

How Does Post-Secondary Education Contribute to the Social Well-Being of British Columbians?

Overview

The objective of this question scan was to determine the contributions that post-secondary education makes toward the social wellbeing of British Columbians. Searches applying a broad range of applicable terms to four major databases initially yielded 171 relevant documents. Subsequent examination of article abstracts reduced this number to 28. A search of government and professional organisation websites yielded an additional 7 articles for a total of 35 articles.

The focus on social wellbeing or social good is generally a theoretical one, which then requires a set of variables to produce clear operational definitions. However, the likelihood that economic and employability factors contribute to social wellbeing appears to most researchers to be quite high. The documents included, therefore, offer an array of possible factors, which are suggested by researchers attempting to address post-secondary contributions or benefits to individuals, groups or society at large in British Columbia, Canada and the United States. We recommend that the report be reviewed as demonstrating the range of possible variables, based on research that was conducted, which are useful for defining what essentially is a philosophical term but which is quantifiably well within economic constructs. When the literature does not address the topic theoretically, it defines wellbeing from an economic standpoint, such as, employability, status of employment, and income, all of which are quantified as measures of achievement contributing to “wellness.”

Various quantitative articles from Canada and the U.S.A lean predominantly toward demonstrating that a post-secondary education has an economic benefit. While improved employment opportunities and increased salaries are shown to be primary functions of post-secondary education, there are some articles that focus on increased participation in society or a measure of satisfaction either in life or employment. Some articles indicate a set of variables which include the following descriptors: reduced welfare dependency, lower crime rates, healthier lifestyles, and other social gains such as, increased volunteerism, charitable giving and participation in leadership of community organizations.

However, there are only a handful of empirical studies that address those variables to any degree. Most articles that were excluded were: (a) theoretical, (b) focussed on the wrong population, or (c) comparing two or more programs within an institution to determine their benefit or outcome. Though program comparisons were deemed not specific to the question, there were a few articles that address the comparison between applied vs. liberal arts degrees. Those articles were included because they seemed to relate to the notion that post-secondary has two distinct functions, namely job training and fostering personal growth. In short, the two functions handle the variables differently, namely job training (including technical or applied programs) predominantly operates to bring about economic returns, whereas liberal arts education predominantly operates to bring about individual and social benefits. Both outcomes may be argued to bring about social

wellbeing, but without a clear operational definition of wellbeing, the findings may be considered generally speculative though highly informative.

Observations

Quantitative: 14 articles—Included under this heading is any scholarly literature that contains statistical evidence to make its case. These articles include experimental, quasi-experimental, and large-scale descriptive studies. The latter dominates this quantitative literature; it includes surveys, questionnaires, analysis of post-graduation trends and statistics, and longitudinal studies tracking several cohorts 1-10 years after high school graduation.

Ten Canadian articles, including one from B.C., examine predominantly positive economic benefits (salary), employability, and differences between applied or technical degrees vs. liberal arts, e.g., Axelrod, Anisef & Lin (2001). *Against All Odds? The Enduring Value of Liberal Education in Universities, Professions, and the Labour Market*. In Evers & Gilbert (1991). *Outcomes Assessment: How Much Value Does University Education Add?* it states that post-secondary education is deemed to add value for reasoning, time management and quantitative skills, but does not demonstrate value-added for social benefits, supervisory, conflict management or creativity. In general, statistics are drawn from censuses or other similar surveys that yield trends in salary, employability, and job mobility. Job or life satisfaction is a conjecture derived from the statistical figures. One article, using data from the 1996 Canadian Census, examines the extent of racial inequality among Canadians holding a domestically obtained, postsecondary educational qualification., i.e., Gosine (2000). *Revisiting the Notion of a 'Recast' Vertical Mosaic in Canada: Does a Post Secondary Education Make a Difference?*

It holds to reason that job satisfaction is a measure of social benefit insofar as high employment contributes positively to the fabric of life. Life satisfaction, in this instant, is thought to be derived from either being employed (versus unemployed) and/or earning a satisfying income.

Four articles drawn from experiment and/or statistics in the United States examine other variables such as: (1) the "common good" in Kentucky (i.e., Watts (2001). *Education and the Common Good: Social Benefits of Higher Education in Kentucky*); (2) disabilities vs. non-disabled values and views (i.e., Bailey (1994). *Do Students with Disabilities Value College Education?*); (3) the economic wellbeing of single mothers and fathers (i.e., Zhan & Pandey (2004). *Postsecondary Education and Economic Well-Being of Single Mothers and Single Fathers*); (4) civic returns (i.e., Cantor (2004). *Civic Engagement. The University as a Public Good.*)

Qualitative: 1 article—Included under this heading is one qualitative study derived from a focus group that was queried in order to ascertain their satisfaction with a Bachelor's Degree.

Reviews: 2 Articles— Included under this heading are articles that review literature on topics related to issues of social benefit of post-secondary education. The two reviews

include an examination of an entire community, namely Cape Breton, and the effects of post-secondary education in the face of an employment slump, Jensen (2004). *Post-secondary education on the edge: self-improvement and community development in a Cape Breton coal town*, and a review of a book that looks at new frameworks in education, Gaskell (2005). *Educational Outcomes for the Canadian Workplace: New Frameworks for Policy and Research*, which "provides a helpful overview of the context in which current policy and academic debates are occurring."

Reports: 9 articles—Reports included under this heading were produced by specific postsecondary institutions or government agencies interested in promoting post-secondary education as a contributor to wellbeing. At least one report has been published as a book. Relevant findings include:

- West (1988). *Higher education in Canada: An analysis* examines enrollment and participation rates, degree and diploma output; considers the social product of post-secondary education, measuring techniques, externalities, the costs of public funds, and education and job market signalling;
- Assessing the Social Union Framework Agreement, (2000). *Policy Options/Options Politiques* examines the inter-provincial mobility, collaborative federalism, post-secondary education, and citizenship;
- Walters (2004). *A Comparison of the Labour Market Outcomes of Postsecondary Graduates of Various Levels and Fields over a Four-Cohort Period* examines the conflicting arguments regarding the needs of the new economy;
- Cantor (2004). *Civic Engagement: The University as a Public Good* expresses that the university can foster an experimental attitude that can give rise to both intellectual discovery and social innovation.

Grey Literature: 9 documents – Grey literature may subsume any of the above four genres. Most are studies or reports and are relevant to the topic insofar as identifying variables that individuals in various sectors deem to be a measure of social wellbeing or social good; are published on the internet by the Canadian federal government, provincial governments and other educational associations such as the University Presidents' Council in BC:

- University Presidents' Council of BC. (2001). *Investing in British Columbia's research infrastructure: Can we afford not to?* which states that universities also contribute to a culture and society, which is analytical, literate, and attuned to innovation and creativity;
- Association of Universities and Colleges of Canada. (2005). *Building on Our Strengths: Higher Education and Research for Canada's Future* states that universities are crucial to Canadians and to Canada;
- Martin & Trudeau (2004). *The Economic Impact of University Research* provides quantitative evidence of the contribution of university research to wealth creation;
- CAUT-ACPPU. (2005). *Paying The Price: The Case For Lowering Tuition Fees in Canada* states that a lack of funding to universities occurring at the same time as access to a university or college education is widely recognized as becoming more important for the economic and social development of the nation. The

concern is that an impediment to the overall social good will be determined by economic restrictions.

The remainder of the grey literature examines statistics or broadly held views from a variety of sources to exhort the values of university education.

Summary

There appears to be relevant literature herein, particularly with respect to social wellbeing measured as an economic or employability variable. Possible policy implications suggested in the literature include:

- Improving funding and access to universities, particularly in programs of technical or applied focuses;
- Allowing liberal arts education to flourish as there are indicators that the liberal arts are the "recycling" avenue for returning graduates and those individuals enjoy increased employability or social status;
- Improving costs for single parents returning to school as they benefit from higher employability than do those without a university degree;
- Improving income returns to visible minorities with equivalent university degrees or credentials

Feasibility

The literature in this domain is not sufficient to warrant a systematic review of the literature.

Appendix A: Included References

References - British Columbia

Allen, R. C. (2005). *The Economic Benefits of Post-secondary Training and Education in B.C.: An Outcomes Assessment*.
<http://scholar.google.com/url?sa=U&q=http://www.econ.ubc.ca/dp9613.pdf>

This paper assesses the conclusions of the B.C. Labour Force Development Board's report, *Training for What?* That report advocated a large increase in post-secondary technical and vocational training and a reduction in "academic" university programs. This paper analyzes the *COPS forecasting model* that was used by *Training for What?* and argues that the model is unreliable. Instead, this paper analyzes sample survey data from the 1991 Canadian Census and the 1992 Survey of Graduates to measure the success of individuals completing various programs. It is shown that university graduates -- including, in particular, the graduates of "academic" programs like the humanities, social sciences, and natural sciences -- have lower unemployment rates and higher earnings than those completing short-term and two year technical and vocational programs. It is also shown, in contrast to the claims of *Training for What?*, that technical/vocational graduates are more likely to "recycle" through the post-secondary system than are university graduates and that technical/vocational graduates often fail to land jobs that require the skills they studied in school. Teaching the general skills of literacy and numeracy in universities is more conducive to economic success than is the teaching of specific skills in short-term and two year training programs.

Andres, L., & Grayson, J. P. (2003). Parents, Educational Attainment, Jobs and Satisfaction: What's the Connection? A 10-Year Portrait of Canadian Young Women and Men. *Journal of Youth Studies*, 6(2), 181-202.

In this study, we examine relationships among parental background, postsecondary attainment, occupational status, & extrinsic & intrinsic job satisfaction of a cohort of British Columbia youth who graduated from high school in 1988. This cohort was studied through surveys conducted in 1989, 1993, & 1998. Consistent with cultural reproduction theory, it was expected that via the route of educational & occupational attainment, individuals from relatively advantaged families would report higher job satisfaction than others. In this study, we take account of gendered dispositions as another critical form of capital. In our analyses, we include those who have never attended a postsecondary institution following high school, through to those who have completed a minimum of a university degree. Simultaneous two-group LISREL models by gender were specified & estimated. Analyses reveal that significant relationships are, for the most part, direct & sequential, & that every step in the sequence matters. Parents, by virtue of being more highly educated & holding higher status jobs, did not directly or indirectly influence the status of occupations their children will hold as young adults. Rather, parental privilege is passed on to their children via the route of educational attainment. Also, our analyses reveal important

gender differences. The findings extend our understanding of these relationships & raise important questions about the ways investment in higher education is translated into occupational status & eventual job satisfaction for women & men.

University Presidents' Council of BC. (2001). *Investing in British Columbia's research infrastructure: Can we afford not to?*
<http://www.tupc.bc.ca/publications/investResearchInf.pdf>

The most important focus points for research and knowledge development exist within the research-based universities. Their contributions are not simply scientific and technological. Universities also contribute to a culture and society, which is analytical, literate, and attuned to innovation and creativity. Knowledge and ideas are valued and understood as important in communities and regions where the university is vital and recognized.

West, E. G. (1988). *Higher education in Canada: An analysis* Vancouver: Fraser Institute. <http://search.epnet.com/login.aspx?direct=true&db=ecn&an=0046408>

Focuses on the educational and research services of community colleges and universities in Canada, although vocational or career related schools and training programs receive some attention. Describes post-secondary education and presents a general statistical background, concentrating on the period 1975-86. Examines enrollment and participation rates, degree and diploma output, graduates and jobs, student/teacher ratios, student forgone earnings, expenditures, and loans. Compares community colleges and universities. Examines productivity factors, discussing relative earnings of graduates, social and public returns, research activities, and direct and indirect outputs. Considers the social product of post-secondary education, measuring techniques, externalities, the costs of public funds, and education and job market signaling. Examines the status of educational loans, presents data on defaults, and makes recommendations for alternative programs. Discusses the fiscal arrangements and institutional organization of the suppliers. West is a member of the Economics Department at Carleton University.

References - Canada

Assessing the Social Union Framework Agreement, redux.(2000). *Policy Options/Options Politiques*, 21(4), 42-51.

Deals with federal-provincial relations and the SUFA of Feb. 1999 from several different perspectives; Canada; 5 articles. Inter-provincial mobility, collaborative federalism, post-secondary education, and children and citizenship

Association of Universities and Colleges of Canada. (2005). *Building on Our Strengths: Higher Education and Research for Canada's Future*.
http://www.aucc.ca/pdf/english/reports/2004/prebud_10_19_e.pdf

Universities are crucial to Canadians and to Canada. The value of universities to the fabric of our country has been manifest for decades, but never has the importance of higher education been as clear as in recent years.

Axelrod, P., Anisef, P., & Lin, Z. (2001). Against All Odds? The Enduring Value of Liberal Education in Universities, Professions, and the Labour Market. *Canadian Journal of Higher Education*, 31(2), 47-77.

Asserting that liberal education is at risk in Canadian universities, attempts to explain why such policy shifts are occurring; points to the continuing cultural, social, and intellectual value of liberal education; and, drawing from recent census data, demonstrates that liberal education produces generally positive economic benefits to the individual graduate.

CAUT-ACPPU. (2005). *Financing Canada's Universities and Colleges*.

<http://www.caut.ca/en/publications/educationreview/education-review-7-2.pdf>

This report draws upon the latest data on government revenues and expenditures to examine recent trends in public spending on post-secondary education in Canada. The data presented in this report shows that governments continue to seriously under-invest in post-secondary education. This lack of funding is occurring at the same time as access to a university or college education is widely recognized as becoming more important for the economic and social development of the nation, and for improving the standard of living and quality of life of all Canadians.

CAUT-ACPPU. (2005). *Paying The Price: The Case For Lowering Tuition Fees in Canada*. <http://www.caut.ca/en/publications/educationreview/educationreview7-1.pdf>

Should university and college students in Canada pay more for their education? A growing number of commentators think so. They claim that students reap enormous personal benefits from education but are heavily subsidized by the public because tuition fees cover only a fraction of the full cost of education. This report challenges that view. It argues that students today are paying a greater share of their education than at any time in the past 30 years.

Chow, P. H. (2005). Assessing the Determinants of Life Satisfaction in a Canadian University Student Sample. *Alberta Journal of Educational Research*, 51(1), 85. Earlier research has identified age (Hong & Giannakopoulos, 1994), stress (Chang, 1998; Makinen & Pychyl, 2001; Simons, Aysan, Thompson, Hamarat, & Steele, 2002), physical health (Chow, 2002; Pilcher, 1998), style of studying (Cheung, 2000), parenting style (Seibel & Johnson, 2001), lifestyle (Bailey & Miller, 1998), and personality constructs (Cha, 2003; Yetim, 2003) as significant determinants of life satisfaction among postsecondary students. Cross-national studies have also demonstrated that university students in Western, economically affluent societies express higher levels of life satisfaction (Dorahy et al., 2000; Schumaker, Shea, Monfries, & Groth-Marnat, 1993; Simpson, Schumaker, Dorahy, & Shrestha, 1996;

Veenhoven, 1995). This study attempted to explore the construct of life satisfaction among university students in Regina and to identify the primary factors that affect students' satisfaction with life. Notably, self-image emerges as the strongest predictor. This finding is consistent with results from earlier research (Chow, 2002; Harter, 1999; Huebner & Alderman, 1993; Lackovic-Grgin, Dekovic, Milosavljevic, Cvek-Soric, & Opacic, 1996; Leung & Leung, 1992; Neto, 2001; Wilson & Peterson, 1988), demonstrating that individuals who accept themselves in a positive manner and believe that a similar viewpoint is shared by others will develop a more positive evaluation of their overall life conditions. There is also evidence in the literature that socioeconomic status significantly affects life satisfaction ([Sam, D.L.], 2000; Simons et al., 2002; Zumbo & Michalos, 2000). In the light of the high costs associated with university education, the finding that students who had a higher family income were more satisfied with life is not surprising. With respect to sex, female students exhibited a higher level of life satisfaction (Dorahy, Schumaker, Simpson, & Deshpande, 1996; Simpson et al., 1996). This survey also corroborates findings from earlier studies (Bailey & Miller, 1998; Cheung, 2000; Gilman, Huebner, & Laughlin, 2000; Hong & Giannakopoulos, 1994) that academic performance and life satisfaction are positively related. In addition, this study provides substantial support for the strong association between life satisfaction and satisfaction with family members, significant others, and friends (Chow, 2002; Dew & Huebner, 1994; Greenspoon & Saklofske, 2001; Maton, 1990; Seibel & Johnson, 2001; September, McCarrey, Baranowsky, Parent, & Schindler, 2001). Finally, the present study also underscores the significance of physical health on life satisfaction (Chow, 2002; Pilcher, 1998).

Crozier, S. D., & Grassick, P. (1996). I love my B.A.: the employment experience of successful bachelor of arts graduates. *Guidance and Counselling, 11*, 19-26.
A focus group technique was used to explore the employment experience of liberal arts graduates, who had been successful in finding satisfying employment related to their university programs. The graduates stressed the importance of taking personal initiative and using many job search strategies in order to advance their careers. They emphasized the importance of personal contacts and referrals as key strategies in the job search process. The graduates valued the skills they acquired in liberal arts and highlighted their usefulness in employment.

Elliott, L. (2004). *Revitalizing universities through faculty renewal*.
http://www.aucc.ca/pdf/english/publications/researchfile/2000/vol4n1_e.pdf
Student enrolment is expected to grow about 20 percent by 2010 due to demographic and participation rate increases.

Evers, F. T., & Gilbert, S. N. (1991). Outcomes Assessment: How Much Value Does University Education Add? *Canadian Journal of Higher Education, 21*(2), 53-76.
Data from two independent Canadian research studies found that university education produced added value on such dimensions of student development as reasoning, time management, and quantitative skills but not on social skills,

supervisory skills, conflict management, and creativity. Universities are urged to develop more than mere competence in their students.

Finnie, Ross. (2000). Holding their own: employment and earnings of postsecondary graduates. *Education Quarterly Review*, 7(1), 21.

The primary focus of this analysis is to determine whether early labour market outcomes have deteriorated recently for postsecondary graduates in Canada. The evidence suggests that this has not in fact been the case--or at least not to the degree that some may have thought. More specifically, the most recent class of male graduates (1990) generally had similar employment rates and in some cases moderately lower earnings than the first group (1982 graduates). The middle group (1986 graduates) fared better than both of these, having come onto the labour market during the boom years of the mid-1980s. While employment rates for female graduates were also effectively unchanged, earnings levels were generally higher for the most recent group--but more so two years than five years after graduation. There was also a fairly significant narrowing of the earnings gap among graduates by sex, but interestingly this narrowing was greater immediately following graduation than at the interview times. The first important point to note is that unemployment rates were quite low for graduates of all levels (college through doctoral)--mostly in the 4% to 10% range, but sometimes as low as 2% and nowhere greater than 11%. Furthermore, these rates are considerably below those of all labour force participants taken together (that is, postsecondary graduates plus all others). The rates for workers of comparable ages in the general population ranged from 10% to 20%, thus implying rates considerably higher than these for non-postsecondary graduates taken alone. The graduates' rates also compare rather favourably with those of men and women of all ages taken together, thus further distancing college and university graduates from the 'youth unemployment problem.' Median earnings also rose substantially between two and five years after graduation. More interesting, perhaps, is that while the increases in median earnings for female graduates were in every case greater than or equal to the increases in their means (see 'Change' columns in tables 3 and 4), this was not the case for men, for whom the median increases were in many cases smaller than those of their means, especially in the first two cohorts. As a result, the increases in female graduates' median earnings between interviews were closer to the men's increases than was the case with mean earnings, with the exception of bachelor's graduates of the middle cohort and PhD graduates of the third cohort. For 1982 and 1986 PhD graduates, 1986 college graduates, and 1990 bachelor's graduates, the women's growth rates surpassed the men's.

Gosine, K. (2000). Revisiting the Notion of a 'Recast' Vertical Mosaic in Canada: Does a Post Secondary Education Make a Difference? *Canadian Ethnic Studies/Etudes Ethniques Au Canada*, 32(3), 89-104.

Using data from the Public Use Microdata File for individuals drawn from the 1996 Canadian Census, this paper examines the extent of racial inequality among Canadians holding a domestically obtained, postsecondary educational qualification. The study employs multiple regression techniques to examine the relationship between race & income within two subpopulations: people holding a nonuniversity,

postsecondary credential & people who have completed a university degree. In both cases, multiple models were constructed to assess how the conclusion of different variables affected the relationship between race & earnings. Among people holding a nonuniversity qualification, the analysis shows that Blacks, the Chinese, & people included in the "other" visible minority category earn significantly less than white Canadians after controlling for the effects of a range of other predictor. Within the university-educated sample, all visible minority groups were found to earn significantly less than the white majority reference group after adjusting for differences in other variables. Both sets of analyses reveal that, among the visible minority groups, black Canadians incur the most severe penalty in the labor market as a result of their racialized status. Overall, it is clear from this study that visible minorities do not enjoy the same returns from their investment in human capital as white Canadians.

Jensen, M., & Sherman, J. (2004). Post-secondary education on the edge: self-improvement and community development in a Cape Breton coal town. *The Canadian Journal of Higher Education*, 34(2), 154.

As in similar communities, people in Glace Bay have little control over the economic and political decisions that control their futures, and education alone has not improved their sense of empowerment. Unfortunately, this inability to gain economic security or other forms of political power through education has led to a cynical and often times defeatist attitude toward academic challenge. This attitude only increases the problem and grassroots community development is resisted with a sense of sad frustration. Jensen tells these stories with a certain compassion that draws the reader in, while creating more understanding than pity. Jensen successfully argues that self-sufficiency is what is required in order for sustainable development to occur in Glace Bay. The much asked question "Training for what?" gives rise to her observation that the route to success in Glace Bay is not to train for jobs that don't exist, but to improve oneself in ways that fulfill the human spirit (p. 138). Phrases like "We are survivors not winners" and "We live in quiet desperation" leave the reader with a better understanding of the enormity of the challenge facing the people of Glace Bay. They value post-secondary education, but there needs to be a better match between the educational achievements of these people and economic opportunities. Jensen leaves us with a clearer understanding that until larger issues of regional economics are addressed locally, provincially, and federally, post-secondary education alone will not bring about the much needed community development.

Martin, F., & Trudeau, M. (2004). *The Economic Impact of University Research*.

http://www.aucc.ca/pdf/english/publications/researchfile/1997-98/vol2n3_e.pdf

This new study provides quantitative evidence of the contribution of university research to wealth creation. The study confirms that Canadian university research is a powerful stimulus for economic development, producing measurable increases in GDP and employment.

Maslove, L., Fischer, L., & O'Heron, H. (2004). *Making the transition: no two paths alike*. http://www.aucc.ca/_pdf/english/publications/researchfile/1997-98/vol2n4_e.pdf

Youth unemployment is a serious problem, but it may not be as new as some media reports say. Canadians have among youth, but in fact, youth have always had high rates of unemployment. Over the last few decades, the youth unemployment rate has generally hovered between six and nine percentage points higher than that of the general population. What makes the youth unemployment problem more noticeable now, and more acute than before, is that young people are better educated than ever. The number of bachelor degree holders aged 20 to 29 entering the labour market grew 14 percent between 1990 and 1995. Meanwhile, overall youth unemployment rates remained high during that same period, ranging between 11 and 16 percent for 20 to 24 year olds, and nine and 12 percent for 25 to 29 year olds.

Taylor, A., Gaskell, Jane & Rubenson, K. (2005). Educational Outcomes for the Canadian Workplace: New Frameworks for Policy and Research. *Alberta Journal of Educational Research*, 51(1), 92.

The introductory chapter by [Jane Gaskell] and [Rubenson] provides a helpful overview of the context in which current policy and academic debates are occurring. I was particularly interested in the authors' discussion of a shift from the "first wave" of human capital theory beginning in the 1960s, which focused on the state's role in expanding educational access, to the "second wave" of human capital theory beginning at the end of the 1980s, which has focused more on the quality and vocational relevance of education and training. This discussion provides a frame for understanding current policy debates and various understandings of the links between education and the economy. The theme that government policy in Canada and other OECD countries has encouraged educational institutions to become more responsive to economic demands runs through several chapters. At the same time, I felt that the policy context could have been taken up by more authors in the chapters that follow as a way of providing greater textual coherence and engaging more effectively with discussions beyond Canada and British Columbia. The first section, "What skills matter in the economy?" presents two articles by economists who draw on national datasets to address questions about educational investments and outcomes. Riddell's chapter provides a snapshot of Canadian education in relation to education in other OECD countries. His discussion of student performance on national and international tests (such as PISA) highlights the increased importance of such outcome measures for policymakers, although I would have appreciated more discussion about the adequacy of these measures. Alien's chapter challenges the popular claim of "techniks" that we need to educate more postsecondary students in science, technology, and engineering fields by presenting data about the employment outcomes for graduates from a wide range of programs. Given the author's argument that the market does not appear to value technology grads more than social sciences and arts grads, it would have been interesting to speculate about why "techism discourse" has been so pervasive and persuasive in recent years. Both chapters in this

section, therefore, are useful in presenting empirical data that shed light on the relationship between education and the labor market with less attention to more normative issues. The two chapters that follow analyze interviews with participants from two "disadvantaged" groups, Aboriginal peoples and low-income single mothers, in order to examine the outcomes of education and training policies. The chapter by Sloane-Seale, Wallace, and Levin presents a hopeful view of how postsecondary programs can be designed to reduce the effects of disadvantage. They adopt a life history approach to interviewing adults who applied to university access programs for Aboriginal students in order to gain a sense of participants' trajectories. In discussing the outcomes of programs, the authors conclude: "while the impacts of early and continued disadvantage cannot be overcome entirely by any one element of the social structure, additional education and supports can undoubtedly significantly improve employment outcomes."

Vaillancourt, F., & Henriques, I. (1986). The Profitability of College Study. *Recherches Sociographiques*, 27(3), 481-493.

Canadian government census data from 1981 are used to evaluate the return to both the individual & society on investment in Coll (pre-U) education in Quebec. Different samples are analyzed according to age, sex, income, & attainment of a secondary or postsecondary diploma. Indicators of relative social & private profitability are derived from differences in gross & net income, respectively. Results show that the rate of return for a graduate of a Coll professional program is excellent; when a graduate of a nonprofessional Coll program does not continue to U, however, neither the individual nor society has made a good investment.

Vaillancourt, Chantal. (2001). The school-to-work transition: what motivates graduates to change jobs? *Education Quarterly Review*, 7(4), 18.

Among university graduates, those in fine and applied arts had the highest rate (32%). Interestingly, this same group also had the lowest median salaries (Taillon and [Mike Paju] 1999). In contrast, health science graduates experienced the highest median salaries, followed by engineering and applied science graduates (Taillon and Paju 1999). These two groups of graduates also had the lowest job search rates. Generally, the lower the job satisfaction that graduates reported, the higher the job search rate (Graph 2). Only 12% of graduates who were very satisfied with their job were looking for another job. Among satisfied graduates, the job search rate was 27%. However, 56% of dissatisfied graduates and about 63% of very dissatisfied graduates were looking for a new job. A logistical regression established which variables were most important in an employed graduate's decision to look for another job.(3) In terms of academic level, the results confirmed that the job search rate for doctoral graduates was proportionately higher than for other graduates. Among doctoral graduates, all things being equal, the job search rate was 29%. For graduates with master's degrees, it was 21%. Generally, the trend in the job search rate increased by level of education. However, the results were reversed for graduates with a college diploma or bachelor's degree.

Walters, D. (2004). A Comparison of the Labour Market Outcomes of Postsecondary Graduates of Various Levels and Fields over a Four-Cohort Period. *Canadian Journal of Sociology/Cahiers Canadiens De Sociologie*, 29(1), 1-27.

The evolving "knowledge-based" economy is widely believed to affect the labor market outcomes of highly educated workers. However, there are conflicting arguments regarding the needs of the new economy, & there is little evidence available in the research literature to determine whether the labor market outcomes of various postsecondary graduates have changed among graduates of recent cohorts. Drawing on the 1982, 1986, 1990, & 1995 National Graduates Surveys, this paper builds on previous research by comparing the earnings & employment outcomes of graduates of various levels of postsecondary schooling (ie, trades, college, & university) & fields of study over a 13-year period. The analyses suggest that the labor market experiences of postsecondary graduates of the various programs have remained relatively stable over the period investigated. 2 Tables, 4 Figures, 1 Appendix, 51 References.

Walters, D. (2003). "Recycling": The Economic Implications of Obtaining Additional Post-Secondary Credentials at Lower or Equivalent Levels. *The Canadian Review of Sociology and Anthropology/La Revue Canadienne De Sociologie Et d'Anthropologie*, 40(4), 463-480.

This paper explores the earnings of graduates of community college & university undergraduate programs of different fields of study. There are two goals of this study. The first goal is to determine whether technical & applied community college programs provide their graduates with better earnings outcomes than do the so-called "softer" liberal arts programs. The second goal is to examine the economic implications of obtaining an additional post-secondary credential that is not designed to be a continuation of the first credential, a practice known as "recycling." Comparisons by field of study are also investigated.

Walters, David. (2004). The relationship between postsecondary education and skill: comparing credentialism with human capital theory. *The Canadian Journal of Higher Education*, 34(2), 97.

Unfortunately, there is not enough evidence currently available to allow us to adequately test the merits of each theory with respect to skill utilization. Therefore, this study is able to make a contribution to the research literature by addressing theoretical questions, which to this point have not been thoroughly tested. The statistical analysis will test the human capital and credentialist perspectives by using an independent variable that assesses whether the respondents' credentials were requested for their jobs, and a dependent variable that assesses whether their education is related to their work. Since human capital theory asserts that postsecondary schooling generates the skills that are later used on the job, support for this theory would be obtained if employers' requests for specific credentials are useful for obtaining graduates who use their education on the job. On the other hand, the results would support the credentialist position if employers' requests for postsecondary credentials as a job requirement are not useful for attracting graduates who will later use their education on the job. Furthermore, by distinguishing among

various postsecondary programs instead of simply using "years of schooling" to assess educational attainment, it is possible to identify the applicability of human capital and credentialist perspectives to various postsecondary programs. In regard to whether postsecondary education provides graduates with credentials that are required and used in the labour market, the results provide some support for human capital theory, suggesting that there is a strong connection between postsecondary schooling and employee perceptions of the education requirements for their jobs. Postsecondary graduates with credentials that match those requested by their employers report a closer fit between their education and work than do graduates whose credentials do not directly match those recommended for their job, or graduates in jobs that do not require postsecondary credentials. Employers, therefore, appear to be in tune with their employment needs, as they are using education credentials to appropriately channel those with relevant skills sets into suitable jobs. This implies, contrary to what the credentialist theory might suggest, that the educational qualifications recommended by employers are justified in terms of matching the qualifications of graduates with the needs of employers, at least when one examines the subjective feelings of the respondents. Nonetheless, the results provide a preliminary indication that the value of each theoretical perspective may be specific to certain postsecondary programs, which may have implications for future research and theoretical development in the area. For example, while the importance of addressing the qualitative dimensions of postsecondary schooling (i.e., field of study) has received a growing amount of attention in the research literature (Axelrod, Anisef, & Lin, 2001; Butlin, 2001; Davies & Guppy, 1997; Davies & Hammack, 2004; Finnie, 2001; Hay, 2000; Jacobs, 1995; Krahn & Lowe, 1998; [DAVID WALTERS], 2003, 2004), past studies which have informed the theoretical debates in the area have generally treated education primarily as a quantitative variable, in terms of years of schooling. However, the results of this study suggest that future theoretical development would be better informed by emphasizing how the credentialing process operates for graduates of different types of postsecondary schooling. Hopefully, this study will cause researchers to consider the qualitative dimensions of postsecondary schooling in their theoretically informed research on the transitions from school to work.

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- Bailey, J. (1994). Do Students with Disabilities Value College Education? *Journal of College Student Development*, 35(6), 494-495.
- Examined whether students with disabilities value college education and how their values differ from non-disabled students. Results indicated disabled have similar values and are motivated in much the same way as non-disabled. The significant difference was disabled students were keen to improve their value to society through success in college.

Belcheir, M. J., & Ollenburger, J. C. (1998). *Faculty, Student, and Community Perceptions on the Value of a College Education. AIR 1998 Annual Forum Paper.* U.S.; Idaho

This study examined faculty, student, and community perceptions of the purpose and value of a college education. A total of 536 undergraduates, 121 faculty, 211 members of the community of a metropolitan university completed a survey based on the ACT College Outcomes Survey that focused on educational outcomes and student growth. The results indicated that faculty and community members found information management skills to be of more importance than did students. Students and community members, however, placed more importance on the acquisition of job skills than did faculty. Women in all three groups placed more importance on all four educational outcomes--information management skills, academic skills, self-knowledge, and job skills--than did men. Faculty placed more importance on the role of the university in fostering values and intellectual growth than did students or community members. Faculty were also more committed to developing social awareness in students than were students themselves. On the other hand, students wanted the university to help them grow more interpersonally than faculty thought should be the case.

Cantor, N. (2004). Civic Engagement. The University as a Public Good. *Liberal Education*, 90(2), 18-25.

As a public good, universities have a rare and critical role to play. While Universities educate leaders for the future, they also address important societal issues of the day. The discoveries can and do change the world. The groundwork is laid for the future as work is done to preserve the culture of the past. The university's role is "rare" because it is positioned to the side of everyday life, unconstrained by requirements for rigid adherence to social norms or intellectual paradigms. The university can foster an experimental attitude that can give rise to both intellectual discovery and social innovation. The university takes on a "critical" role when it opens its gates far enough to listen to the different voices in the debate over the issues of greatest concern to society and to learn about them firsthand. The university must face outward toward work that changes the culture of the day. This document discusses the power and benefits of universities.

Dee, T. (2003). Are There Civic Returns to Education? *CIRCLE Working Papers*, 8, 1-36.

The effects of higher education upon people's civic participation & knowledge are examined. Contemporary research that has examined the correlation between educational attainment & civic involvement & knowledge is reviewed. Data from the US Department of Education's longitudinal study High School and Beyond is analyzed to ascertain the effects of higher learning upon students (N = approximately 12,000) civic participation. The subsequent analysis demonstrated a strong connection between availability of post-educational institutions, students' enrollment at post-secondary schools, & voter participation. Citing shortcomings with the High School and Beyond data, data from the General Social Surveys is scrutinized to determine the civic returns of secondary education & former students' (N = 32,776)

awareness of particular civic values. Two principal findings are reported: secondary education positively affected people's civic involvement & additional schooling slightly augmented participants' civic involvement & knowledge. The study's implications for future research & policymaking are also pondered.

Hartog, J., & Oosterbeek, H. (2003). Health, Wealth and Happiness: Why Pursue a Higher Education? *The Economics of Higher Education*, 154-65.

We explore the effect of schooling on health, wealth and happiness for a cohort of individuals born around 1940. We also use observations on childhood IQ and family background. The most fortunate group is the group with a non-vocational intermediate level education: they score highest on health, wealth and happiness. We find that IQ affects health, but not wealth or happiness. Family background level increases wealth, but neither health nor happiness. With a father who worked independently, health, wealth and happiness are higher. Women are a miracle: compared to men, they are less wealthy, equally healthy but they are definitely happier. Cheltenham, U.K. and Northampton, Mass.

Institute for Higher Education Policy, Washington, DC. (1998). *Reaping the Benefits: Defining the Public and Private Value of Going to College. The New Millennium Project on Higher Education Costs, Pricing, and Productivity*. U.S.; District of Columbia: The Institute for Higher Education Policy.

This report examines the individual and societal benefits of attending college, providing a broad overview of the range of benefits that accrue from college education. It includes a brief historical discussion of the benefits of higher education and the role of state and federal governments in encouraging college attendance. The report then reviews: (1) public economic benefits, including increased tax revenues, greater productivity, increased consumption, increased workforce flexibility, and decreased reliance on government financial support; (2) private economic benefits, including higher salaries and benefits, high employment levels, higher savings levels, improved working conditions, and personal/professional mobility; (3) public social benefits, including reduced crime rates, increased charitable giving, increased quality of civic life, social cohesion, and improved ability to adapt and use technology; and (4) private social benefits, including improved health/life expectancy, improved quality of life for offspring, better consumer decision making, increased personal status, and more hobbies and leisure activities. The report concludes that diminishing support for higher education's diverse benefits would have a negative consequence on the nation's ability to prosper and succeed.

Kezar, A. J. (1999). *Higher Education Trends (1997-1999): Higher Education and the Public Good. ERIC-HE Trends*. U.S.; District of Columbia: ERIC Clearinghouse on Higher Education.

Higher education's relationship with and contribution to the public good emerged as a trend in the higher education literature in 1996. Three major themes are represented: the role of higher education, public relations, and collaboration. The literature and research continue to illustrate the valuable role of higher education in

the important processes that underlie our culture and society. Most often discussed in the literature is economic development; political and social development have a significantly lesser role. Helpful additions to the literature are contextual studies that examine the impact of higher education on specific communities. A report developed for the State Higher Education Executive Officers Association examines the role of higher education in the development of the workforce, focusing on such issues as employers', learners', and the public's expectations. Public relations, an increasingly problematic issue, is not well represented in the literature. This area needs more research to understand how public perception affects higher education institutions, what shapes public opinion, and how it can be changed. Collaboration was also a major theme in the literature, with discussions about collaborations with industry, with K-12 educators, and within the institution.

Porter, K. (2002). *The Value of a College Degree*. U.S.; District of Columbia: ERIC Clearinghouse on Higher Education.

The escalating cost of higher education is causing many to question the value of continuing education beyond high school. To determine whether higher education is worth the investment, it is useful to examine what is known about the value of higher education and the rates of return on investment to both the individual and society. There is considerable support for the idea that the rate of return on investment in higher education is high enough to warrant the financial burden associated with pursuing a college degree. Statistics on the earnings discrepancy between high school graduates and college graduates indicate the value of a college education. College graduates enjoy benefits beyond increased income, such as increased personal and professional mobility, improved quality of life for their offspring, and more leisure activity. Research has also shown a positive correlation between completion of high school education and good health, and a number of studies have shown a high correlation between higher education and cultural and family values. Research also suggests that students of modest ability or uncertain motivation would do well to enroll in two-year colleges, and that those who choose to enroll in four-year colleges should do everything in their power to graduate.

Watts, A. L. (2001). *Education and the Common Good: Social Benefits of Higher Education in Kentucky*. U.S.; Kentucky: Kentucky Long-Term Policy Research Center.

The returns that Kentucky can expect on its investments in higher education were examined in an analysis that identified some of the social benefits accompanying earning a degree from a four-year college and established a value for those benefits. The analysis was based on 12 models that were estimated by using datasets from semiannual surveys of Kentucky residents conducted by the University of Kentucky Survey Research Center. The following were among the benefits identified: (1) economic benefits in the form of higher earnings and higher state and federal tax revenues to fund tax-supported programs; (2) reduced welfare dependency; (3) lower crime costs; (4) healthier lifestyles; (5) social gains, including increased volunteerism, charitable giving, and participation in and leadership of community organizations; and (6) various immeasurable benefits, including reading to children

and increased levels of participation in cultural activities. The lifetime social benefits of a four-year degree were estimated at more than \$126,000 for men and \$96,000 for women. (Twenty tables /figures are appended. The following items are appended: (1) descriptions of the Kentucky survey data and models; (2) an estimate of the additional federal and state tax revenues resulting from participation in higher education; and (3) expected costs of incarcerating men and women in Kentucky.)

Williams, A., & Swail, W. S. (2005). *Is More Better? The Impact of Post-secondary Education on the Economic and Social Wellbeing of American Society*.

<http://www.educationalpolicy.org/pdf/gates.pdf>

This report, funded by the Bill and Melinda Gates Foundation, looks at the economic and non-economic impacts of higher education on individuals and society as a whole. According to the report, college graduates receive higher wages, are more likely to be employed, and when unemployed, likely to find new jobs faster. As well, graduates receive social returns to education, including increased life expectancy and better general health, improved quality of life for self and offspring and increased social status. The report concludes that higher education can best serve the nation by targeting low-income and other historically under-represented groups.

Zhan, M., & Pandey, S. (2004). Postsecondary Education and Economic Well-Being of Single Mothers and Single Fathers. *Journal of Marriage and Family*, 66(3), 661-673.

We investigate the effects of post-secondary education on the economic well-being of single parents. The data for this study are from the 1993 Panel Study of Income Dynamics, with a sample of 930 single mothers and 168 single fathers. The results indicate that post-secondary education, particularly a 4-year college degree, improves the economic status of both single mothers and single fathers. Controlling for the effects of education and other factors, single fathers fare better than single mothers, and White single parents fare better than their African American counterparts. To benefit single parents, social policies must devote more resources toward human capital development and reduction of gender and race-based discrimination in the labor.

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