

THE KNOWLEDGE ECONOMY AND EDUCATION

Challenging Transitions in Learning and Work

Reflections on Policy and Practice

Peter Sawchuk and Alison Taylor (Eds.)



SensePublishers

Challenging Transitions in Learning and Work

The Knowledge Economy and Education

Volume 2

Series Editors:

David W. Livingstone, *Ontario Institute for Studies in Education*

David Guile, *Faculty of Policy and Society, Institute of Education, University of London*

Editorial Board:

Stephen Billett, *Griffiths University, Australia*

Zhou Zuoyu, *Normal University, Beijing, China*

Emery Hyslop-Margison, *Concordia University, Canada*

Karen Jensen, *University of Oslo, Norway*

Johan Muller, *University of Cape Town, South Africa*

Yoko Watanabe, *University of Kyoto, Japan*

Scope:

The aim of this series is to provide a focus for writers and readers interested in exploring the relation between the knowledge economy and education or an aspect of that relation, for example, vocational and professional education theorised critically.

It seeks authors who are keen to question conceptually and empirically the causal link that policymakers globally assume exists between education and the knowledge economy by raising: (i) epistemological issues as regards the concepts and types of and the relations between knowledge, the knowledge economy and education; (ii) sociological and political economic issues as regards the changing nature of work, the role of learning in workplaces, the relation between work, formal and informal learning and competing and contending visions of what a knowledge economy/knowledge society might look like; and (iii) pedagogic issues as regards the relationship between knowledge and learning in educational, community and workplace contexts.

The series is particularly aimed at researchers, policymakers, practitioners and students who wish to read texts and engage with researchers who call into question the current conventional wisdom that the knowledge economy is a new global reality to which all individuals and societies must adjust, and that lifelong learning is the strategy to secure such an adjustment. The series hopes to stimulate debate amongst this diverse audience by publishing books that: (i) articulate alternative visions of the relation between education and the knowledge economy; (ii) offer new insights into the extent, modes, and effectiveness of people's acquisition of knowledge and skill in the new circumstances that they face in the developed and developing world, (iii) and suggest how changes in both work conditions and curriculum and pedagogy can led to new relations between work and education.

Challenging Transitions in Learning and Work

Reflections on Policy and Practice

Edited by

Peter Sawchuk
University of Toronto, Canada

Alison Taylor
University of Alberta, Canada



SENSE PUBLISHERS
ROTTERDAM / BOSTON / TAIPEI

A C.I.P. record for this book is available from the Library of Congress.

ISBN: 978-90-8790-887-4 (paperback)

ISBN: 978-90-8790-888-1 (hardback)

ISBN: 978-90-8790-889-8 (e-book)

Published by: Sense Publishers,
P.O. Box 21858, 3001 AW
Rotterdam, The Netherlands
<http://www.sensepublishers.com>

Printed on acid-free paper

All Rights Reserved © 2010 Sense Publishers

No part of this work may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, microfilming, recording or otherwise, without written permission from the Publisher, with the exception of any material supplied specifically for the purpose of being entered and executed on a computer system, for exclusive use by the purchaser of the work.

TABLE OF CONTENTS

1. Understanding Challenging Transitions in Learning and Work	1
Peter H. Sawchuk and Alison Taylor	
2. Age, Occupational Class and Lifelong Learning:	25
<i>Findings of a 2004 Canadian Survey of Formal and Informal Learning through the Life Course</i>	
D.W. Livingstone	
SECTION 1	
Introduction	41
<i>Learning/Work Transitions – Education and Training</i>	
Peter H. Sawchuk	
3. Leaving University Without Graduating.....	49
<i>Evidence from Canada’s Youth in Transition Survey</i>	
Wolfgang Lehmann and Eric Y. Tenkorang	
4. Evolving Constraints and Life ‘Choices’	65
<i>Understanding the Career Pathways of Students in First Nations Communities</i>	
Alison Taylor and Evelyn Steinhauer	
5. Educating for Followership.....	85
<i>The Social Relations and Labour Process in a College Program</i>	
Anthony Tambureno	
6. There and Not There:	109
<i>Presence and Absence of Disability in the Transition from Education to Work</i>	
Rod Michalko and Tanya Titchkosky	
7. Skilled Trade Training Programs for Women:	125
<i>In Vogue One More Time</i>	
Bonnie Watt-Malcolm	
8. Re-Thinking Learning-Work Transitions in the Context of Community Training for Racialized Youth	145
Karen Carter	
9. Transitioning to the Teacher Workforce:.....	165
<i>Internationally Educated Teachers (IETs) as Occasional Teachers</i>	
Katina E. Pollock	

TABLE OF CONTENTS

SECTION 2

Introduction	183
<i>Learning/Work Transitions – Work, Career, and Life Changes</i>	
Alison Taylor	
10. Occupational Transitions Within Workplaces Undergoing Change: A Case from the Public Sector	189
Peter H. Sawchuk	
11. Ambiguities in Continuing Education and Training in the Knowledge Economy:	209
<i>The Biopharmaceutical Economic Sector</i>	
Paul Bélanger and Stéphane Daniau	
12. Transitioning Into Precarious Work:.....	231
<i>Immigrants’ Learning and Resistance</i>	
Kiran Mirchandani, Roxana Ng, Nel Coloma-Moya, Srabani Maitra, Trudy Rawlings, Hongxia Shan, Khaleda Siddiqui and Bonnie Slade	
13. False Promises in the New Economy.....	243
<i>Barriers facing the Transition of Recent Chinese Immigrants in Edmonton</i>	
Shibao Guo	
14. ‘Starting from Another Side, the Bottom’:	261
<i>Volunteer Work as a Transition into the Labour Market for Immigrant Professionals</i>	
Bonnie Slade and Daniel Schugurensky	
15. Adult Education and the Transition to Retirement	283
Pierre Doray, Elaine Biron, Paul Bélanger, Simon Cloutier and Olivier Meyer	
16. Transitions in Working Dis/Ability:	309
<i>Able-ing Environments and Disabling Policies</i>	
Janice Wallace and Tara Fenwick	
17. Afterword:	325
Alison Taylor and Peter Sawchuk	

PETER H. SAWCHUK AND ALISON TAYLOR

1. UNDERSTANDING CHALLENGING TRANSITIONS IN LEARNING AND WORK

INTRODUCTION

The purpose of this volume is to present both a critical and expansive exploration of learning and work transitions. In part, it is a response to contemporary understandings of the relationships between education, lifelong learning and the knowledge economy. Taken as a whole, this volume is aligned with research that has recognized that learning and work transitions are increasingly complex, extended across the life course, differentiated and in turn differentiating across social groups. In this sense, our response can be seen as being critical of the homogenization of diverse experiences. What is the nature of the transitions for different social groups? Are these transitions the same as or different from those presumed by dominant ‘school-to-work’ notions that continue to inform policy? And, perhaps the most important question of all that we ask: *How?* How do these challenging transitions emerge and how are they navigated? To answer such questions we suggest the need to expand concepts of transitions.

Our collection begins from a set of premises that are different from those of the dominant policy and research traditions. As we make clear in this introduction, the volume presents an expanded *critical vocationalism* approach to learning/work transitions. These transitions we feel are *challenging* for those enmeshed in them and need to be *actively challenged* through critical research we report. We present a range of detailed discussion and analysis across different dimensions of learning/work relations: transitions from education *to* work, from work *to* education, and transitions *within* educational and training systems, occupational and work life. Throughout, we emphasize the need to develop ways of understanding the context, social differences and power relations that define how learning capacities are productive and reproductive of uneven social and economic prosperity.

Beyond an interest in recognizing context, differences and power, the *critical vocationalism* perspective taken up in this volume also provides us with a particular orientation to informal dimensions of transitions, learning and experience. While this volume does not fixate strictly on these informal dimensions, they remain a strong, underlying theme in virtually all contributors’ attempts to engage in research into challenging transitions. Indeed, one of the major contributions of a critical vocationalist approach is its interest to recognize learning and experience throughout its full range of variation that in the final instances allows us to better

understand the complexity of learning/work transitions throughout the life course. We claim that beyond rhetorical flourishes the informal dimensions of learning and experience are rarely recognized in a meaningful way within dominant theoretical or policy-based transitions research.

In our view, there are explanations for this omission of meaningful attention to informal learning and experience in transitions research. We argue this is because informalized dimensions of learning and experience do not fit comfortably with approaches (implicitly or explicitly) committed to individualization and the commodification of learning and experience. Given the socially embedded and, not infrequently, collective nature of informal learning processes and outcomes, they remain difficult to credentialized. Moreover, careful attention to the informalized dimensions of learning and experience admit what most mainstream approaches to transitions, education and work simply cannot: the negative as well as the positive outcomes of learning – the good, the bad and the ugly. A critical vocationalism approach, in this sense, demands attention to the experience of barriers and the individual and group scarring that result as every bit as predictable as positive outcomes of participation in schooling, training, the workplace, and the transitions between them. Given that challenging transitions are rarely formally recognized as anything but aberrant problems, we claim that attention to informal learning and experience tends to illuminate such transitions not as aberrations but as latent institutional functions.

The impetus for this volume, its conceptual framing and much of the research emerges from the team of Canadian researchers who together completed case study and survey projects within the Social Science and Humanities Research Council of Canada's 'Work and Lifelong Learning' (WALL) network (2002–2007) (see www.wallnetwork.ca) led by D.W. Livingstone. This network was composed of researchers from seven universities and myriad community groups, unions and associations from across Canada. While all of the research in this volume is Canadian-based, half of the contributions emerge directly from the research, discussion and debate of the WALL network. The 12 case studies of WALL were qualitative in nature and, while not all of these are represented in the volume for those that are the specificities of relevance are noted in individual chapters. In several instances, these case studies also involved small-scale surveying of particular occupational groups and/or workplaces which are, likewise, described in individual chapters. The large WALL Canadian national survey of learning and work practices generated a sample of over 9000 respondents. It is described in Chapter 2 of this volume, and is referenced in several other chapters as well. This survey is the largest of its kind to date and serves as an important counter-balance to the focused, qualitative studies of the volume. With this WALL research as a foundation, the remaining half of the contributions to this volume – Chapters 3–8, 12 and 16 – were selected as dialogic complements that extended and deepened our understanding of challenging learning/work transitions in particular areas.

Finally, we note that while research in this volume is Canadian its significance is not limited to this national context alone. The WALL research network functioned in the context of international debate and reflection. It included a team of international research advisors (from Europe, South America and Australia)

whose perspectives constantly informed its findings and interpretation. To further sharpen comparative assessment, the introductory and concluding chapters speak directly to how the research relates to other national situations and research. Moreover, as available comparative transitions research and, not least of all, the global economic events of 2008–2009 that demonstrated trans-national interdependency have shown, it seems clear to us that insights from individual countries can and should be used to shed light on others. In fact it may be the case that the Canadian context encourages comparative insights all the more given its historical admixture of economic, labour market and labour relations legacies. That is, these legacies have clear roots in anglo-European, franco-European as well as American models. And, one final way that this research on transitions may have inherent comparative value lies in the fact that Canada (like, for example, Norway) has achieved particularly high rates of educational attainment. In this sense, given the fixation in so many countries (including in Canada) on educational attainment as a solution to problems of contemporary learning/work transition, this situation suggests Canadian research may serve as a one among a small group of other particularly relevant contexts from which to begin critical re-evaluation. Indeed, the truth of the relationship between educational attainment and learning/ work transitions is a contradictory one, as we hope to show, but our point is that consideration of the Canadian context may encourage further critical appreciation of research and policy issues actively being considered in one's own country. Of course, none of this can erase the differences between national contexts. And, this is why we discuss such differences in our introductory and concluding chapters. As such and with such supports in place, our sense is that readers – aware of the specificities of their own and possibly other national contexts – will be able to see the *forest* of comparable dynamics amidst the *trees* of national differences.

ECONOMIC CONTEXT OF LEARNING/WORK TRANSITIONS

Before proceeding further with our introduction we want to take a moment, however, to briefly present our understanding of the economic context within which different perspectives on learning/work transitions are figured. Significant economic instability around the globe at press time makes any simple contextualization problematic. Uncertainty within virtually all major, international comparative reports on economic and labour market conditions provides us with little choice but to take a medium-term outlook of both the past and future.

In these terms, an important point to begin with derives from observations published by the Organization for Economic Cooperation and Development (OECD). This literature acknowledges that over the last two decades advanced capitalist countries have seen sustained growth in labour market participation along with a growth in the number of jobs workers tend to have in their working lives (OECD 2008). While beginning in 2008 this trend made a reversal – short of major social and economic restructuring – in all likelihood it will return. Over a slightly longer period we also see that not only formal educational attainment but participation in a range of non-compulsory learning/training have likewise grown

(OECD 1998, 2001). Particularly significant for us, however, is that the OECD (2008) has confirmed that a wide variety of forms of labour market discrimination remain a serious issue in virtually all member countries (including G10 countries), and that treatment based on a range of social differences (including gender, age, disability and race/ethnicity) have continued to play a crucial role in the growing disparities in employment participation as well as in disparities in the quality of employment. Reporting on data just prior to accelerated global turmoil, this same 2008 OECD report goes on to provide indications that traditional labour market transitions were already increasingly fragile and exclusionary. Related to this, it was also reported that the number of so-called 'stepping stones' required by youth to solidify a place in the labour market appeared to be multiplying. In fact, for both youth and adults the number of jobs in a working life has continued to rise over the medium-term, and to make matters more complicated still the OECD (2008) also identified that (undeclared) informal employment was likewise expanding.

Informing our concern for challenging transitions, our summary interpretation of these matters suggests a trend of both polarization. In the language of labour market segmentation theorists, primary labour markets (i.e. good jobs) are likely shrinking in relation to overall labour force participation. Workers in primary labour markets retain a capacity to positively cope with and experience forms of (relative) control in the course of their transitions, either laterally or vertically, and in the medium-term past and future have and will see either stable or growing remuneration. Within the growing secondary labour market, however, structural factors appear to have created distinctive forms of complex learning/work transitions, and in so doing bring questions of social difference and non-linearity into even sharper relief.

In relation to this interpretation of global economic context, equally important is how organizations such as the OECD and many member states understand available solutions. While, recognizing a role for state regulation rhetorically, the dominant tendency still appears to presume growth of labour market opportunities in general to be the key technical fix. From a public policy perspective, this continues to translate into an allegiance to viewing educational and vocational training attainment as the only viable mode of public intervention. Obviously, such tendencies set a specific course in policy, practice and understandings of learning/work transitions which continue to marginalize differentiated and differentiating experiences.

In this sense, the economic context and way it is understood by mainstream policy and research perspectives retains, to our minds, a conviction that suitable education, training and informal learning environments associated with work, if further developed, have the capacity to generate relatively transparent, equitable and linear learning/work transitions. Such perspectives comfortably admit that in a knowledge economy these transitions may be more learning-intensive and multi-institutional. But, as we will see below, such perspectives retain a privileged place, implicitly or explicitly, for particular conceptual touch-stones: namely, post-industrialist, human capital and rational choice theories. And, resting on a generalized growth solution, in these formulations education is regarded, unproblematically, as the primary response to satisfying social and economic need vis-à-vis individualized

cost-benefit decisions. It is within such approaches that – despite the economic context we summarize here – learning/work transitions will more than likely continue to be subject to a homogenizing and normalizing, rather than critical and differentiated consideration.

ASSAYING THE LITERATURE AND ESTABLISHING OUR FRAMEWORK

As Staff and Mortimer (2003) comment: ‘A diverse set of life changes mark the transition from adolescence to adulthood, including school completion, entry into the full-time labor force, and economic self-sufficiency’ (p. 361). As a host of researchers have likewise confirmed, transitions to work have become more extended and complex (e.g., Marsden, 1999; Sackmann and Wingers, 2003; Hannan, Raffé and Smyth, 1997; Van Berkel and Hornemann Møller, 2002; López Blasco, McNeish and Walther, 2003; Walther and Pohl, 2005; McVicar and Anyadike-Danes, 2002; Breen, 2005; Anisef, Axelrod, Baichman-Anisef, James and Turriffin, 2000; Evans, 2002; Grubb, 1996). Indeed, amidst this complexity some have gone so far as to suggest the term ‘transitions’ to have lost its analytic value (e.g., Brooks 2007). However, it seems that many others, like us, have simply begun to recognize the need to expand how we think about transitions in order to examine the concept of learning and work transitions more carefully for their multiple, differentiated and non-linear dimensions. In this section we wish to register some related disciplinary traditions as well as the most pronounced bodies of learning/work transitions research that form, either implicit or explicit, companions to the material in this volume.

In this context it is important from the start for us to note that this collection is rooted in but not confined to educational studies, broadly conceived. It offers, as we have said, a (critical) *vocationalist* perspective. But vocationalist perspectives are hardly alone in their consideration of transitions. This volume contrasts and dialogically engages with a series of other traditions with vitally important points to make of their own. Minimally, these include sociology attending to life transitions and biography, trans-disciplinary studies of the life course, the life history tradition, institutionalist and neo-institutionalist sociology, political science, economics, and so on. Among these many choices of perspective, for us two traditions stand out however. And, although the linkage to them are more implicit than explicit, it is relevant to begin by briefly registering each in order to better situate our own vocationalist approach.

First, life course research (e.g., Mortimer and Shanahan 2003; Sackmann and Wingers 2003) including the many contemporary, multi-disciplinary applications of the ‘life course approach’ have expanded at an accelerated pace over the last two decades. This includes those drawing on the tradition to inform health and epidemiology, gerontology, studies in marriage, family, drug addiction, obesity, sports, crime, housing and urban studies, immigration, consumer behaviour and social policy to name only a cross-section of applications. Our approach is distinct from this tradition, but to our minds linkages to it retain important potential given our interest in expanding understandings of learning/work transitions that inevitably must incorporate such wide-ranging issues as well. That is, while some of these

topics are registered in contributions to this volume many others are beyond its present scope, and thus we see a future for critical perspectives on learning/work transitions as necessarily including these other, sometimes life-defining, matters. Minimally, it is unlikely that health, family-life, participation in the criminal justice system and housing – as assessed in the life course research tradition – can remain separate from full appreciations for the factors that shape the many forms and periods of learning/work transition.

Likewise, given our concern for broadening learning/work transitions research, neo-institutional analysis offers an additional, broad tradition with clear connections to our goals in this volume despite it being beyond our present scope. Having origins in several disciplinary homes (e.g., economics, sociology, political science and more recently organizational studies), neo-institutional approaches over the past two decades have established relevant means of assessing how institutional practices are conditioned by relationships with other, mediating institutions. For example, as we see in this volume, labour market participation is understood in relation to education, apprenticeship programs, the labour processes, the states, and so on. The complex circuits suggested by neo-institutional approaches provide examples of what we refer to in this volume as inter-institutional dynamics. Neo-institutional perspectives also have, as of late, developed an interest beyond simply the reproduction of organizational structures, rules, norms, and so on. They have, for example, provided accounts of inter-institutional isomorphism to generate relevant theories of embedded agency, often connected to the analysis of social position and fields of action. Questions of inter-institutional competition (for legitimacy as well as resources; e.g., DiMaggio and Powell, 1991), the de-coupling of institutional functions to provide flexibility in response to increasingly tight inter-institutional networks (e.g., Scott, 2001) have a family resemblance to the matters which our volume explores.

Both the life course and the neo-institutionalist traditions remain implicit resources for further development of our perspective here. They remain implicit rather than explicit, but retain the potential for fruitful, future research and dialogue. In turning toward learning/work transitions research itself however, there are several important sets of companion works and bodies of work that we wish to brief register as well.

First, we see that the bulk of research confirms a substantial understanding of youth oriented, school-to-work transitions. These include the especially informative work by Shavit and Müller (1998), Stern and Wagner (1999), and contributions to Heinz (1999; see also Heinz, 2002). In Canada specifically, recent scholarship can be found in book form in Gaskell and Rubenson (2004), Scheutze and Sweet (2003) and Krahn (1996). Some of the material above utilizes a life course perspective, but the bulk offers a critical reflection on contemporary relations of transitions including both detailed qualitative analysis as well as structural and policy effects regarding, in particular, educational experiences and occupational outcomes. For example, matters discussed include standardized and occupationally specific curriculum and stratification (e.g., Shavit and Müller, 1998), the restructuring of vocational education and apprenticeships for better transitions (e.g., Stern and Wagner, 1999), biographical orientations to schooling and work (e.g., Heinz, 1999, 2002), and the shifting effects of human capital on school-to-work transitions and its relationship to occupational segregation (e.g.,

Gaskell and Rubenson, 2004). Though our volume is interested in more than simply youth transitions and we are arguably more intensive in our tracing of the effects of social differences and power relations, taken together these sources form a relevant backdrop and recommended companions to the types of questions we raise.

Distinct from these examples of key pieces of research are the largely separate Canadian and European survey analyses of transitions currently available. In this research, again we see the focus tends to be on youth primarily, and that there is less interest in understanding the interlocking mechanisms of difference and power. Nevertheless, we can begin by noting that Canada's best survey data base for understanding youth transitions has been recently compiled. The Youth in Transition Survey (YITS) was developed as a longitudinal means of collecting data beginning with two age groups producing its first cycle in 1999. The first group was aged 15 and the second 18–20 years. In total, almost 52,000 youth from across Canada participated in the first cycle of the survey. The first follow-up survey took place in 2002 and included over 40,000 youth, and the second follow-up survey interviews took place in 2004 including over 37,000 youth respondents. This has produced a range of cohort and sequence analyses to date (e.g., Clark, 2000; Bowlby and McMullen, 2002; Zeman, Knighton and Bussière, 2004; Livingstone, 2004; Shaienks, Eisl-Culkin and Bussière, 2006; Shaienks and Gluszynski, 2007; Hango and de Broucker, 2007, Krahn and Taylor, 2005). We consider this another important companion to understanding the dynamics of transitions we explore in this volume. Despite its focus on youth, it broadens appreciation for the sticking points at definitive periods of the transition process, and allows the testing of observations emerging from the qualitative studies here and elsewhere. With the existence of similar longitudinal data sets, such as the European Community Household Panel (1994–2001; e.g., Peracchi, 2002; Brzinsky-Fay, 2007), this research, in turn, allows additional capacity to compare Canadian data with those gathered in European countries to add further substance to models of, for example, generalized vocational tracks versus highly structured ones, universalized benefits and supports policies versus highly targeted ones, and so on. Again, like the resources we have already registered, these studies provide a valuable backdrop for understanding the findings reported in this volume.

Having taken a moment to recognize some companion traditions outside of learning/work transitions research, and two separate clusters of research within it, we now turn our attention to properly situating our vocationalist perspective in specific terms in the remainder of this section. Indeed, to begin to analytically grasp the wide variation in transitions research, we draw on a basic continuum for comparing and contrasting approaches either implicit or explicit across available quantitative, qualitative and policy-based research including those already cited. We suggest that this literature can be understood in light of the continuum running between *new vocationalism* and *critical vocationalism* approaches. We use the term 'continuum' here to resist dichotomizing the differences. While maintaining that distinctions do exist, in fact, most of the work we have just registered only rarely falls easily onto one end of the continuum or another.

In its most extreme form *new vocationalism*, as we use the term in this collection, is defined by the argument that narrowly prescribed occupationally-

specific knowledge and skill sets are becoming less important within contemporary, fast-paced, global market economy. Replacing them are abilities related to independence, evaluation, conflict resolution and team-work (see discussion by Lehmann, 2000). An important distinction here is that this argument is centred on *adaptation* of workers to the needs of the economy. For this, a touch-stone of new vocationalism is the notion of ‘human capital’ (cf. Gaskell and Rubenson, 2004). However, the human capital thesis, and the utility-maximization research of Nobel laureate Gary Becker (1964) specifically, did not simply appear from thin air. Rather, it along with the new vocationalism approach developed an educational and training as well as life, occupational and career development perspective standing on the shoulders of a broader thesis on society and economy; one with European but in particular American roots in the post-World War Two era. The ‘industrialism/post-industrialism thesis’ summarized early in the work of Kerr, Dunlop, Harbinson and Myers (1960; see Sawchuk, 2006 for further explanation) has for almost a half a century articulated and developed extensive research reflected by key, contemporary presumptions of new vocationalism. That is, education and training are the prime means through which individuals develop capacities for an increasingly information/knowledge-centred economy (e.g., Touraine, 1971; Bell, 1973; Zuboff, 1988; Frenkel, Korczynski, Shire and Tam, 1999). These complementary approaches argue that changing skill requirements in the workplace have been caused by new technologies as well as flatter, looser and more ‘flexible’ organizational structures which emphasize individuality and problem-solving. In later iterations, such approaches promoted the idea that all workers need to be symbolic analysts or knowledge workers (e.g., Reich, 1991; Grubb, 1996). Indeed, the coherence between post-industrialism thinking and new vocationalism is, to our minds, both remarkable and remarkably persistent.

Powerful supports for the new vocationalism perspective are to be found amongst virtually all OECD policy literature and economic outlook material (OECD 1996, 1998; 2001, 2004, 2008). The World Bank and the International Monetary Fund, likewise, now orient to, amongst other matters, the issue of lifelong learning, work and human capital generation as well. Such policy views have taken a lifelong learning perspective on transitions including both youth and adult/continuing forms. As primarily an individual/adaptive perspective however it has inherent difficulties admitting structural contradictions rooted in both institutions of education and economy. Necessarily such perspectives presume that better and more responsive education, continuing education, vocational and workplace training – for youth, employed and unemployed adults, from ‘cradle to the grave’ (OECD 1996) – can adequately address the types of problems we identified earlier in our summary of economic, labour market and transitions context. Of course, the new vocationalism perspective has begun to register informal learning in the life course. To date, however, this appears both selective and persistently difficult to apply concretely vis-à-vis anything but rhetorical flourishes. What may be particularly relevant to note, however, is that in its individual/adaptive orientation what is – indeed what must be – presumed first and foremost is that neither young nor established workers currently possess the

necessary capacities to effectively live and work in the present and future economy. They are in (perhaps a permanent state of) deficit. This is a presumption that we challenge both in this volume and elsewhere (e.g., Taylor, 2005; Lehmann and Taylor 2003; Livingstone and Sawchuk, 2004).

We are not alone in this view (e.g., Kincheloe, 1999; Griffin, 1999; Hunt, 1999; Evans, 2002; Evans, Hodkinson and Unwin, 2002; Coffield, 2007), but the international summary provided by Bynner (2001) brings additional focus in this regard. He offers a critique of the ‘economism’ inherent in mainstream views of transitions specifically. Our volume shares this view as well. National and international policy continues to construct transitions in a specific way: “the starting point being the immature unemployable child and the end point the independent employable adult” (Bynner, 2001, p. 5), yet it is an end point perpetually receding. Bynner’s solution is to instead think in terms of the “interconnectedness of activity across the different domains of life” (p. 7). For him, there is a distinct lack of attention to broader political climate, culture and the effects of other spheres of institutional and non-institutionalized life as dimensions of the transitions process.

Offering an alternative, political/analytic approach *Critical vocationalism* challenges most if not all of the presumptions of post-industrialism, human capital, rational choice theory, new vocationalism and their associated policy expressions. However, just as new vocationalism has important intellectual roots in industrialism/ post-industrialism thinking, so too does critical vocationalism have roots in critical analyses of gender (see review in Griffin, 1985; Sharpe, 1994), race (see review in Galabuzi, 2006), disability (e.g., Oliver, 1996) and social class (e.g., Braverman, 1974). As we have shown elsewhere (e.g., Lehmann and Taylor, 2003), the reality behind the rhetoric of new vocationalism is that it has tended to ignore or at least minimize how education systems – hand-in-glove with labour markets and work systems – are shaped by the tensions and contradictions inherent within processes of control, conflict, accommodation and occasionally resistance. There remains, in Livingstone’s (2004) terms, a significant ‘education-jobs gap’ that continues to be either ignored, under-recognized or mis-interpreted in the new vocationalism tradition (see also Roberts, 2003; Osterman, 1996). Likewise, social divisions are perpetuated and in fact intensified under these conditions vis-à-vis the relationship between biographical agency, social structures and social histories (see contributions to Heinz, 1999 and particularly Heinz, 2002). And in summary, our observations result in the following, initial points of emphasis we wish to note regarding our critical vocationalism perspective on learning/work transitions:

- a) vocational education and training, including attention to informal on-the-job learning has intensified as people are staying in school longer and availing themselves more frequently of adult, continuing education as well as training opportunities;
- b) vocational training is increasingly important for securing employment in competitive, increasingly internationalized labour markets;
- c) skills and knowledge developed in vocational preparation are not effectively utilized in the labour process;

- d) labour processes are just as likely to reduce the use of judgment, autonomy and discretion by narrowing the terms of performance as they are to require independence, flexibility and creative problem-solving;
- e) experiences and ‘biographical agency’ are socially differentiated across relations of dis/ability, gender, race and class lines.

In keeping with our recognition that simple dichotomies do little justice to understanding the distinctions between new vocationalism and critical vocationalism perspectives, it is important to not conclude our comments here without registering overlaps. Clearly, we see that ‘human capital’ approaches over the last decade in particular have expanded to include notions of ‘social capital’; a revelation that has expanded the application of the basic capital accumulation metaphor to collective practices, interrelations and social structures which suggests a movement toward a more critical analysis in some cases. Considerations of social capital, while popular, have seemed to remain secondary to transitions-related policy to date however. Likewise, if we associate a narrow labour market orientation with new vocationalism, we might just as well observe that a great deal of transitions studies oriented by critical vocationalism have not consistently dealt with an expansive inter-institutional perspective that takes into account what actually happens at work. Many critical approaches remain fixated on the distribution of education and training generally, often continuing to ignore a variety of specific social groups, and focusing simply job attainment rather than the quality of these experiences.

With these types of caveats in mind, to our minds it remains relevant to position this volume on the critical vocational end of the continuum we have just outlined. And, having outlined our approach in broad strokes, we can now specify with additional details that will be useful in understanding the collection as a whole.

EXISTING LITERATURE AND EXPANDING THINKING ABOUT LEARNING WORK TRANSITIONS

In seeking to expand understandings of transitions from a critical vocationalism perspective, it is important to first ask ourselves what types of variables and mechanisms have been associated with challenging transitions to date in the research. As we mentioned earlier, understood as ‘learning and work transitions’ specifically, the most detailed research has tended to focus on youth and early adulthood. As such, this is where we begin. At the same time, it may be the case that studies of youth and early adulthood offer some points of general guidance for understanding transitions more broadly.

Beginning with recent Canadian research on youth transitions, we see that there are a variety of social variables that shape the patterns of transition and marginalization in and out-of high school and post-secondary education, and then into and out-of the labour market. Several key social variables are strongly correlated with specific transitional pathways. The detailed Canadian survey research of Hango and de Broucker (2007) for example substantiate this well. These variables include gender where being female strongly correlates with transition interruptions as well as incidences of returning to school. Aboriginal ancestry has

shown a strong negative correlation with engaging in continuous education transitions toward labour market participation. People living in urban centers in Canada are much more likely to return to school. And finally, experiencing a disability has shown amongst the strongest negative correlations with both continuous education and disrupted transitions to and within the labour market. Not well covered in the Hango and de Brouker analysis (2007), however, we note some specific figures on transitions for immigrants within Canada. According to Gilmore (2008), we see that for immigrant youth, unemployment was highest among those of African and Eastern European origin, followed by those youth born in Latin American, West Central Asian or the Middle Eastern countries. Youth unemployment for Canadian youth was lowest for those from Southern Asian countries, and virtually all immigrant youth groups show higher levels of unemployment and poorer quality employment than Canadian-born youth.

Looking beyond Canada, analysis of international data, for example, in Breen's assessment of 27 OECD countries (2005), highlights a variety of similar dynamics, and provides some additional explanation. It argues that two key factors explain differential learning and work transitions from youth and into early adulthood: i) the ability of the educational system to effectively signal the suitability of a job seeker for a specific form of employment; and ii) the degree of employment regulation and specifically the degree to which employers are prevented from dismissing workers more or less easily early in their job tenure. Breen goes on to indicate that despite the call for greater flexible and generalized skill sets, in detailed analysis it is specific skill and knowledge sets taught at schools on a consistent basis that appear to result in stronger youth employment. Close partnerships between industry and educational systems are said to be central. In these terms, Germany, Austria and the Netherlands appear to offer the most effective models of such linkages (though there is variation in how this achieved). Despite Sweden's apparent deviation from specific vocational skill and knowledge set teaching, it still seems to generate relatively high youth employment levels however. It would seem to do this on the basis of strong employment regulation which underlines all the more the importance of paying attention not simply to education but the workplace as suggested earlier in our discussion of critical vocationalism. Countries such as Canada (as well as the UK, the US, Australia) appear to offer neither strong linkages with industry through their general education or vocational education and training streams, nor strong employer regulation and thus suffer from higher levels of youth unemployment, often despite very high levels of educational attainment overall.

Taking a different approach altogether, Brzinsky-Fay's (2007) innovative international comparison of transitions within 10 European countries (using sequence analysis software developed for researching human genetics), highlights quantitatively the importance of many of the points we have associated with a critical vocationalism perspective. Like the Canadian-based research we began with, Brzinsky-Fay makes some important in-roads into understanding questions of universality of experiences to develop characterizations of national 'volatility' and 'integration' vis-à-vis learning and work transitions. Such an approach offers a chance to further challenge the myth of linearity linked to public policy goals.

Contributions to our volume may shed further light on the question of how it is that countries like Germany have generated significantly stronger culture of ‘bridging’ and ‘return’ sequences in learning/work transitions when compared, for example, with the UK? Or, thinking beyond the traditional ‘General Qualifications’ versus ‘Vocational Specific Qualifications’ frameworks, our volume informs the question of how it is that the countries such as the UK have generated much more successful ‘express’ transition sequences. Brzinsky-Fay (2007) identifies all of these features of transitional event sequences, and others as well, but how these are produced is less clear. In combination, international comparative analyses such as Breen (2005), Brzinsky-Fay (2007), and others (e.g., Pohl and Walther, 2007) likewise pose important research questions that the type of research presented in this volume can address, particularly so in relation to concerns for non-linearity and its relationship with social differences and power.

In sum, existing research – nationally specific research in Canada as well as international comparative literature – highlights the effects of a range of social differences on learning/work transitions. It also broadens a sense of the types of variables associated with challenging transitions. It demonstrates the need to further understand how non-linear transitions come about, and, in so doing, the complexity of transitions and the need to attend to broader institutional arrangements within and across education and training, the labour market and workplace. The contribution of this volume to these types of findings is by way of posing the questions of how educational signaling and labour market regulation function differently for different social groups, how such things function differently at different points in multiple transitions within and between institutional spheres. These questions are best answered, we suggest, through a combination of careful extension of the issues raised through quantitative research and detailed qualitative, exploratory study of the frequently under-studied groups and contexts. Drawing on these exemplar studies simply as cases in point, we see that nationally specific demographic information is essential for understanding transitions, both the more traditionally focused inter-institutional (e.g., school-to-work/work-to-school) but also the intra-institutional transitions (within education and workplaces), for youth as well as adults.

For a proper understanding of the critical vocationalist perspective that orients this book, however, a few more words on this idea of agency and choice may be necessary. Building on some of the themes referenced immediately above we can say that the quantitative research on learning and work transitions limits access to how it is that people make active, even if limited, choices in constructing their own pathways. Sometimes these choices are made in a rational manner in the course of life planning. Indeed, sometimes these choices (amongst both youth and adults) are made out of an orientation of resistance – whether this is a resistance to forms of schooling, parents, peers, communities among youth, or forms of adult resistance opposing employers, work organizations for example. Whatever the case, it is crucial to know what people choose but also the patterns of choices are rooted in biography, identity, situation and emergent life course. The rationality of such choices is wholly dependent on not simply objective conditions but biographical horizons, and indeed the complex, shifting and subjective interpretations of both. Answering these types of questions demands a thick description of context, relations and dynamics.

Our volume provides such analysis, but on this matter we can also register some invaluable Canadian research on youth to make a broader, general point. Lehmann (2005) shows how working-class youth of differing gender and ethno-racial backgrounds become actively involved in their own streaming into particular work and learning pathways. This is not a new observation in itself, however he goes on to identify ‘critical junctures’ or points of choice-making that can both transform and reproduce patterns of marginalization in the transition processes. Varying in their moment of appearance in individual lives, the emergence of a concrete orientation to, for example, ‘job rewards’ appears crucial and more elusive to predict than at first glance. Likewise, moments when clear articulation of autonomy brought on by work – almost universally expressed in the way that youth contrast notions of ‘real work’ with either part-time work or their studies – are equally crucial, highly variable and related primarily to parental as well as peer group orientations. Our point in this regard is this. The meaning and social relations of transitions to employment as well as transitions within employment are always actively constructed. Youth and adults actively generate the horizons of choice unique to the circumstances which are often shared by their social groups. Processes such as these, once initiated, can have a robust, enduring effect on learning efforts, occupational or career advancement choices and transitions.

A variety of international studies confirm this type of appreciation of the learning/work transition process as well. In Australia, for example, Stokes and Wyn (2007) argue subjective achievements of agency as ‘investments in identity [that] foreshadow the emergence of new meanings of careers’ (p. 495). Heinz (1999) likewise suggests an emphasis on structured agency as a particularly powerful means to understand transitions to labour markets. In the UK similar arguments in the work of Shildrick and MacDonald (2007), and Furlong, Cartmel, Biggart, Sweeting and West (2003) show how ‘at-risk’ and ‘hard-to-reach’ youth from impoverished neighbourhoods follow their life transitions from teens and into adulthood in similar ways. They identified enormous variability and ‘unpredictability’ in their lives following school (whether exit comes from graduation or dropping-out) that were peppered with periods of unemployment. These transitions feature longer periods of unemployment, longer duration of dependency on parents than generations past. Recognition of forms of human agency are central to these Canadian, Australian and UK examples, following the original example set by Paul Willis (1977), where we perhaps first came face-to-face with how youth play an active, decision-making role in selecting transitions that are most available and most commonly portrayed to them: portrayed to them in ways shaped by identity, the social production of roles, possibilities and limits.

COMPONENTS OF A CRITICAL VOCATIONALISM APPROACH TO TRANSITIONS

At this point we have offered some initial definition and background for a critical vocationalism approach which was then followed by a selective review of literature which raised additional traditions, findings and questions which could be taken up from this perspective. As we have outlined it, a critical vocationalism perspective

demands we both look beyond and question the default social spheres and social variables that have largely, though not exclusively, defined the literature on learning/work and transitions to date. In other words, in an era of lifelong learning, 'school-to-work' transition needs to be understood as but one inter-institutional dimension of the broader phenomenon of the learning/work transition complex. Equally important are the learning/work transitions of various specific social groups within the aggregate. Consider for a moment, both the complexity and specificity inherent to the manner in which immigrants to virtually every advanced capitalist countries are forced to engage in uneven, byzantine (if not Kafkaesque) circuits of learning/work transitions that are non-linear, fraught with barriers and regularly mediated by non-school-based occupational regulatory bodies. Alternatively, we could just as easily look at the role of voluntary (unpaid) work, the growth of paid work for students, the growth of continuing education amongst working adults, and the various mediations each of these patterns entail for contemporary learning/work transition circuits. None of this is to presume that linearity is undetectable, at least within the sub-set of successful transitions of particular social groups and individuals within what we earlier referenced as primary labour markets (cf. Furlong, Cartmel, Biggart, Sweeting and West, 2003). It does mean that challenging these normalized, homogenized forms of inter-institutional transitions requires attention to biography, social characteristics as well as the ongoing constructions of social differences within the transition process.

Importantly, our approach seeks to understand how *intra-institutional* transitions also shape the barriers and successes of *inter-institutional* learning/work transitions. For example, opportunities for mobility across programs within secondary and post-secondary institutions clearly inform the possibilities and patterns of inter-institutional transitions. Moreover, intra-institutional transitions might also include transitions between schools and related training systems such as union-based apprenticeship, employer-based apprenticeships, or transitions mediated by national vocational qualification systems as in Britain, or as in Canada, systems of 'employability skills' offered by the Conference Board and later Human Resource and Social Development Canada. And likewise, intra-institutional transitions include movements in and across workplaces. Examples here would include cases where employees undertake employer-based training moving to new positions (i.e., transitions within internal or sectoral labour markets), or in some cases where whole groups of workers must make a transition from one labour process to another signifying a learning/work transition which transforms an entire office, shopfloor, and sometimes even an entire occupational group or sector. A critical vocationalism approach encourages such concerns, and specifically these types of considerations have the capacity to expand our appreciation beyond the 'supply side' of the labour market to illuminate how the capacity of educational or training institutions, as well as employers, workplaces and industry effectively shape learning/work transitions as a whole. Thus, to more clearly put our point, a critical vocationalism perspective requires attention to how transitions are affected deeply by biography, social differences, as well as institutional arrangements and forms of constrained agency or choice. And moreover, efforts to challenge and expand notions of learning/work transitions must recognize that the experience of transition is hardly universal.

Beyond the recognition of inter- and intra-institutional transitions and social differences, we feel it is equally important to also think expansively about the notions of ‘learning’ and ‘work’ themselves (e.g., Sawchuk, 2003; Livingstone, 2004; Taylor, 2005). Whereas in the past, conceptions of learning/work transitions were almost strictly rooted in conceptions of ‘formal schooling’ on the one hand and ‘full-time paid work’ on the other, it is now recognized that learning is more than ‘schooling’ and the complexities of employment cannot be expressed in a stagnant notion of ‘full-time paid work.’ Thus, we now know that formal schooling shapes and is shaped by non-formal learning (i.e., organized learning that takes place beyond the formal, state-regulated credential system) as well as by informal learning (non-organized learning that can take place through self-directed projects or can be done in groups). Furthermore, both scholars and organizations such as the OECD are increasingly registering the fact that paid work is increasingly non-standard (i.e., part-time, seasonal, precarious) and that unpaid work such as volunteering in the community or un-declared employment affects labour market participation, and that paid employment itself contains variation, includes (lateral and vertical) occupational transitions and that entire work processes frequently undergo change.

Thus to summarize the analytic points of departure of our critical vocationalism perspective we can say that it opens up the notion of learning/work transitions on several levels. First, on the specific themes of expanding previously conceptualized notions of transitions in contemporary society, across our collection we critically evaluate:

1. traditional scholarly research on inter-institutional school to work transition policy and practice
2. other inter-institutional transitions including but not limited to apprenticeship programs
3. intra-institutional learning transitions involving linkages between formal education, non-formal education as well as informal learning experiences
4. intra-institutional work-based transitions with attention to informal learning in relation to different types of work, work changes, sectors and occupations.

Second, across each of these expanded notions of ‘transitions’ we explore social themes oriented by our wish to critically evaluate and challenge:

1. the *linearity* of transitions in which either youth or adults undertake one-way progress from learning towards the world of paid work
2. the *universality* of transitions by highlighting how social differences including those rooted in gender, race/ethnicity, national origin, social class, disability and age.

As we indicated, we are critical of the presumption that learning/work transitions can be understood as individual, labour market ‘supply-side’ inadequacies. Thus, on top of these points of analysis and themes our collective argument is that problems of learning/work transitions are rooted in institutional contradictions of capitalist labour markets and labour processes themselves, as well as the economic and social implications of racial, gendered, ageist and ablest structures that are likewise central to generating disparate and inequitable experiences.

A BRIEF INTRODUCTION TO THE CHAPTERS

Each of the contributions to this volume explores aspects of the positions we have introduced above. In unique ways and via distinct empirical foci, the chapters set the stage for a better understanding of the questions inherent in the above comments; answers to which are the subject the concluding chapter of the volume. Our introductions to the two sections of the volume provides further detail, but as an initial orientation to what will come we offer a brief introduction to each chapter below.

Along with this introductory chapter, *Chapter 2: Age, Occupational Class and Lifelong Learning: Findings of a 2004 Canadian Survey of Formal and Informal Learning through the Life Course* completes our conceptual and empirical starting point for the volume. In it D.W. Livingstone reports analysis based on the 2004 WALL survey mentioned above. Beginning from the recognition of life course transitional elements broadly, the author suggests both proliferating sub-components and non-linearity are factors in contemporary life course. The analysis focuses on intentional (formalized and informalized) learning activities across this life course amongst cohorts from 18 to over 80 while also recognizing social class divisions. Findings reported in this chapter speak to matters of underemployment/over-education developed in earlier work by the author, and further assessed here. The dynamics between formal and informal learning alter over the life course, though this would appear to be rooted in changing formal rather than informal learning practice. In particular there is a call for greater attention to the extensive learning of both older and working-class people.

Following this, we begin the first of two major sections of the book. The goal of *Section 1 Learning/Work Transitions – Education and Training*, is to look at critical studies of formal education and training programs designed to help participants transition into work. As with the collection as a whole, in this section there is a focus on the experiences of participants who are ‘non-traditional’ entrants to particular learning and work sites (e.g., women in trades, students with disabilities, black and working-class youth).

Wolfgang Lehmann and Eric Tenkorang’s *Chapter 3: Leaving University without Graduating: Evidence from Canada’s Youth in Transitions Survey* starts off this section noting that high levels of post-secondary education are seen increasingly as essential for occupational and life course success, as well as the importance of investigating the educational outcomes of groups that have been traditionally excluded from higher education. In this context, socio-economic status (SES) and access to university has tended to retain a positive relationship. However, little is known about how SES affects individuals’ university experiences and chances to persist and graduate. These authors carry out an analysis of Canada’s Youth in Transition Survey mentioned earlier in this chapter where we see that SES has no significant effects on university attrition when basic logistic regression models are used. The authors then offer an alternative statistical technique to find important effects on university attrition.

Alison Taylor and Evelyn Steinhaurer’s *Chapter 4: Evolving Constraints and Life ‘Choices’: Understanding Pathways of Students in First Nations Communities* begins from the observation that the career pathways of First Nations

youth do not conform to the linear model that is dominant in policy literature. Through interviews with high school students involved in a provincial career program and other community organizations, they examine the institutional and personal factors that influence the career pathways of First Nations youth in Alberta Canada. The authors' findings suggest that schools on Reservations were constrained by a lack of resources, high student needs, and limited opportunities for career education. Taylor and Steinhauer conclude that these institutional realities must be recognized, and the understandings of young people validated if policy-makers and communities are to better support Aboriginal youth in their transitions.

In *Chapter 5: Educating for Followership – The Hidden Curriculum in Community Colleges* Anthony Tambureno sheds light on the role of the community college system as a reproductive force in determining employment outcomes. That is, intra-institutionally, within the college system itself, there are important determinants of transition potentials, and indeed the class structure of the broader economy. Tambureno's focus is on the hidden curriculum of the colleges that selectively prepare working-class students for working-class jobs drawing on extensive ethnographic and interview data from Ontario as well as secondary analysis of data from other provinces in Canada and the US.

Michalko and Titchkosky's *Chapter 6: There and Not There: Presents and Absence of Disability in Transitions from Education to Work* offers a view, rarely seen in the research literature on learning/work transitions, into the way that disability shapes and is actively produced. Indeed, as they outline, unemployment, under-employment, and labor force non-participation are enormous amongst "persons with disabilities". We see that the role of education in reproducing these dynamics is a powerful one where expectations are ratified through failed accommodation. Employing what is known as the social model of disability, the authors find that undergirding this process are the ideological assumptions of educational environments that help to constitute disability as an unexpected or as a disappearing feature of the transition from learning to work.

In our first contribution to our understanding of the apprenticeship process, in *Chapter 7: Skilled Trade Training for Women: In Vogue One More Time* Bonnie Watt-Malcolm analyzes the renewed discussion of women in the trades amongst multiple stake-holders including government, capital, sector councils, unions, contractors, education and training agencies, as well as employees. She offers a critical evaluation of the assumptions underlying attempts to implement training initiatives to recruit and retain women into a sector that has customarily resisted their presence. The analysis reveals that training that takes place off the jobsite may not, in fact, be the most effective means to help women learn how to work in trades work within various industrial sectors.

Karen Carter then offers a fascinating exploratory discussion in *Chapter 8: Re-Thinking Learning-Work Transitions in the Context of Community Training and Racialized Youth*. Her argument is that traditional training and school-to-work transitions are disproportionately ineffective for racialized youth. Based on participatory observation and interview methods, her research is focused on the role of the arts and culture industries and the value of community programs. Such programs are seeking to bridge a particularly disenfranchised

social group to labour markets with a focus on community-based initiatives dealing with cultural industries such as music, film and new media in the Toronto area.

Pollock's *Chapter 9: Transitioning to the Teacher Workforce: Internationally Educated Teachers (IETs) as Occasional Teachers* takes a close look at the growing trend for teachers who are educated in non-western countries entering the Canadian teacher workforce. She focuses on Occasional Teachers, documents the nature of their transitions, and shows these transitions to be seriously challenging. We see that these teachers are challenged in the course of gaining access to work as well as in terms of the actual work in the classroom. The various and intersecting processes of professional marginalization are outlined.

The second section of the book is entitled *Section 2 Learning/Work Transitions – Work, Career and Life Changes*. It is aimed at exploring social differences in the transition process 'from work to education' as well as within labour markets and the labour process itself. It highlights in several spots the role of workplace change in negotiations over learning and training opportunities.

We begin with Peter Sawchuk's *Chapter 10: Occupational Transitions within Workplaces Undergoing Change: A Case from the Public Sector*. In keeping with the volume's orientation toward expansive understandings of learning-work transitions, his chapter focuses on what happens once people obtain a job, and how occupational and organizational transitions are interlinked. Drawing on qualitative and quantitative research on the changing nature of welfare benefit delivery work we find multiple layers of transition at play. Central to discussion are the structure of informal learning networks that are crucial for intra-occupational and intra-organizational transitions where we see the importance of changing entry requirements and age cohort divisions.

Chapter 11: Ambiguities in Continuing Education and Training in the Knowledge Economy: The Biopharmaceutical Economic Sector by Paul Bélanger and Stéphane Daniau parallels the theme introduced by Sawchuk in several ways. Their research reports on formal and informal learning trends and contradictions in the bio-pharmaceutical sector as important factors for understanding future developments over the next decade both in this and, indeed, a wide-range of other economic sectors in Canada and elsewhere. The analysis details the differential support given to informal learning among professional groups, the impact of competition between firms on knowledge transfer, as well as how these dynamics can and do shape the development of communities of practice, self-directed learning (within and outside of work).

In keeping with our focus on the transition intrinsic to particular economic sectors and differentiated experiences, in *Chapter 12: Transitioning into Precarious Work: Immigrants' Learning and Resistance* Kiran Mirchandiani et al. examine the dynamics of so-called flexibility associated with the new economy. The reality, as the authors point out, is that such dynamics are characterized by the use of temporary and part-time employees within contingent work arrangements which put them 'at-risk'. These workers do not receive the same protection and benefits as the full-time permanent workforce. Based on extensive interviews with female contingent workers (new immigrants) in the Toronto area across a variety of

workplaces (e.g., supermarkets, call centers, garment industry) the various roles of social differences in this under-research learning/work transition topic are illuminated.

Next is Shibao Guo's *Chapter 13: False Promises in the New Economy: Barriers Facing the Transitions of Recent Chinese Immigrants in Edmonton*. Guo expands on the theme of immigration and racialization established by Mirchandani et al. in the previous chapter. He offers a critique of the self-framing of Canada as a country of immigrants, and the land of vast opportunity. Indeed, not unlike many European countries, in the face of an aging labour force and declining fertility, Canada has little choice but to open its doors, but what awaits newcomers falls far short of the imagined 'land of opportunity' that is actively promoted abroad. The author draws on survey research on immigration from the People's Republic of China. Despite that fact that China has become the country's leading source of new Canadians over the last decade and the immigrant experiences concerning transitions remains poorly understood. Although the majority of these immigrants arrived with post-secondary education, many of them face unemployment or underemployment.

Bonnie Slade and Daniel Schugurensky's *Chapter 14: 'Staring from Another Side, the Bottom': Volunteer Work as a Transition into the Labour Market for Immigrant Professionals* shows how labour market participation and transitions are linked to the 'paid work bias' by focusing on volunteer work, race and immigration. The authors note that a majority of new immigrants in Canada now fall into the "Skilled Worker" category according to the country's immigration 'point system', and that although there is a good deal of information on the integration of 'highly skilled' immigrants into the Canadian labour market in general, few studies to date have explored the mediating role of volunteer work and informal learning in immigrants' work transitions from their home country to Canada. Based on interview and focus group research as well as secondary analysis of national survey data we see the significant degree to which immigrant workers orient to volunteering as a key means of fixing the broken learning-work transitions they face in Canada.

Elaine Biron and her co-authors next turn our attention to the issue of aging in their *Chapter 15: Adult Education and the Transition to Retirement*. Extending the observations from previous chapters (e.g., Livingstone's Chapter 2 and Sawchuk's Chapter 9) their analysis shows that, even in the context of lower adult education participation amongst older adults, the contradiction between initial education in early years of one life still predict, to a large degree, not only who will remain active learners in the later portions of the life course, but also who will use adult learning to guide them amidst challenging uncertainties. The authors note important generational patterns in terms of understandings of the role and purpose of adult education.

And finally, in the last analytic chapter of our collection Tara Fenwick and Janice Wallace reconnect with the issue of disability in *Chapter 16: Transitions in Working Dis/Ability: Able-ing Environments and Disabling Policies*. This chapter bridges many of the concerns about older workers in the previous chapter and issues raised in Chapter 6 (Machalko and Titchkosky). Here the authors point

out that as workers increasingly experience age-related changes to their abilities and mobility, particularly with the removal of mandatory retirement policies in most of Canada, issues of disability in the workplace are growing in importance. However, persons with disabilities, despite employers' legal "duty to accommodate", face discrimination in the workplace including informal stigma, marginalization, insufficient provision of necessary support, and stress-producing expectations that they conform to narrow norms defining the 'good employee' and the 'acceptable body'. Fenwick and Wallace show that individuals often encounter a series of transitions between agencies and workplaces, finding themselves and their 'disability' re-inscribed at each point in the learning-work transitions process. More broadly, most workers can expect to experience transition into or out of various levels of disabling conditions that affect their well-being throughout their working lives, including invisible disabilities such as mental illness produced by workplace stress. Building on an expansive notion of formal as well as informal learning they show that issues of identity become sites of struggle for individuals finding themselves avoided and marginalized. The authors conclude that broad workplace policies can be developed to produce holistic able-ing environments.

CONCLUSIONS FOR MOVING FORWARD

Drawing from this diversity of original research allows us to effectively construct a collective, scholarly response to what, as we have argued, are frequently narrow conceptualizations of transition processes. Central to constructing this volume has been our critical vocationalism approach that has the goal of illuminating the experiences of those social groups that remain effectively under-served by existing learning and work transitions processes. In our collection's division of labour, for the sake of avoiding repetition, contributors were specifically asked *not* to spend inordinate amounts of space re-hashing the range of transitions literature, but rather to focus on the detail and original contributions of their own empirical work. Situating the contributions against the backdrop of national and international literature, we felt, could be properly dealt with through effective introduction and concluding chapters further supported by concise section introductions. Where suitable, we did ask them to retain observations on method where it is necessary for critical understanding of the material and/or it serves the purpose of expanding understanding of studies in learning/work transitions directly. This way of proceeding, we feel, has yielded an illuminating look at the learning/work transition process which begins from the premise of providing voice to marginalized groups while providing clarity to marginalizing mechanisms that remain under-researched in this sub-field of scholarship.

These are the origins of our work, in brief. However, by way of moving forward into the substance of our collection we offer some final words of invitation and observation. Research on transitions can be potentially dizzying in its variation. Fantastically enough, a literature search for the term 'transition' within the many electronic indices of social science research now available reveals something that has the potential to overwhelm: over a half a million entries! The vast majority of these appear to not relate to issues of education, learning and work as such. In other

words, they do not begin from what we understand as a vocationalism perspective. However, the point for us is that conceptualizations of ‘transitions’ has and will likely increasingly play an enormous role in how researchers come to understand the life course. For a volume of this type then, the practical as well as intellectual challenge of delimiting an understanding of transitions was a necessary and immediate one.

While encouraging readers to push forward critically to expand their own thinking beyond the resources collected here we have, nevertheless, found it necessary to draw some boundaries for the purposes of coherence. Our first tools for this are found in our discussion of vocationalism, including the new vocationalism and critical vocationalism continuum. While broad, it serves as an important orientation for us and we hope readers as well; a specific entry point into the broader field that does, however, distinguish the discussion from the sea of transitions, life course and neo-institutionalist studies that exist.

Based on this, we and our contributors have aimed to develop a perspective with careful attention to a broad array of contexts and social differences. The principles we have outlined, this type of perspective and this attention to differences, we feel, are essential for understanding learning/work transitions: transitions which remain *challenging* to an enormous proportion of the populations of virtually every country and for this reason must continue to be *challenged*.

REFERENCES

- Anisef, P., Axelrod, P., Baichman-Anisef, E., James, C., & Turriffin, A. (2000). *Opportunity and uncertainty: Life course experiences of the class of '73*. Toronto: University of Toronto Press.
- Becker, G. (1964). *Human capital: A theoretical and empirical analysis, with special reference to education*. Chicago: University of Chicago Press.
- Bell, D. (1973). *The coming of the post-industrial society*. New York: Basic Books.
- Bowlby, G. (2005). Provincial drop-out rates – trends and consequences. In *Education matters* (Vol. 2, No. 4) (Cat., 81-004-XIE). Ottawa: Statistics Canada.
- Braverman, H. (1974). *Labor and monopoly capital: The degradation of work in the twentieth century*. New York: Monthly Review Press.
- Breen, R. (2005). Explaining cross national variation in youth unemployment: Market and institutional factors. *European Sociological Review*, 21(2), 125–134.
- Brooks, R. (2007). Transitions from education to work in the twenty-first century. *International Journal of Lifelong Education*, 26(5), 491–493.
- Brzinsky-Fay, C. (2007). Lost in transition: Labour entry sequence for school leavers in Europe. *European Sociological Review*, 23(4), 409–422.
- Bynner, J. (2001). British youth transitions in comparative perspective. *Journal of Youth Studies*, 4(1), 5–23.
- Clark, W. (2000). 100 years of education. In *Canadian social trends* (Winter) (Cat.11-008-XIE). Ottawa: Statistics Canada.
- Coffield, F. (2007). *Running ever faster down the wrong road: An alternative future for education and skills*. London: Institute of Education - University of London.
- DiMaggio, P., & Powell, W. (1991). *The new institutionalism in organizational analysis*. Chicago: University of Chicago Press.
- Evans, K. (2002). Taking control of their lives? Agency in young adult transitions in England and the New Germany. *Journal of Youth Studies*, 5(3), 245–269.
- Evans, K., Hodkinson, P., & Unwin, L. (Eds.). (2002). *Working to learn: Transforming learning in the workplace*. London: Francis Taylor.
- Frenkel, S., Korczynski, M., Shire, K., & Tam, M. (1999). *On the front live: Organization of work in the information economy*. Ithaca, NY: Cornell University Press.

- Furlong, A., Cartmel, F., Biggart, A., Sweeting, H., & West, P. (2003). *Youth transitions: Patterns of vulnerability and processes of social inclusion*. Edinburgh: Scottish Executive.
- Galabuzi, G.-E. (2006). *Canada's economic apartheid: The social exclusion of racialized groups in the new century*. Toronto: Canadian Scholars Press.
- Gaskell, J., & Rubenson, K. (Eds.). (2004). *Educational outcomes for the Canadian workplace: New frameworks for policy and research*. Toronto: University of Toronto Press.
- Gilmore, J. (2008). *The Canadian immigrant labour market in 2006: Analysis by region or country of birth* (The Immigrant Labour Force Analysis Series) (Cat. 71-606-X2008002). Ottawa: Statistics Canada.
- Griffin, C. (1985). *Typical girls: Young women from school to the job market*. London: Routledge and Kegan Paul.
- Griffin, C. (1999). Lifelong learning and social democracy. *International Journal of Lifelong Education*, 18(5), 329–342.
- Grubb, N. (1996). *Learning to work: The case for re-integrating job training and education*. New York: Russell Sage.
- Hango, D., & de Broucker, P. (2007). *Education-to-labour market pathways of Canadian youth: Findings from the youth in transition survey* (Culture, Tourism and the Centre for Education Statistics Research Paper). Ottawa: Statistics Canada.
- Hannan, D. F., Raffae, D., & Smyth, E. (1997). *Cross-national research on school to work transitions: An analytical framework*. Paper presented at 1996 Workshop of the Network on Transitions in Youth, La Ciotat.
- Heinz, W. (2002). Transition discontinuities and the biographical shaping of early work careers. *Journal of Vocational Behaviour*, 60(2), 220–240.
- Heinz, W. (Ed.). (1999). *From education to work: Cross-national perspectives*. New York: Cambridge University Press.
- Howell, J. (2008). *The business of community*. Toronto: Imagine Canada.
- Hunt, C. (1999). Candlestick and faces: Aspects of lifelong learning. *Studies in the Education of Adults*, 31(2), 197–209.
- Kerr, C., Dunlop, J., Harbinson, F., & Myers, C. (1960). *Industrialism and industrial man*. New York: Oxford University Press.
- Kincheloe, J. (1999). *How do we tell the workers?: The socioeconomic foundations of work and vocational education*. Boulder, CO: Westview Press.
- Krahn, H., & Taylor, A. (2005). Resilient teenagers: Explaining the high educational aspirations of visible minority immigrant youth in Canada. *Journal of International Migration and Integration*, 6(3/4), 405–434.
- Krahn, H. (1996). *School–work transitions: Changing patterns and research needs*. Ottawa: Applied Research Branch, Human Resources Development Canada.
- Lehmann, W. (2000). Is Germany's dual system still a model for Canadian youth apprenticeship initiatives? *Canadian Public Policy-Analyse de Politiques*, 26(2), 225–240.
- Lehmann, W. (2005). Choosing to labour: Structure and agency in school-to-work transitions. *Canadian Journal of Sociology*, 30(3), 325–350.
- Lehmann, W., & Taylor, A. (2003). Giving employers what they want? New vocationalism in Alberta. *Journal of Education and Work*, 16(1), 45–67.
- Livingstone, D. (2004). *The education-jobs gap*. Toronto: Broadview Press.
- López Blasco, A., McNeish, W., & Walther, A. (2003). *Young people and contradictions of inclusion: Towards integrated transition policies in Europe*. Bristol: Policy Press.
- Marsden, D. (1999). *A theory of employment systems. Micro-foundations of societal diversity*. Oxford: Oxford University Press.
- McVicar, D., & Anyadike-Danes, M. (2002). Predicting successful and unsuccessful transitions from school to work by using sequence methods. *Journal of the Royal Statistical Society*, 165, 317–334.
- Mortimer, J., & Shanahan, M. (Eds.). (2003). *Handbook of the life course*. New York: Kluwer.
- OECD. (2004, February). *Policy brief on lifelong learning*, *OECD Observer*. Paris: Organization for Economic Co-operation and Development.
- OECD. (1996). *Lifelong learning for all: Meeting of the education committee at ministerial level*. Paris: Organization for Economic Co-operation and Development.
- OECD. (1998). Lifelong learning: A monitoring framework and trends in participation. In *Centre for educational research and innovation education policy analysis 1998* (pp. 7–24). Paris: Organization for Economic Co-operation and Development.

- OECD. (2001). *Competencies for the knowledge economy*. Paris: Organization for Economic Co-operation and Development.
- OECD. (2008). *OECD employment outlook 2008*. Paris: Organization for Economic Cooperation and Development.
- Oliver, M. (1996). *Understanding disability: From theory to practice*. Basingstoke: Macmillan Press.
- Osterman, P. (1996). *Broken ladders: Managerial careers in the new economy*. New York: Oxford University Press.
- Peracchi, F. (2002). The European community household panel: A review. *Empirical Economics*, 27, 63–90.
- Pohl, A., & Walther, A. (2007). Activating the disadvantages: Variations in addressing youth transitions across Europe. *International Journal of Lifelong Education*, 26(5), 533–553.
- Reich, R. (1991). *The work of nations: Preparing ourselves for 21st century capitalism*. New York: Vintage.
- Roberts, K. (2003). School-to-work transitions: Why the United Kingdom's educational ladders always fail to connect. *International Studies in Sociology of Education*, 14(3), 203–216.
- Sackmann, R., & Wingens, M. (2003). From transitions to trajectories. Sequence types. In W. R. Heinz (Ed.), *Social dynamics of the life course. Transitions, institutions, and interrelations*. New York: Aldine de Gruyter.
- Sawchuk, P. (2003). *Adult learning and technology in working-class life*. New York: Cambridge University Press.
- Sawchuk, P. (2006). 'Use-Value' and the re-thinking of skills, learning and the labour process. *Journal of Industrial Relations*, 48(5), 593–617.
- Sawchuk, P. (2008). Labour perspectives on the new politics of skill and competency formation: International reflections. *Asia Pacific Education Review*, 9(1), 1–15.
- Schuetze, H., & Sweet, R. (Eds.). (2003). *Integrating school and workplace learning in Canada*. Montreal: McGill-Queen's Press.
- Scott, W. (2001). *Institutions and organizations*. Thousand Oaks, CA: Sage.
- Shaienks, D., Eisl-Culkin, J., & Bussière, P. (2006). *Follow-up on education and labour market pathways of young Canadians aged 18 to 20: Results from YITS Cycle 3*. Ottawa: Statistics Canada.
- Shaienks, D., & Gluszynski, T. (2007). *Participation in postsecondary education: Graduates, continuers and drop outs – results from the YITS Cycle 4* (Culture, Tourism and the Centre for Education Statistics Research Papers). Ottawa: Human Resources and Social Development Canada.
- Sharpe, S. (1994). *Just like a girl: How girls learn to be women from the seventies to the nineties*. London: Penguin.
- Shavit, Y., & Müller, W. (1998). *A comparative study of educational qualifications and occupational destinations*. New York: Oxford University Press.
- Shildrick, T., & MacDonald, R. (2007). Biographies of exclusion: Poor work and poor transitions. *International Journal of Lifelong Education*, 26(5), 589–604.
- Staff, J., & Mortimer, J. (2003). Diverse transitions from school to work. *Work and Occupations*, 30(3), 361–369.
- Stern, D., & Wagner, D. (1999). *International perspectives on the school-to-work transition*. London: Hampton Press.
- Stokes, H., & Wyn, J. (2007). Constructing identities and making careers: Young people's perspectives on work and learning. *International Journal of Lifelong Education*, 26(5), 495–511.
- Taylor, A. (2005). 'Re-culturing' students and selling futures: School-to-work policy in Ontario. *Journal of Education and Work*, 18(3), 321–340.
- Touraine, A. (1971). *The post-industrial society: Tomorrow's social history: Classes, conflicts and culture in the programmed society*. New York: Random House.
- Van Berkel, R., & Hornemann Møller, I. (2002). *Active social policies in the EU: Inclusion through participation?* Bristol: Policy Press.
- Walther, A., & Pohl, A. (2005). *Thematic study on policy measures for disadvantaged youth. Study for the European commission*. Tübingen: IRIS.
- Willis, P. (1977). *Learning to labour: How working class kids get working class jobs*. Farnborough: Saxon House.
- Zeman, K., Knighton, T., & Bussière, P. (2004). *Education and labour market pathways of young Canadians between age 20 and 22: An overview* (Education, Skills and Learning Research Papers) (Cat. 81-595-MIE2004018). Ottawa: Statistics Canada.

SAWCHUK AND TAYLOR

Peter H. Sawchuk

Professor, Department of Sociology and Equity Studies in Education

Ontario Institute for Studies in Education of the University of Toronto, Canada

Alison Taylor

Professor, Department of Educational Policy Studies

University of Alberta, Canada

D.W. LIVINGSTONE

2. AGE, OCCUPATIONAL CLASS AND LIFELONG LEARNING:

Findings of a 2004 Canadian Survey of Formal and Informal Learning through the Life Course¹

INTRODUCTION

All societies develop rules and norms to guide their populations through the life course. Human action would be stymied if we did not rely on some such conventions. But we make our own history and in the process may choose to reproduce, modify or transform such orienting social constructions. A pertinent case in point is the notion of major transition points through the life course in the institutional context of advanced capitalist societies. Through most of my life, three major transition points have been widely presumed and reproduced by most people. These are school entry, school to employment, and retirement from employment. When I enrolled in first grade a large portion of my life became increasingly regulated by a large institution outside my family. School graduation led me directly to the labour market and a steady job. Post-WWII pension and old age security programs have been designed on the assumption that most employees will retire from their jobs by their 60s, an imminent consideration for me.

The reality of life transitions is rarely as neat as norms suggest. All of these notions of major change and especially adult ‘transitions’ are becoming more diffuse and complex in the current period. School entry now may include stages of day care programs and junior kindergarten as well as immersion in a variety of organized pre-school activities, educational games and media. The majority of students leaving secondary schools now move back and forth between the labour market and post-secondary and further education programs, and may continue to do so through much of their careers to enhance their job prospects; married women with jobs and children to care for also increasingly move back and forth between home and jobs. Retirement from paid employment now comes in many forms from early or partial to late or never, while unpaid volunteer work by older people is being increasingly recognized as a valuable and necessary activity. The notions of retirement as a final phase of disengagement (as suggested by functionalist theories) or compulsory consignment to state-based long-term care systems (as presumed in political economy approaches) are increasingly remote accounts of the real choices for older people (see Gilleard and Higgs, 2002).

Virtually all attempts to construct distinctive transition points, maturation stages or life passages are revealed on close examination as ideal types with many variants. In the present empirical analysis, we will treat respondents as active social agents who, while making work and learning choices, serve to reproduce or modify pre-established transition patterns. This agency can apply to all social actors including those in all types of marginalized groups identified in Chapter 1. The focus in this chapter will be on age and economic class differences: old and working class as well as younger and wealthy people.

The primary focus of this analysis will be on intentional learning activities throughout the life course. Such intentional acquisition of knowledge, skill or understanding occurs in sites of widely varied formality. Basic types of intentional learning include: *formal schooling*; *formal adult education*; *informal education or training*; and *non-taught individual or collective informal learning* (see Livingstone, 2006 as well as Colley et al., 2003 for further definition and critical discussion of these distinctions). Few empirical studies to date have paid comparable attention to both formal and informal learning activities, most often concentrating on more easily recorded formal education. In this chapter we will first offer a brief overview of the recent self-reported formal and informal learning activities of the Canadian adult population followed by age and class-based comparative analysis of these activities.

Age differences will be summarized using conventional five-year age cohort divisions of the population over 18 and up to the 80s, although other groupings also have been explored to detect differences in learning activities. Few prior surveys have addressed the learning practices of those adults over 65. It should be noted that the cross-sectional data used here cannot begin to distinguish individual maturation effects (aging per se) from purportedly distinctive cohort effects (e.g., 'baby boom' generation) or historical period effects (e.g., 'information age'). It may be, for example, that specific effects of the diffusion of personal information technologies over the past generation will serve to increase the incidence of learning activities significantly over the levels now found among retired people as current younger cohorts age. In any case, the incidence of learning activities found among older people in this study is unlikely to decrease as younger cohorts age in the current historical period.

For the *employed* labour force, *labour process-based occupational class distinctions* will be used because these are the most basic economic class divisions in society and therefore most likely to be associated with learning differences. The basic class division in capitalism is between the owners of means of production and those who must offer their labour to make a living. In concrete terms, few people are pure representatives of capital or labour. The boundaries are more permeable than most other nominal social distinctions such as age, sex, ethnicity, disability². Many owners do some labour and many labourers own some capital. But the foundational class positions in the production process clearly perform the respective functions of capital to oversee profitable commodity production and of hired labour to produce vendible commodities. Our conceptual model of class positions is grounded in ownership, and distinguishable authority and autonomy aspects of production relations. It was initially developed during the period when Harry

Braverman's (1974) analysis of the capitalist labour process stimulated several efforts to identify contemporary class locations grounded in production relations (see Wright, 1978, Livingstone, 1983, 1999a)—before class analysis and labour process studies went their separate ways (see Carter, 1995). We can distinguish eight major class groupings: *large employers*, *small employers*, the *self-employed*, *managers*, *supervisors*, *professional employees*, *service workers*, and *industrial workers*. Among owners, large employers include substantial owners of capital and corporate executives who oversee investment in companies and corporations with multi-million dollar assets and many employees. Small employers, typically family firms or partnerships, tend to have exclusive ownership, small numbers of employees and continue to play active co-ordinating roles in the labour process of their firms. The self-employed remain in control of their small commodity enterprises but are reliant on their own labour. At the other end of the class hierarchy are those clearly in the working class, without substantial ownership claims and devoid of official supervisory authority or recognized autonomy to exercise specialized knowledge. This includes industrial workers who produce, distribute or repair material goods. It also includes service workers who provide a widening array of sales, business, social and other services, similarly without recognized supervisory authority or task autonomy. Between employers and those who are clearly in working class positions, other employees tend to have mixed functions. Managers are delegated by owners to control the overall labour process at the point of production to ensure profitability but may also contribute their labour to co-ordinate this process. Supervisors are under the authority of managers to control adherence to production standards by industrial or service workers but may also collaborate directly with them in aspects of this work. Professional employees have recognized task autonomy based on their specialized knowledge to design production processes for themselves and others and to execute their own work with a high level of discretion, but remain subordinated to employer prerogatives.³ We will use these class distinctions to analyze changes in the learning practices of the employed labour force based on a recent Canadian national survey.⁴ In addition, the combined effects of class and age on learning practices will be analyzed for the employed labour force, most of which is under 65 years old.

WORK AND LIFELONG LEARNING (WALL) RESEARCH NETWORK FINDINGS

The data for this analysis are drawn from the WALL research network, established at the Centre for the Study of Education and Work (CSEW) at the Ontario Institute for Studies in Education at the University of Toronto (OISE/UT) in 2002.⁵ Part of the mandate of this network was to conduct comparative surveys and case studies of the changing nature of learning and work across Canada. A large-scale country-wide survey (N = 9,063) was conducted in 2004 covering an array of paid and unpaid work activities, formal and informal learning activities, and socio-demographic information (see www.wallnetwork.ca). In this paper, we will present and discuss some of the relevant findings on learning activities for the entire adult population and then by age and class.

FORMAL SCHOOLING, ADULT EDUCATION AND INFORMAL LEARNING
PROFILES

Massive expansion of state-funded schooling in the post WWII era has led to near-universal attendance until near the end of secondary school and widespread participation in post-secondary institutions in most advanced capitalist economies. In Canada, with one of the highest levels of educational attainment in the world (Statistics Canada, 2003), majorities of youth cohorts now complete some form of post-secondary education. Age cohort inspection of the 2004 survey data shows that among those over 80 years of age – born before the Great Depression of the 1930s and schooled largely prior to WWII – less than 15 percent have completed any form of post-secondary schooling. About a third of those now in their early 60s—born in the WWII period and schooled mainly in the comprehensive and vocational secondary school expansion of the immediate post-war era – have completed post-secondary education, mostly university degrees. The following cohort now in their late 50s—born in the 1960s and beneficiaries of newly created community college systems in Canada—jumped to completion rates of almost half of the cohort. Younger cohorts have experienced a more gradual continuing increase in completion rates, with over 60 percent of those between 25 and 34 graduating to date.

Table 2.1. Participation in adult education by formal schooling, Canada, 18 + Population, 1998–2004

<i>FORMAL SCHOOLING</i>	<i>Taken a course 1998 [%]</i>	<i>Taken a course 2004 [%]</i>
No Diploma	18	23
High School Diploma	53	48
College Certificate	58	52
University Degree	70	63
Total	44	45
<i>N</i>	<i>1548</i>	<i>8843</i>

Sources: NALL Survey, 1998; WALL Survey, 2004

Participation in formal adult education courses has also expanded. Canada still has a relatively poorly organized adult education system compared to many European countries (Myers and deBroucker, 2006) but participation rates have increased rapidly from tiny numbers in the immediate post WWII era. In 1961, only around 4 percent of Canadian adults enrolled in a course; by the early 1980s, the rate had increased to around 20 percent; in 2004, over 40 percent of all Canadian adults (including students registered in degree programs) had taken a course in the past year (Livingstone and Scholtz, 2006). While both formal attainment and adult education have made very large aggregate gains since 1960, participation in adult education courses still tends to reproduce prior differences in educational attainments. As Table 2.1 shows, in both 1998 and 2004 surveys, university graduates remain three times as likely as secondary dropouts to have

taken a course in the past year. However, general adult education participation differences are narrowing as greater proportions of younger cohorts complete forms of secondary and post-secondary schooling.

Popular attitudes about the need for formal education also have risen markedly in recent decades. There is now a nearly universal expectation, in Canada at least, that a post-secondary credential is needed to 'get along' in today's world – even though accessibility to both universities and adult education remain problematic for many of those from socially disadvantaged backgrounds (Livingstone and Stowe, 2003; Myers and de Broucker, 2006).

Every study ever done on informal learning has found it to be more extensive than formal education, which is hardly surprising given that learning is inherent in our species' means of coping with our changing environment. Such studies have also found little relation with formal education, which is again unremarkable since anyone can engage in informal learning at anytime without institutional or resource barriers. While there may be many variations in terms of content, intensity and competency, virtually all adults report engaging in some informal learning.

Empirical research on employment-related learning has confirmed that the vast majority of job training is done informally, much of it through mentoring by more experienced co-workers, and relatively little through formal courses (Betcherman, Leckie and McMullen, 1998; Center for Workforce Development, 1998; Livingstone and Scholtz, 2006). Recent Canadian studies have found that over 80 percent of the labour force have engaged in a specific set of job-related informal learning activities over the past year (Peters, 2004; Livingstone and Scholtz, 2006). Extensive workplace learning activities are indicated by such surveys and growing numbers of case studies (e.g., Rainbird et al., 2004; Felstead et al., 2004). Organized training programs are much less widely available. Employer and government appeals for greater lifelong learning efforts by workers to cope with an emerging knowledge-based economy (e.g., Cortada, 1998) might be more suitably directed to provision of more organized further education programs.

There is some evidence that adults' overall array of intentional informal learning efforts may have increased somewhat in recent decades. According to recent national surveys of self-reported informal learning, Canadian adults are now spending an average of around 14 hours a week in such activities (Livingstone and Scholtz, 2006), compared to around 10 hours in the many case studies and single U.S. national survey conducted in the 1970s (Tough, 1979; Penland, 1977). Whatever the reliability of such measures, there is now substantial evidence that most adults should be recognized as continuing, actively engaged informal learners, that intentional informal learning continues long past initial formal schooling, and that such learning involves many spheres beyond paid employment and is much less constrained by economic background than formal education.⁶

AGE, ADULT EDUCATION AND INFORMAL LEARNING

The connection between age and participation in further education has been one of the strongest relationships in contemporary societies (e.g., Courtney, 1992). As Table 2.2 shows, the majority of those 18 to 24 participated in at least one adult

education course in the past year. But this rate now declines only very gradually, with 45 percent of those in their early 50s also taking a course. For older age groups the rate then drops more rapidly to 30 percent for the 65 to 69 cohort and under 10 percent for those over 75. While comparable historical figures are not readily available for older adults, it is safe to assume that all of these age-specific participation rates are higher than previously. Not only do people go to school longer than ever before but, with the expansion of schooling, the long established association between schooling and adult education draws evermore older adults into continuing formal adult educational activities.

Table 2.2. Age and proportion participating in adult education course in past year, Canada, 2004

<i>AGE COHORT</i>	<i>Taken a course in past year</i> [%]
18–24	65
25–29	56
30–34	54
35–39	50
40–44	52
45–49	50
50–54	46
55–59	38
60–64	30
65–69	21
70–74	17
75–79	9
80+	10
Total	45
<i>N</i>	8757

Source: WALL Survey, 2004

Since substantial numbers of older people have been enrolling in higher education programs, their capabilities to perform well in such programs have become a revelation to some researchers (e.g., Johnson, 1995). But direct studies of older peoples' cognitive functioning discovered decades ago that prior conceptual models focused on older peoples' less efficient recall of details had obscured the more efficient selection and distillation of usable knowledge associated with their maturity (see Labouvie-Vief, 1990). With all due respect to estimates of the doubling of the quantity of knowledge within a matter of years, the wisdom that older people typically gain through the life course surely diminishes their need to attend to a 'required curriculum' of practical knowledge with the intensity of younger people. The primary motivations for most people to take adult education courses during their middle years are job-related. Once older people leave the employed labour force, other motives assume priority but with less urgency, hence the declining adult education participation rates now beginning in the 50s age cohorts.

While involvement in intentional informal learning activities may also be increasing somewhat in recent decades, the association with age is markedly different. As Table 2.3 shows, over 90 percent of all adults and the vast majority at all ages are engaged in some form of informal learning activity. There is some evidence of declining involvement by those over 70 but two-thirds of those over 80 still report active engagement in informal learning activities. Evidence to date suggests that the youngest adults, as well as being those most involved in completing formal schooling, are the most involved in extensive informal learning—which appears self-evident since they are most likely to be experiencing multiple transitions: from families of origin to independent living situations, from initial schooling to starting careers and otherwise establishing new life styles (Livingstone, 1999b). The extensiveness of informal learning activities appears to remain fairly constant throughout later adulthood, at least as indicated by participation rates and time devoted to it.

Table 2.3. Age and participation in any informal learning activities or learning about computers in past year, Canada, 2004

<i>AGE COHORT</i>	<i>Any informal learning</i> [%]	<i>Learning about computers</i> [%]
18–24	95	65
25–29	95	63
30–34	96	66
35–39	96	67
40–44	94	67
45–49	95	67
50–54	94	70
55–59	90	61
60–64	86	44
65–69	86	37
70–74	78	26
75–79	72	20
80+	64	11
Total	91	58
<i>N</i>	<i>8774</i>	<i>8771</i>

The main contents of informal learning do shift markedly from preoccupation with job-related matters prior to retirement to ‘post-occupation’ focus on general interests including health issues. It is clear by virtually any direct measures that intentional informal learning is much more extensive than formal adult education for most people after they complete their initial period of intensive schooling. Tough’s (1978) metaphor of the iceberg of adult learning remains quite appropriate in terms of estimated time devoted—a few hours a week of formal education versus more than 10 hours for informal learning activities on average for all adults—but the hidden part of the iceberg is even greater for older people who in a real sense have less to learn from any available formal curriculum about coping with life experience.

Table 2.3 also summarizes the proportions of each of these age cohorts that have engaged in informal learning about computers over the past year, in relation to either paid work, unpaid housework or community volunteer work or through general interest. Informal learning on any specific topic will obviously be less extensive than informal learning in general. But the majority of adults have been involved in learning about computers in this period when personal computers are making their way into most schools, most paid workplaces and the majority of households. Majorities in all age cohorts up to age 60 engage in informal learning about computers. Participation then drops rapidly in post-retirement dominated cohorts but remains detectable even in those over 80. Given the active continuing involvement in general informal learning for the majority of those over 80, this drop in learning about computers is likely an effect of older cohorts' formative years occurring in the historical period prior to the onset of the 'information age'.

A century ago, working to earn a living was a common condition in industrializing societies from adolescence to the grave. A common retirement phase of life has emerged over this period as a consequence of a more capital-intensive economy requiring less direct producers to achieve subsistence levels, widening provision of retirement benefits and extended longevity because more recent generations did not have to work themselves into the grave. Table 2.4 summarizes current employment status by age in Canada. Paid employment is now the majority status for all cohorts between 20 and 60, including both men and women. Indeed, with the rapidly growing entry of married women with children into paid employment since WWII, the labour force participation rate for these age groups is now at historically highest recorded levels. But with compulsory schooling until at least 16 and a growing norm of post-secondary completion, employment (either part-time or full-time) is now a minority status until the late teens at least and is now commonly combined with post-secondary schooling in the early 20s.

Table 2.4. Age cohort by proportion currently employed, Canada, 2004

<i>AGE COHORT</i>	<i>Males</i> [%]	<i>Females</i> [%]	<i>Total</i> [%]
18-19	59	41	49
20-24	71	66	68
25-29	83	72	77
30-34	90	81	86
35-39	88	75	81
40-44	91	80	85
45-49	92	80	86
50-54	84	69	77
55-59	71	57	64
60-64	45	31	37
65-69	14	7	11
70-74	15	3	9
75-79	4	1	2
80+	3	1	1
Total	71	58	64
<i>N</i>	4251	4520	8775

The retirement phase has become close to universal, with employment becoming a minority status for those between 60 and 64 and only around 10 percent continuing in employment after 65, a common legislated age for retirement benefits to begin. However, the normative age of retirement is becoming more diffuse, with early retirement provisions becoming more common as the baby boom generation has marched through the active labour force, and mandatory retirement provisions diminishing as they prepare to leave it. Paid employment remains a detectable status of at least a few of those over 80.

Before moving to consider a class perspective, one further aspect of age and learning should be emphasized. Informal education, in terms of mentoring by more experienced colleagues and friends, is commonly an age-based process. For example, according to the 2004 survey, the majority of recent young labour force entrants have actively sought advice about job skills within the past month while only a quarter of those over 55 and 10 percent of those continuing beyond 65 have done so. Much paid workplace learning tends to be collective and mutual (Sawchuk, 2003), but more experienced and typically older workers most often lead the way.

OCCUPATIONAL CLASS AND LEARNING PRACTICES

The role of formal education in reproducing social classes – at least in simple status-based dichotomous terms of middle and working classes – has been well documented. School success has long reflected the occupational and family-centred transmission of cultural codes (Bourdieu, 1984), as well as class-based access to adequate funds. Canadian research has found that children from families in higher occupational class locations, whose parents much more commonly had advanced educational attainments, have been much more likely to gain university credentials and better jobs (Curtis, Livingstone and Smaller, 1992). Table 2.5 shows that occupational classes in the current labour force continue to be clearly differentiated in terms of the proportion attaining post-secondary degrees: about 80 percent of professional employees and 70 percent large employers and managers have completed some form of post-secondary schooling, contrasted with about half of those in most other class positions and about a third of industrial workers. As previously noted, completion of some form of post-secondary certification – most notably community college diplomas – has grown rapidly in Canada since the 1960s, therefore the absolute differences in post-secondary attainment levels between large employers, managers and professional employees on the one hand and industrial and service workers on the other hand have diminished. But large gaps remain at more advanced levels. About half of professional employees have university degrees, contrasted with 10 percent of service workers and 4 percent of industrial workers.

As a consequence of post-secondary expansion, the long established association between school attainment and participation in adult education may be playing a diminishing role in the cycle of class reproduction. As Table 2.5 also shows, differences in course participation between large employers, managers and professionals on the one hand and service and industrial workers on the other hand are less than their school attainment differences; these differences also have decreased during the past decade.

Table 2.5. Post-secondary school completion, participation in adult education, and job-related and computer-related informal learning by occupational class, employed labour force, Canada, 2004

<i>OCCUPATIONAL CLASS</i>	<i>Post-secondary completion</i>	<i>Course/Workshop taken in past year</i>	<i>Participate in informal job-related learning</i>	<i>Participate in learning about computers</i>
	[%]	[%]	[%]	[%]
Large Employers	70	67	87	77
Small Employers	54	46	88	68
Self-Employed	54	46	87	65
Managers	71	68	92	80
Professionals	83	67	92	77
Supervisors	56	54	88	66
Service Workers	50	52	84	65
Industrial Workers	34	41	84	59
Total [%]	56	53	87	68
<i>N</i>	5366	5436	5428	5595

Employer contributions are widely recognized as a factor in employee course participation (Peters, 2004). While demand for adult education courses appears to be similar between occupational classes, employer contributions differ widely. In 2004, Canadian employers provided, paid for or facilitated half of all managers to receive formal training. Over a quarter of all professional employees and supervisory employees received support. Only around 15 percent of service workers and industrial workers were given any such assistance. This is presumably one factor accounting for persistent class differences in adult education participation rates. It should also be noted here that both the school attainment levels and adult course participation rates of the employed labour force are higher than those of the remaining population excluded from the active labour force; these marginalized or ‘underclass’ people may often find less formal education is a powerful means of their exclusion.

But it is clear that participation in both job-related as well as general informal learning is much more prevalent than participation in adult education, and does not appear to be generally linked to formal credentials or much differentiated by occupational class position. As Table 2.5 also shows, the vast majority of Canadians in all occupational classes are active informal job-related learners regardless of their formal educational attainment. This finding suggests that the continuing acquisition of skills among lower occupational classes is more prevalent than often assumed. There is also no suggestion in the survey data or related case studies (see Livingstone and Sawchuk, 2004) that those working class respondents with less formal schooling are devoting appreciably less time to job-related informal learning. Differences between class positions in informal learning about computers are somewhat more noticeable between industrial workers and others, partly because of more limited opportunities to use computers in manual jobs, but the majority of industrial workers are actively engaged in such learning even if there is little on-the-job opportunity (see

Sawchuk, 2003). There is much more detailed analysis of informal learning in other WALL survey reports (see Livingstone and Scholtz, 2006; WALL website case studies). It may be most relevant here to note that the strongest relation between work time and informal learning time for those in most class positions is found for voluntary community work, which is generally more discretionary than either paid work or housework (see Livingstone, 2001). This suggests that adults may be most likely to learn intentionally in social settings relatively free of hierarchical control.

AGE, CLASS AND LEARNING ACTIVITIES

This large-scale survey also permits further analysis of the interactive effects of age and class on learning practices. Table 2.6 summarizes the basic patterns in relation to participation in adult education courses. The first point to be noted here is that the long established decline in adult education participation with aging appears to be becoming more delayed and gradual for those actively employed in all class positions. There is virtually no consistent decline in participation rates among those aged 25 through their early 50s in either professional-managerial class positions or in working class jobs. Professional and managerial employees as well as large owners appear to have the highest sustained participation rates in all age cohorts. But participation reaches near majority levels in older cohorts of most class positions, with the notable exception the small numbers of industrial workers who remain employed into the late 50s, for whom course participation drops to around a quarter (and for whom employer sponsorship of courses appears to be almost nil).

Table 2.6. Age and occupational class position by participation in adult education courses, Canada, 2004

CLASS AGE	Large emp. [%]	Small emp. [%]	Self- emp. [%]	Man- agers [%]	Profe ss. [%]	Super vis. [%]	Serv. Wk. [%]	Ind. wk. [%]	Age totals [%]
18-24			54	76	71	64	62	50	62
25-29		46**	67	62	62	52	57	47	56
30-34		66	64	62	66	45	50	42	55
35-39		42	40	66	69	64	52	40	52
40-44	60*	36	48	70	68	69	42	51	53
45-49	68**	55	44	83	69	51	48	38	53
50-54		43	37	75	76	37	51	31	50
55-59		44	35	63	56	45**	48	28	45
60-64		43**	52	22**	50**		46**	23**	40
65+			24						31
Class	64	47	45	68	67	53	51	41	53
Total [%]									
N	55	336	872	587	852	283	1466	1047	5498

*Younger age cohorts combined when cell sizes less than 20 cases.

**Older age cohorts combined when cell sizes less than 20 cases.

Participation rates in informal learning activities are at similarly high levels of around 90 percent in all age cohorts in all occupational classes. Learning about computers also involves majorities of those of all ages in all class positions in the employed labour force. Paid workplace informal learning is engaged in extensively by those in all class positions throughout virtually their entire working lives.

CONCLUDING REMARKS

The current analysis does not intend to make inferences about the effectiveness of adult education courses or the quality of informal learning. It merely registers the incidence of such activities and in particular the extensive involvement of older people generally and working class employees in both types of learning activities. Those with vested interests in previously institutionalized forms of learning may well dismiss such findings as superficial. However, we can safely conclude the following:

- the most evident formal types of learning diminish in old age, but informal parts of learning persist throughout the life course. Older people in all walks of life typically remain active informal learners. In terms of recent research on neuroplasticity, their brains continue to develop. Older people warrant greater respect for their learning capacities and rights than has been generally accorded in industrial and post-industrial societies where they have been commonly regarded as cognitively deficient and socially disengaged;
- older people tend to be wiser than younger people in the ‘required curriculum’ of life and have less related need for formal instruction. Elders in every society are capable of providing vital mentoring instruction to younger people. In many advanced capitalist societies, they tend to be a wasted resource;
- it is evident that participation in schooling and formal adult education courses has grown rapidly in recent decades. There is mounting evidence that these increases are in excess of formal job requirements and that the ‘overqualification/underemployment/underutilization/overeducation’ of the entire labour force in advanced market economies, and of working class employees in particular, is also growing significantly (see Livingstone, 1999a, 2004, 2009; Green et al., 2002; Handel, 2005; Vaisey, 2006 for overviews). If the unrecognized and underutilized informal learning of many people is also considered, the waste of talent is massive;
- according to the current survey, over a quarter of all employees believe they are overqualified for their jobs. This includes over 40 percent of those ages 18 to 24. But even among those in their 50s, a quarter feel the same way. Underemployment is now a sustained problem that cannot be resolved by the maturation of workers through their employment careers;
- it is increasingly evident that further educational reforms—inherently valuable as education generally is—will be of little immediate use in addressing such education-jobs gap. More equitable distribution of paid work, design of more

decent jobs allowing more workers to utilize their current capacities, and greater valuing of now unpaid work – including creation of green jobs and mentoring by retired people – are surely part of the resolution of this growing gap.

- much further research attention to the actual learning capacities and accomplishments of older people and working class employees is needed to overcome persistent assumptions about their inferiority and irrelevance in societies in which formal education remains hegemonic.

Finally, these findings from one of the few surveys to date to have examined actual learning practices of adults across the life course and across different occupational classes provide evidence for abandoning simple assumptions of linearity, both in terms of aging and learning and also in terms of job-related learning. The findings also suggest that the heralded emergence of a knowledge-based economy with presumed demands for greater learning efforts, especially by older employees with less formal education, may be ignoring already very substantial learning efforts. Different formal educational structures and employment regulations may be related to variations in initial successful transitions between schooling and employment in respective countries (e.g., Breen, 2005). But the commonalities in adult learning practices may ultimately be more important for understanding later transitions throughout the life course.

NOTES

- ¹ Revised version of keynote address presented at ‘The times they are a-changin’:researching transitions in lifelong learning’ conference. Centre for Research on Lifelong Learning, University of Stirling, Scotland, 22–24 June 2007.
- ² Sex, ethnicity and disability effects on learning activities will not be considered in this paper. There are significant learning differences in these terms, notably more limited recognition of the learning activities of women, visible minorities and those designated as disabled. Further multivariate analyses have found that, for the learning measures discussed here, these effects do not diminish age and class effects.
- ³ These class divisions based on relations of production are distinct from occupational classifications but overlap with them (see Wright, 1980). In operationalizing class divisions, ownership positions must first be separated from the rest of the active labour force. While employee positions with official supervisory authority and/or recognized specialized professional knowledge may be continually shifting, the detailed occupational censuses of most advanced industrial countries provide sufficient information to approximate most of these divisions, as well as ownership. But before proceeding to empirical data analysis, two limitations must be noted. The large employer class is not adequately distinguished in any national survey because of their very small numbers. Also, the much larger underclass of chronically unemployed and otherwise excluded from the wage labour force, but dependent on the capitalist mode of production, is also poorly represented in sample surveys and beyond the scope of this analysis.
- ⁴ For fuller comparative discussion of these occupational class distinctions, see Livingstone and Mangan (1996) and Livingstone and Scholtz (2006).
- ⁵ The 2004 WALL survey (N = 9,063) is primarily intended to provide general benchmarks for continuing studies of work and learning. Readers are encouraged to use the data in this survey in conjunction with reports on the 12 WALL network case studies and the WALL Resource Base which can be found at: <http://www.wallnetwork.ca>. A comparable prior national survey of adult learning was conducted in 1998 and results may be found at www.nall.ca.
- ⁶ See for example the WALL studies by Eichler (2005) and Schugurensky & Mundel (2005) on housework and volunteer community work in relation to largely informal learning activities.

REFERENCES

- Gilleard, C., & Higgs, P. (2002). The third age: Class, cohort or generation? *Ageing and Society*, 22, 369–382.
- Betcherman, G., Leckie, N., & McMullen, K. (1998). *Barriers to employer-sponsored training in Canada*. Ottawa: Canadian Policy Research Networks.
- Bourdieu, P. (1984). *Distinction: A social critique of the judgement of taste*. Cambridge, MA: Harvard University Press.
- Braverman, H. (1974). *Labor and monopoly capital*. New York: Monthly Review Press.
- Breen, R. (2005). Explaining cross national variation in youth unemployment: Market and institutional factors. *European Sociological Review*, 21(2), 125–134.
- Carter, B. (1995, Spring). A growing divide: Marxist class analysis and the labour process. *Capital and Class*, 55, 33–72.
- Center for Workforce Development. (1998). *The teaching firm: Where productive work and learning converge*. Newton, MA: Education Development Center.
- Colley, S., Hodkinson, P., & Malcom, J. (2003). *Informality and formality in learning*. London: Learning and Skills Research Centre.
- Cortada, J. W. (Ed.). (1998). *Rise of the knowledge worker*. Boston: Butterworth-Heinemann.
- Courtney, S. (1992). *Why adults learn: Towards a theory of participation in adult education*. London: Routledge.
- Curtis, B., Livingstone, D. W., & Smaller, H. (1992). *Stacking the deck: The streaming of working class kids in Ontario schools*. Toronto, ON: Our Schools/Our Selves.
- Eichler, M. (2005). The other half (or more) of the story: Unpaid household and care work and lifelong learning. In N. Bascia, A. Cumming, A. Datnow, K. Leithwood, & D. Livingstone (Eds.), *International handbook of educational policy, Part 2* (pp. 1023–1042). Bodmin, Cornwall, UK: Springer.
- Felstead, A., Fuller, A., Unwin, L., Ashton, D., Butler, P., Lee, T., et al. (2004, September). *Exposing learning at work: Results from a recent survey*. Paper presented to the Work, Employment and Society Conference, University of Manchester Institute of Science and Technology (UMIST), 1–3 September 2004.
- Green, F., McIntosh, S., & Vignoles, A. (2002, December). The utilization of education and skills: Evidence from Britain. *The Manchester School*, 70(6), 792–811.
- Handel, M. J. (2005). *Worker skills and job requirements: Is there a mismatch?* Washington, DC: Economic Policy Institute.
- Johnson, M. (1995). Lessons from the Open University: Third age learning. *Educational Gerontology*, 21(5), 415–427.
- Labouvie-Vief, G. (1990). Wisdom as integrated thought. In R. J. Sternberg (Ed.), *Wisdom, its nature, origins and development*. New York: Cambridge University Press.
- Livingstone, D. W. (1983). *Class, ideologies and educational futures*. London and New York: Falmer Press.
- Livingstone, D. W. (1999a). *The education-jobs gap: Underemployment or economic democracy*. Toronto, ON: Garamond Press.
- Livingstone, D. W. (1999b). Exploring the icebergs of adult learning: Findings of the first Canadian survey of informal learning practices. *Canadian Journal for the Study of Adult Education*, 13(2), 49–72.
- Livingstone, D. W. (2001). Worker control as the missing link: Relations between paid/unpaid work and work-related learning. *Journal of Workplace Learning*, 13(7/8), 308–317.
- Livingstone, D. W. (2004). Introduction: Mapping the forest of underemployment. In D. W. Livingstone (Ed.), *The education-jobs gap: Underemployment or economic democracy* (2nd edn., pp. xvii–xxxii). Aurora, ON: Garamond Press.
- Livingstone, D. W. (2006). Informal learning: Conceptual distinctions and preliminary findings. In Z. Bekerman, N. C. Burbules, & D. Silberman-Keller (Eds.), *Learning in places: The informal education reader* (pp. 202–226). New York: Peter Lang.
- Livingstone, D. W. (ed.). (2009). *Education and jobs: Exploring the gaps*. Toronto: University of Toronto Press.
- Livingstone, D. W., & Mangan, J. M. (1996). Men's employment classes and class consciousness: An empirical comparison of Marxist and Weberian class distinctions. In D. W. Livingstone & J. M. Mangan (Eds.), *Recast dreams: Class and gender consciousness in Steeltown* (pp. 15–51). Toronto, ON: Garamond Press.

- Livingstone, D. W., & Sawchuk, P. H. (2004). *Hidden knowledge: Organized labour in the information age*. Aurora, ON: Garamond Press.
- Livingstone, D. W., & Scholtz, A. (2006). *Work and lifelong learning in Canada: Basic findings of the 2004 WALL survey*. Toronto. OISE/UT, CSEW. 80 pp. Available at www.wallnetwork.ca
- Livingstone, D. W., & Stowe, S. (2003). Class and learning in Canada: Intergenerational patterns of inequality. In A. Scott & J. Freeman-Moir (Eds.), *Yesterday's dreams: International and critical perspectives on education and social class* (pp. 121–35). Auckland: Canterbury University Press.
- Myers, K., & de Broucker, P. (2006). *Too many left behind: Canada's adult education and training system*. Ottawa: Canadian Policy Research Networks.
- Penland, P. (1977). *Self-planned learning in America*. Pittsburgh: University of Pittsburgh.
- Peters, V. (2004). *Working and training: First results of the 2003 adult education and training survey*. Ottawa: Statistics Canada.
- Rainbird, H., Fuller, A., & Munro, A. (Eds.). (2004). *Workplace learning in context*. London, UK: Routledge.
- Schugurensky, D., & Mundel, K. (2005). Volunteer work and learning: Hidden dimensions of labour force training. In N. Bascia, A. Cumming, A. Datnow, K. Leithwood, & D. Livingstone (Eds.), *International handbook of educational policy, Part 2* (pp. 997–1022). Bodmin, Cornwall, UK: Springer.
- Statistics Canada. (2003). *Education indicators in Canada: Report of the pan-Canadian education indicators program 2003*. Ottawa: Statistics Canada.
- Tough, A. (1979). *The adult's learning projects: A fresh approach to theory and practice in adult learning*. Toronto, ON: OISE Press.
- Vaisey, S. (2006, December). Education and its discontents: Overqualification in America, 1972–2002. *Social Forces*, 85(2), 835–864.
- Wright, E. O. (1978). *Class, crisis and the state*. London: New Left Books.
- Wright, E. O. (1980). Class and occupation. *Theory and Society*, 9, 177–214.

Dr. D. W. Livingstone
Canada Research Chair in Lifelong Learning and Work
Head, Centre for the Study of Education and Work
Director, WALL Research Network
Professor, Department of Sociology and Equity Studies in Education
Ontario Institute for Studies in Education of the University of Toronto