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The Value of Postsecondary Education: Human Capital Theory in Ontario's Postsecondary Education Discourse 1962 - 2005

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Graduate Program in Sociology
A thesis submitted in partial fulfillment of the requirements for the degree in Master of Arts
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THE VALUE OF POSTSECONDARY EDUCATION: HUMAN CAPITAL THEORY
IN ONTARIO'S POSTSECONDARY EDUCATION DISCOURSE 1962 – 2005

By

Adam Jog

Graduate Program in Sociology

A thesis submitted in partial fulfillment
of the requirements for the degree of
Master of Arts

The School of Graduate and Postdoctoral Studies
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Abstract

Contemporary understandings of postsecondary education systems are informed by a globalization discourse that incorporates human capital theory to explain the economic importance of postsecondary education institutions in the global economy. In this study, the influences of human capital theory and of liberal education in Ontario's postsecondary education discourse are examined through a content analysis of government-commissioned reviews of Ontario's postsecondary education system from 1962 to 2005. In particular, I hypothesize that instances of human capital theory would increase over that time period while instances of liberal education would decrease. The results of the content analysis clearly demonstrate that instances of human capital theory in Ontario's postsecondary education discourse increased over time, while instances of liberal education remained fairly consistent. I argue that these results can be explained by exploring the relationship between human capital theory and neoliberalism, particularly neoliberal views of government spending.

Keywords

Human Capital, Human Capital Theory, Neoliberalism, Postsecondary Education, Ontario, Neoclassical Economics, Corporatization, Globalization, Ideology, Governmental Expenditures, Markets

Acknowledgements

I want to thank my supervisor, Scott Schaffer, for guiding me through this project. His patience and empathetic understanding during this period of my life was impressive, and greatly appreciated. I would not have been able to complete this thesis without him. It has been an enormous privilege to have had Scott as my supervisor.

I would also like to thank Anton Allahar, who provided encouragement and wise words throughout. I admire his honesty and his willingness to challenge his students to think critically about the world they live in. He was more than generous with his time, and for that I am truly grateful. I consider myself lucky to have met Anton.

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Chapter 1 – Introduction

In Ontario, as in many other parts of the world, postsecondary education has become a growing phenomenon. As of 2012-13 there were a total of 797,013 students enrolled in Ontario's postsecondary education system, 504,972 of which were enrolled in university and 292,044 in college (Statistics Canada 2014). Postsecondary enrolments have increased substantially since the 1960s and will likely continue to increase. One projection holds that by 2021 university undergraduate enrolments will be 60,000-100,000 higher and college enrolments will be 35,000-50,000 higher than they were in 2007 (Clark et al. 2009: 25-26). Estimates like these find support in Ontario Premier Kathleen Wynne's commitment to expanding access to postsecondary education by 60,000 spaces (Ontario Newsroom 2014).

Why is postsecondary education so important? One answer is given by government ministries, media commentators, and the postsecondary institutions themselves. The Ontario Ministry of Finance claims postsecondary education is an essential asset for the province in an increasingly global marketplace because the jobs that are being created require higher levels of education (2012). In her 2014 Mandate letter to the Ministry of Training, Colleges and Universities, Kathleen Wynne suggests postsecondary institutions have an important role to play in "helping Ontario become North America's leading jurisdiction for talent, skills, and training" and ensuring Ontario's future prosperity. The Council of Ontario Universities, a membership organization of Ontario's twenty publicly-funded universities and the Royal Military College of Canada, releases survey infographics depicting the benefits for students who pursue a university education. In their 2014 infographic it is claimed that Ontario

university graduates are getting well-paying jobs in their fields and are putting the skills they have acquired in university to use in their careers (Council of Ontario Universities). In the media some articles extol the virtues of attending university, with one example a recent piece that argues the financial returns of university education in the long-term are worth the short-term costs and that in order to maximize their investment students should consider enrolling in one of the STEM fields (i.e., science, technology, engineering, and mathematics) (Heath 2015). The commentary on Ontario's postsecondary education system depicted here would lead one to believe that postsecondary education is wonderfully beneficial for both individuals and society because of its considerable economic contributions. There appears to be more to the story, however.

In recent years some media commentators have written articles addressing some problematic aspects of the narrative presented above. Writing an opinion piece for the *Toronto Star*, Ken Coates, faculty member at the University of Saskatchewan, argues that Canada needs to rethink its approach to postsecondary education (Goar 2015). According to Coates, many students in university are not graduating with the skills they need to earn a living, and as a result there are too many unemployable university graduates (Goar 2015). Others have documented similar concerns. Josh Kolm (2013) for *CBC News* directs attention to the issue of graduate underemployment. Citing data from Statistics Canada, Kolm notes that one in four millennials with a university degree are employed in a full-time job that doesn't require that level of education. Many young adults have entered into low-skilled, low-paying jobs (Kolm 2013). Kolm (2013) also cites a survey by Career Builder North America that shows 36 percent of employers are hiring college and university graduates for jobs that used to require only a high school diploma.

The inability to find satisfactory work is also coupled with the issue of high student debts. *Vancouver Sun* columnist, Don Cayo (2015) quotes Jessica McCormick, chair of the Canadian Federation of Students (CFS), who says students are graduating with record levels of debt and struggling to make the required monthly payments. A report produced by the CFS in 2014 predicts an increase in tuition fees from an average of \$5,959 in 2014-15 to \$19,900 in 2035-36 if the federal government's prediction that tuition fees will rise at a rate of 2.5 percent above inflation annually over the next twenty-five years is correct (Cayo 2015).

The concerns raised by these voices and others presents a very different picture of the Ontarian and Canadian postsecondary education systems than the one depicted in the second paragraph. On the one hand, we have a view of the postsecondary education system that claims the economy requires workers with higher levels of education and claims students acquire employable skills via postsecondary education that leads to well-paying jobs in their field. On the other hand, we have a view of the system that documents issues such as graduate unemployment and underemployment. This contrast provides the backdrop for my thesis.

This thesis is specifically about "human capital theory" and how it has shaped Ontario's postsecondary education discourse. According to this theory, individuals have "human capital," meaning they possess skills, knowledge, and any other characteristics that contribute to their economic productivity. By investing in activities said to contribute to human capital development, such as education, individuals and society as a whole can reap the economic benefits of their investment. I will be using the term "human capital" the way economists do, which is narrower in its conception than the way other social

scientists might use the term. For example, some social scientists (e.g., Coleman 1988; Spencer, White and Maxim 2007) try to relate human capital to other forms of capital, such as social capital, to provide a more nuanced understanding that takes social context into consideration. The term is also used by some social scientists (e.g., O'Neill 2006; Picot, Saunders and Sweetman 2007) to explain how human capital acquisition contributes to non-economic outcomes, such as civic participation. I concern myself here with the purported economic functions of human capital. It is my intention to subject human capital theory, and its assumptions as they relate to postsecondary education, to critical analysis. The main argument presented in the pages to follow is that the presence of human capital theory and its assumptions in Ontario's postsecondary education discourse serves as an ideological device that justifies and legitimates shifting costs for postsecondary education from governments to individuals. Furthermore, I attempt to explain this role of human capital theory in the discourse by connecting it to the influence of neoliberal and neoclassical views of the state, especially of state expenditures, in Canada since the 1980s.

In the Literature Review chapter, I discuss the dominant narrative that informs many understandings of postsecondary education. Since the 1980s postsecondary education is typically understood within a globalization discourse that draws on human capital theory to argue for the economic importance of postsecondary institutions in the global economy. This chapter also includes a review of the scholarly literature that critiques both human capital theory and its application to postsecondary education. In the Context chapter, I broadly describe neoliberalism before narrowing in on its influence in Canada and its effects on postsecondary education. I argue the use of human capital

theory in postsecondary education discourse can be better understood by examining the connection between neoliberalism and human capital theory.

In the Methodology and Discussion chapters, I lay out the rationale for my research and explore the results. I investigated the use of human capital theory in Ontario's postsecondary education discourse over time. To do this, I conducted a content analysis of government-commissioned reviews of Ontario's postsecondary education system from 1962 to 2005. In writing about human capital theory and its relation to postsecondary education, I do not intend to put forward an original argument; this relationship has already received a fair amount of attention from academics. Rather, the contribution I am attempting to make is largely an empirical one. Academics have noted the presence of human capital theory in postsecondary education discourse, but there has not yet been an attempt, to the best of my knowledge, to provide an empirical and systematic analysis of human capital theory in Ontario's postsecondary education discourse. It is one thing to assert its usage in the discourse; it is another to empirically show it. In the Conclusion chapter I wrap up by reflecting on some of the implications of my thesis. I advance the argument that human capital theory in postsecondary education discourse is ideological in the sense that it benefits the wealthy at the expense of the general population.

I feel it is necessary to explain why I have chosen to talk about this particular issue and why I think it has relevance beyond my own academic interests, if only to inform the reader of any bias I may have. As a university student, it became increasingly difficult to not take an interest in the role that postsecondary institutions play in our society. I have become concerned that the purpose of postsecondary education,

specifically university education, today has less to do with “educating” and more to do with instilling obedience in students. This is perhaps a grandiose statement. It is of course true that there are passionate faculty members who inspire their students to think independently and critically about the world around them and their role in it. However, I think it would be difficult to deny that our understanding of postsecondary education has been changing over time, to the detriment of both students and the wider society. And as postsecondary education becomes a reality for more and more people, the orthodoxy surrounding it becomes more and more disconcerting. There are many assumptions about postsecondary education in Ontario that need to be challenged and not accepted uncritically. With this thesis I hope to provide a challenge, even if miniscule, to the prevailing orthodoxy. As such, this thesis deals more broadly with the growing assumption that postsecondary education and the postsecondary education system should serve the market, and what this assumption means for our society as a cultural entity. It not only raises the question of how we understand our postsecondary education system, but also what we value as a society and what we do not, and I think the answer is cause for alarm.

Chapter 2 – Literature Review

In this chapter I will review scholarly literature that exposes the dominant narrative currently informing our understanding of postsecondary education. I argue that the dominant narrative is a globalization discourse that incorporates human capital theory. Within this framework, postsecondary education systems are said to be of vital importance because they produce the human capital and knowledge necessary to remain competitive in the global economy. To lay out this narrative framework in greater detail, this chapter will be separated into three sections. The first section reviews literature pertaining to human capital theory, particularly literature that illuminates the theory's guiding assumptions and their application to education. The second section centres on the role of postsecondary education systems in the era of globalization and how human capital theory assumptions are integrated into this discourse. The third section covers scholarly critiques of the dominant narrative so as to provide a broader and more critical understanding, as well as to set up the following chapter.

2.1 Human Capital Theory

A large body of literature has accumulated concerning “human capital theory” (Becker 1975; Schultz 1981; Sweetland 1996; Picot, Saunders and Sweetman 2007; Tan 2014). In order to discuss what human capital theory is, it is first necessary to discuss the term “human capital.” Human capital refers to inner resources possessed by human beings that can be used to generate market and non-market outcomes, such as civic engagement and reduced crime rates, although there is an overwhelming emphasis in the literature on market outcomes (Picot et al. 2007: 1). It is commonly understood that the inner resources belonging to individuals can be anything that contributes to those

individuals' economic productivity, but attention is usually directed towards the "skills" and "knowledge" an individual has (Crocker 2007: 143; Curtis 2007: 37; Picot et al. 2007: 1; Tan 2014: 412). An individual's human capital contributes not only to his or her economic productivity but also to his or her entrepreneurial ability (Schultz 1981: 11). It is said that these inner resources can be innate, so perhaps it is the case that some individuals are naturally endowed with desired skills or characteristics, but an important aspect of human capital theory is the notion that these inner resources, i.e., human capital, can also be acquired.

How individuals acquire human capital is the primary concern among human capital theorists. Gary Becker (1975) suggested there are certain "activities that influence future monetary and psychic income by increasing resources in people," and that "these activities are called investments in human capital" (9). It is through such investments that individuals improve their skills, knowledge or health, and as a result, increase their monetary and psychic incomes (Becker 1975: 9). There are conceivably innumerable ways to acquire human capital, but human capital theorists typically restrict their analyses to schooling, work experience, child care, health, and migration (Becker 1975: 9; Schultz 1981: 23). In so doing, human capital theory represents an important development, according to Bowles and Gintis (1975), in that social institutions (such as schooling and family) previously excluded from economic analyses are now included (74). To reiterate, it is by acquiring human capital that individuals can generate favourable economic outcomes, such as access to better jobs and higher earnings (Crocker 2007; Curtis 2007: 38). Human capital theory not only predicts that increased knowledge and skills will yield improved economic outcomes for individuals, but investments in people will

also yield economic benefits for societies as a whole (Sweetland 1996: 341; Crocker 2007). This is premised on the notion that the economy is the sum of individual economic behaviours; therefore, as each individual acquires human capital and thus increases their productivity, society will benefit from an increase in goods and services produced.

Human capital theory is informed by certain assumptions about human nature. Individuals, according to human capital theory, are rational, self-interested actors who attempt to maximize their utility. Tan (2014) explains this by pointing out that human capital theory rests on the foundation of rational choice theory (415). Rational choice theory is concerned with the intentions and motivations of individuals and the means they use to reach goals under certain conditions (Tan 2014: 415). Individuals seek to maximize their utility by choosing the most efficient means and this rational calculus is said to pervade all aspects of an individual's life (Tan 2014: 415). This implies a constant weighing of the costs and the benefits of any given course of action. Indeed, Schultz (1981) makes this claim when talking about agriculture in "developing" countries. He says one of the serious mistakes economists tend to make is to assume poor people lack rational capacities. To the contrary, Schultz argues, poor people are just as rational as anyone else. This is demonstrated by farmers, who "dealing with costs, returns, and risks, are calculating economic agents. Within their small, individual, allocative domain they are entrepreneurs tuning so subtly to economic conditions that many experts fail to recognize how efficient they are" (Schultz 1981: 8). Applying the logic of rational choice theory, human capital theorists posit that individuals will attempt to acquire human capital in order to maximize their economic interests (Tan 2014: 413). This entails calculating whether the returns to be gained at some point in the future are greater than

the costs to be incurred at the present time (Schultz 1981: 12; Riddell 2007: 57). As Schultz (1981) says, when the returns are greater than the costs, more individuals will seek to acquire human capital, thereby enhancing the supply of human capital in the population (12).

It is fair to say human capital theory has recently become popular among academics (as well as non-academics), although its assumptions have a long history that dates back to the beginnings of classical economics (Tan 2014). The idea of human capital was enunciated by the famous eighteenth-century political economist, Adam Smith, and has since evolved, though the conception, if not the application, of human capital that exists today is not so different. The modern conception of human capital and the establishment of human capital theory as an academic field can be traced back to the mid-twentieth century (Sweetland 1996: 345; Crocker 2007: 144; Tan 2014: 428). The field was significantly developed by Gary Becker and Theodore Schultz, two economists at the Chicago School of Economics (Tan 2014: 412). From the perspectives of Becker and Schultz, whose work was briefly mentioned above, one reason for the growing popularity and importance of human capital theory resides in the relationship between human capital and physical capital. The core claim of human capital theory is human beings' inner resources constitutes a form of capital analogous to machinery and other natural resources in production (Livingstone 1997: 9; Côté and Allahar 2011: 47). Incidentally, the term human capital was considered to be incredibly controversial at the time but is less so today (Stanfield 2009). The comparison of human beings to innate objects implied by the term was seen as degrading and dehumanizing. Even Becker (1975) acknowledged this, stating critics feared the "emphasis on the 'material' effects of

human capital detract[ed] from its ‘cultural’ effects” (10). Despite the controversy, Becker (1975) suggested that growing interest in human capital investments was a result of the realization that growth in physical capital could only account for a marginal part of the growth of income in many countries (9). Furthermore, Schultz (1981) added that limitations of material/physical resources are not the decisive constraints to human betterment (vii); instead, the acquired abilities of people and advances in knowledge are the decisive factors in achieving economic progress (Schultz 1981: vii, 4).

Schultz (1981) elaborated this using the example of agriculture in developing countries. In explaining why farmers were poor, he said it was not land which played a critical role, but the individual farmers themselves (Schultz 1981: 7). What mattered in the case of farmland was “the incentives and associated opportunities farm people ha[d] to augment the effective supply of land by investments that include the contributions of agricultural research and the improvement of human skills” (Schultz 1981: 6). An important process in providing the “incentives” and “associated opportunities” was modernization, since it was “a source of many new experiences that entail[ed] learning valuable new skills and acquiring information of value” (Schultz 1981: 22). Modernization rendered skills and knowledge of greater economic importance than farmland (Schultz 1981: 6). The growing emphasis on human capital over physical capital is an important shift, one that links economic performance with the psychical properties of human beings. The solution for securing human well-being and economic development, from this perspective, is investing in human capital and knowledge (Becker 1975: 10; Schultz 1981: vii).

Becker’s (1975) statement that human capital would become increasingly

important for understanding phenomena like economic development, income distribution, and labour turnover has turned out to be quite prescient (237). This is perhaps best evidenced by the rise of what is called “education economics.” Writing in 1975, Becker had already documented the growing worldwide interest in the economics of education (2). His evidence was the mushrooming of scholarly literature over a thirteen-year period. Becker (1975) notes a bibliography compiled on the economics of education in 1957 would have numbered fewer than 50 entries, whereas a bibliography compiled in 1964 numbered almost 450 entries and one in 1970 numbered more than 1300 entries (2). Interest among economists in the relationship between education and human capital has only grown since then. The growing interest derives from the observation that increasing school participation rates in the post-WWII period were paralleled by strong levels of economic growth and rising incomes (Livingstone 1997: 9; Stanfield 2009). It was inferred that the former was one significant factor in the latter. This supported the view of those who believed education was an essential activity for human capital acquisition and that more schooling would lead to greater economic success (Livingstone 2007: 9). As a result, education has been placed at the centre of human capital theory and is considered the source of economic development (Tan 2014: 411). In the literature, education is consistently regarded as the prime human capital investment for empirical analysis (Sweetland 1996: 341; Curtis 2007: 41). Years of schooling and levels of schooling are taken as a way to quantify the quality of labour and are used in estimating economic returns to schooling (Livingstone 1997: 9; Crocker 2007: 144; Riddell 2007: 56).

The specific connection between education and various economic indicators, such as income, has been elaborated upon by various commentators (Becker 1975; Schultz

1981; Friedman 1982; Sweetland 1996; Riddell 2007; Tan 2014). Human capital theory suggests that individuals acquire skills and knowledge through formal schooling (Schultz 1981: 7; Riddell 2007: 57). The skills and knowledge acquired by individuals enhances their economic productivity (Schultz 1981: 31; Sweetland 1996: 354; Riddell 2007: 57; Tan 2014: 412). The skills and knowledge that contribute to an individual's productivity can be acquired at all three levels (i.e., primary, secondary, and tertiary) (Côté 2014: 209; Tan 2014: 424). The increase in productivity as a result of schooling will lead to an increase in earnings for those individuals, since wages are determined according to productivity levels (Côté 2014: 209; Tan 2014: 413). In addition to enhancing productivity, schooling also enhances an individual's entrepreneurial ability. Schultz (1981) says there are a considerable number of studies which demonstrate that the supply of entrepreneurial ability among populations is increased by additional schooling (31). Entrepreneurial ability is important for dealing with disequilibria associated with economic modernization (Schultz 1981: 31). In other words, it is vital for dealing with inevitable market inefficiencies. Having an entrepreneurial mindset allows individuals to better adapt to unstable and uncertain economic conditions. For example, individuals with higher levels of human capital are more likely to be employed and less likely to require social assistance relative to those with lower levels of human capital (Curtis 2007: 38). In contributing to individuals' productivity and entrepreneurial ability via the acquisition of human capital, schooling is considered an investment because of the financial returns generated (Tan 2014: 57). Schooling is not only beneficial for workers; it is also beneficial for employers and for countries. Human capital theory claims skills and knowledge acquired by workers translates into profit for the employer (Côté 2014:

209). The increase in production of goods and services as a direct result of a more educated and therefore more productive labour force will also benefit any given country economically (Schultz 1981: 14; Tan 2014: 424).

The proposed connection between education and various economic indicators is fairly straightforward, and there seems to be consensus among academics that education does have private returns for the individual (Becker 1975; Schultz 1981; Friedman 1982; Sweetland 1996; Riddell 2007). Becker (1975) made the case that college education positively affected future prospects for both “money income and psychic income” (9). The most impressive piece of evidence was that more highly educated and skilled persons tended to earn more than others (Becker 1975: 10). Becker (1975) explained this by suggesting that some persons earn more than others simply because they invest more in themselves (231). Though Becker (1975) demonstrated that private rates of return on college education exceeded those on business (thus giving credence to the notion that human capital is an untapped source of wealth), he says the evidence is insufficient on the question of whether education produces social rates of return (233). Despite the lack of evidence, Becker (1975) still maintained that an educated labour force was essential for economic development (10).

In general agreement with Becker, Friedman (1982) noted there is considerable empirical evidence that the rate of return on investment in training is much higher than the rate of return on investment in physical capital, suggesting an underinvestment in human capital (101). Friedman (1982) made sure to distinguish training (i.e., vocational and professional schooling) from general education (100), and in this respect he differs from Becker. By raising the economic productivity of human beings, training allows

individuals in a free enterprise society to receive higher returns for their services than would otherwise have been possible (Friedman 1982: 100-101). The gap in earnings produces an economic incentive for individuals to invest in human capital (Friedman 1982: 101). At this point, the individual must balance the possible returns against the costs (Friedman 1982: 101). For vocational schooling, Friedman (1982) says “the major costs are the income foregone during the period of training, interest lost by postponing the beginning of the earning period, and special expenses of acquiring the training such as tuition fees and expenditures on books and equipment” (101). In light of weighing the costs and benefits, it follows that individuals would invest in education up to the point where the private benefits from education equal the private costs of pursuing it (Tan 2014: 413). If the rate of return to education is positive, then individuals will invest in education; if it is not positive, they will not invest in education (Tan 2014: 420).

Sweetland (1996) asserts “it is appropriate to assume [...] education increases or improves the economic capabilities of people” (341). Riddell (2007), in basic agreement, investigates the causal effect of education on individual and social outcomes (56). He argues that education does enhance individuals’ productive skills and this raises their market value to employers (2007: 59). That education does yield private returns is revealed by comparing the lifetime earnings profile of more educated workers to less educated workers (Riddell 2007: 59). Riddell (2007) states, “better-educated workers earn higher wages, have greater earnings growth over their lifetimes, experience less unemployment and work longer” (63). Furthermore, Riddell (2007) says the strong positive relationship between education and earnings is one of the most well-established relationships in social science, and it is fair to say his understanding of this relationship is

informed by human capital theory (64). In addition to individual benefits, he also believes human capital investments yield social benefits because of the increase in output of goods and services (2007: 59).

This review of the human capital theory literature outlines the theory's key assumptions and their application to education. According to human capital theory, individuals are rational, self-interested actors who seek to maximize their utility. In order to maximize their utility, individuals undertake a course of action to develop their human capital. Education is one activity that allows individuals to develop their human capital. Education confers economic benefits for individuals and for society as a whole through gains in economic productivity and entrepreneurial ability. Thus, education is said to be an investment because it generates positive rates of return. These ideas take on an important role with respect to postsecondary education in the era of globalization.

2.2 Postsecondary Education in the Global Economy

It is necessary to begin by briefly discussing "globalization." Globalization signifies an ongoing process of change in the international political economy whereby nations have become increasingly interconnected and interdependent (Lewis 2003: 96). Globalization has multiple dimensions, but changes in the international arena are understood to be driven primarily by revolutions in technology that facilitate communication and transportation, thereby allowing for massive increases in the movement of capital around the world (Lewis 2003: 96). The movement of capital requires the establishment of markets worldwide, a process that has accelerated with the fall of Communism in the late 1980s. Where markets already exist, nations are expected to open them up to allow for the movement of goods, services, and capital. It is

claimed this will be mutually beneficial for all involved and will foster economic development. If nations do not liberalize and deregulate their economies, they will not be able to compete with other nations and thus will suffer the economic consequences. As a result, the political and economic structure of nations changes in order to adapt to the global economy. There are many who believe globalization is an inevitable and irreversible process, and the goal is to steer the process in order to produce socially desirable outcomes.

Since globalization requires information technologies in order to guide decisions in the global marketplace, it is said that an “information society” has emerged (Harvey 2005: 3-4). This term is applied to Western nations that have seen a withering away of their manufacturing base and a gradual rise in work that ostensibly requires mental labour as opposed to manual labour. Thus it is said that a “knowledge economy” has emerged in which knowledge and skills take on a greater premium than they did in the past (Crocker 2007). Low-skilled work is being phased out and work requiring a high degree of skill is becoming the norm. This requires a labour force capable of performing such “knowledge work” and it requires a strong foundation of knowledge in order to innovate and remain competitive internationally. It is necessary to understand this broader context in order to understand how education systems, especially postsecondary education systems, figure in. Postsecondary education systems are regarded as an essential component of the burgeoning global economy.

Governments at all levels have acted to bring their postsecondary education systems in line with the requirements of the global economy. The Organisation for Economic Co-operation and Development (OECD), an international body comprised of

thirty-four member countries whose stated purpose is to advance an economic agenda, has assumed an influential role in shaping the education systems of various nations. As early as 1979, the OECD was advocating for greater emphasis on “employability skills” at all levels of education (Hyslop-Margison and Sears 2006: 13). These skills are thought to prepare students for the dynamic jobs and dynamic labour markets consistent with the emerging global economy (Hyslop-Margison and Sears 2006: 13). In addition to emphasizing employability skills, there has also been increased interest in promoting “lifelong learning,” as seen in policy documents released by the OECD and the European Commission, for example (Levidow 2005). Lifelong learning requires the individual to take responsibility for reskilling him- or herself in response to the ever-changing imperatives of the labour market (Levidow 2005). In concordance with the European Round Table agenda, Levidow (2005) argues, European Union (EU) member states have promoted “flexible labour markets” to remain globally competitive (159). He goes on to say that in 1997 the EU Council “encouraged ‘training and life-long learning’ in order to improve the ‘employability of workers’,” in addition to recommending a “restructuring of public expenditures [...] to encourage investment in human capital, research and development, innovation, and the infrastructure essential to competitiveness” (2005: 159). Thus, “life-long learning becomes a [policy] instrument for enhancing individual, regional, and national competitiveness” (Levidow 2005).

The emphasis on developing a skilled workforce is highlighted by Holborow’s (2012) analysis of the Hunt Report, Ireland’s recent official government policy on postsecondary education (94). The Hunt Report made the assumption that the provision of highly skilled graduates was vital to Ireland’s economic recovery in the aftermath of

the 2008 global financial crisis (Holborow 2012: 94). The idea that Ireland's postsecondary system should be producing skilled graduates as a means to economic recovery reveals that the function of postsecondary education has become the production of "human capital" for the "smart" economy (Holborow 2012: 94). The Hunt Report, according to Holborow (2012), is premised on the dominant view that "we are in a global knowledge economy of new technologies in which human skills constitute the drivers of economic growth" (97). This emphasis on skills depends on the concept of the knowledge economy as a magnet for foreign investment, the implication being that the existence of a highly skilled workforce attracts new capital investment and creates jobs (2012: 97). According to Holborow (2012), official government policy reports, economic commentaries, and increasingly mission statements of universities in Ireland as well as the UK and the EU consider human capital development as necessary for economic growth and as the main function of postsecondary education (99).

It appears that Canada does not diverge from this emerging pattern. Clark et al. (2009) observe that both the Ontario provincial government and the federal government have identified postsecondary education and research as essential components for fostering the talent and innovation that Ontario and Canada needs in order to successfully compete in the increasingly competitive global economy (17). They argue globalization has heightened public perception of the postsecondary education system's role in producing, via teaching and research, the kind of knowledge and skills that contribute to Ontario's economic well-being (Clark et al. 2009: 18). Coleman and Kamboureli (2011) also note Canadian universities are not an exception from this international trend. In discussing the culture of academic research in Canadian universities, they suggest the

culture has been changing ideologically as a result of the role governments have assigned to the universities (Coleman and Kamboureli 2011: xv). The universities are increasingly regarded as a means to economic vitalization and viability in the global economy (Coleman and Kamboureli 2011: xv).

Discussing Ontario, Axelrod (2008) remarks that all governments, regardless of their political orientation, expect universities to contribute to economic growth and development (90). To make his case, he points to policy initiatives implemented by the Harris Conservatives in 1995 that explicitly sought to link postsecondary education directly to the economy (2008: 96). Axelrod (2008) draws attention to the 1999 report of the Ontario Jobs and Investment Board which recommended that educational institutions should collaborate with each other and with business in order to foster entrepreneurship and innovation and to service the needs of the economy (98). Axelrod (2008) acknowledges that such instrumentalist tendencies were evident prior the election of Harris in 1995, as in the 1988 and 1990 Premier's Council Reports, *Competing in the New Global Economy*, and *People and Skills in the New Global Economy*, respectively (96). These reports emphasized the important economic role of universities and colleges, especially in producing scientists, engineers, and technologists (96). Additionally, Chan and Fisher (2008) remark that the 1988 report recommended placing greater resources in industries that would benefit from investment in research and development and marketing, thus setting the stage for universities in Ontario to increase academic investment in research (52-53).

It is evident the purpose of postsecondary education systems is changing in response to the pressures of globalization. The emphasis on developing a skilled

workforce by international, intergovernmental, and governmental bodies across the world is paralleled by an equal if not greater emphasis on producing knowledge via research.

The success of a postsecondary education system is increasingly measured by its contribution to the economy (Aronowitz 2000: 11). A successful postsecondary education system is one that produces and distributes human capital as well as producing knowledge that has commercial and industrial applications (Aronowitz 2000: 11).

The pressures to produce knowledge and skilled workers for the global economy has altered the relationship between governments and postsecondary institutions, as well as the postsecondary institutions themselves. In the last couple of decades of the twentieth century, and even more marked in the past ten years, there has been the introduction of similar organizational and financial arrangements in many postsecondary education systems across the world (Collini 2012: 14). As governments across the world tighten their spending on public services, postsecondary institutions in turn are pushed to find sources of funding elsewhere. These institutions adopt corporate managerial methods in order to allocate limited resources efficiently and to attract external revenues. Levidow (2005) argues this has ostensibly become increasingly necessary since the 1990s for universities worldwide who have to adopt these commercial and corporate models in order to solicit government funding and to protect themselves from competitors (156). Likewise, Barrett and Meaghan (2006) comment that “educational structures have been dismantled and replaced by new policies and procedures aimed at restructuring postsecondary education to follow a global trend toward corporatization and to create a market responsive sector” (4-5). International organizations support this restructuring by encouraging nations to shift responsibility for provision of educational services to lower

levels of government and encouraging postsecondary institutions to collaborate with the private sector in order to meet educational needs within limited budgets (Barrett and Meaghan 2006: 4).

Clark et al. (2009) draw similar conclusions. Two important implications of globalization for postsecondary education in Canada have been ongoing uncertainty about available funding for universities and colleges and greater pressure on these institutions to be more efficient (Clark et al. 2009: 19). The authors say globalization has put pressure on universities to collaborate with the business sector in order to make Ontario industry economically competitive and to adopt corporate management principles to make institutions more efficient (2009: 19). Chan and Fisher (2008) concur, noting the reluctance to use public funds to fund public services compels public institutions to engage in market behaviours in order to fund more of their services (6). As they are pushed into the market to seek funding, organizational forms, managerial practices, and institutional cultures change (Chan and Fisher 2008: 6). This shift intensified in the 1990s, as university links to business and industry became stronger and the private sector was recognized as a legitimate partner (Chan and Fisher 2008: 60). Tudiver (1999) says these linkages were in large part spurred on by governments, especially in the area of research (139). Indeed, Chan and Fisher (2008) say “universities have been encouraged to become cent[re]s for capital accumulation through the commercialization of research, an increase in technology transfer and the production of intellectual property” (1). Thus, while governments draw back their funding to universities, they simultaneously encourage closer relationships between universities and corporations (Tudiver 1999: 3). The result is a blurring of boundaries between academy and industry (Chan and Fisher

2008: 1).

In the United States, Bok (2003) observes that since 1975, universities have been more aggressively pursuing money from their research and educational activities (vii). According to Bok (2003), these commercial practices, though not new, have expanded in size and scope (2). He credits the growing influence of the market throughout society for the expansion of these commercial practices (4). Bok (2003) says there has been a “rapid growth of opportunities to supply education, expert advice, and scientific knowledge in return for handsome sums of money,” and that such opportunities did not previously exist (10). He attributes the growth in opportunities to government cutbacks, the spirit of private enterprise, entrepreneurship, and most importantly for Bok, the emergence of a knowledge-based economy (2003: 15). Thus, the changes taking place within the university system are a result of functional changes in the economy and not the result of force imposed externally by corporate interests (2003: 6-7). In agreement on the previous point, Slaughter and Rhoades (2004) do not see the university as being subverted by external actors (1). Instead, they argue actors within universities (e.g., faculty, students, administrators, and academic professionals) participate in creating these commercial links by using government resources to create circuits of knowledge that link postsecondary institutions to the “new economy” (2004: 1).

It is clear that globalization has shaped postsecondary education in a fundamental way. Governments have attempted to bring their postsecondary education systems in line with the requirements of the global economy. The pressures placed on postsecondary education institutions to produce knowledge and skilled workers for the global economy has led to changes in their institutional structure. Postsecondary institutions are also

under pressure to collaborate with market actors to fulfill core functions, such as education and research. The remainder of this section is broken into four subsections: (a) commercialization of research; (b) mass access; (c) workforce preparation; and (d) postsecondary education as an investment. These subsections specify in greater detail the extent to which postsecondary education systems are being shaped by a globalization discourse that incorporates human capital theory assumptions.

2.2.1 Commercialization of Research

As Bok (2003) and Slaughter and Rhoades (2004) have indicated, research is an important function of postsecondary education systems in the globalized economy. Postsecondary institutions, primarily the universities, are regarded as sources of innovation. As such, governments have taken interest in these institutions and have implemented a variety of policies to stimulate the production of knowledge that can be applied profitably. As Slaughter and Rhoades (2004) say, in the new economy knowledge becomes regarded as a raw material to be “patented, copyrighted, trademarked, or held as a trade secret” and “then sold in the marketplace for a profit” (4). The introduction of the Bayh-Dole Act in the United States in 1980, which encouraged colleges and universities to partner with the private sector to develop the “commercialization of new technologies” and allowed for discoveries to be patented, is a concrete example of treating knowledge as a raw material (Arum and Roska 2011: 9)

In Canada there has been a growing expectation in the last couple of decades for universities to produce knowledge that contributes to Canada’s economic well-being and international competitiveness (Clark et al. 2009: 1). In particular, the public and governments expect universities to produce research anticipated to have commercially

valuable applications (Clark et al. 2009: 1). Clark et al. (2009) attribute these expectations to the emergence of the knowledge economy in Canada and the globalization of the marketplace (57). That university-based research has become an integral part of government economic development strategies is evident in the creation of programs and increased funding for postsecondary education research in the latter part of the 1980s (Clark et al. 2009: 52). In 1986, the Canadian government introduced a matching funds policy that required its granting councils to earmark funding for university-industry collaborations (Chan and Fisher 2008: 50). In 1987, the Ontario provincial government created seven Ontario Centres of Excellence with \$204 million in government funding over five years (Clark et al. 2009: 53). The creation of these centres was followed by the federal government's establishment of the National Centres of Excellence two years later (Clarke et al. 2009: 53). In 1997 the federal government created the Canada Foundation for Innovation (CFI) with initial funding of \$800 million (Clark et al. 2009: 53). Funding from the CFI was restricted to fields of perceived economic utility, such as health, environment, science, and engineering (Clark et al. 2009: 53). The CFI expanded from its initial funding of \$800 million to \$3.65 billion by the end of 2008 (Clark et al. 2009: 56). Clark et al. (2009) argue the CFI set the tone for expanded government investments in university research, since within less than three months after the federal government announced the CFI, the Ontario government created the Ontario Research and Development Challenge Fund (ORDCF) with \$500 million in provincial funds over ten years, with the hope of leveraging additional research funding (55). In 1999 the Ontario provincial government established the Ontario Innovation Trust with a mission to match CFI funding for research infrastructure (Clark et al. 2009: 55).

In the 2000s Canada's three federal granting councils, the Canadian Institutes for Health and Research (CIHR), the Natural Sciences and Engineering Research of Canada (NSERC), and the Social Sciences and Humanities Research Council of Canada (SSHRC), were expanded greatly (Clark et al. 2009: 56). According to Clark et al. (2009), these councils were transformed to fit more closely with the government's economic development goals (56). One example of how these councils promote the government's economic agenda is an insert which appeared in *The Globe and Mail* in May 2008, entitled "Cultivating Excellence: A Special Report Celebrating the 30th Anniversary of the Social Sciences and Humanities Research Council" (Coleman and Kamboureli 2011: 1). This document presented the humanities as a discipline that was commercially relevant and capable of sharing in the entrepreneurial spirit of the times (Coleman and Kamboureli 2011: 6). Clark et al. (2009) comment that almost every federal budget from 1997 to the mid-2000s featured a major new investment in university research (55-56). From 1997-98 to 2007-08, there was a four-fold increase in federal funding to the universities from \$733 million to \$2,924 million (Clark et al. 2009: 57). Funding for the three federal granting councils and the Centres of Excellence program increased by 130 percent over this time period (Clark et al. 2009: 57).

These programs and initiatives reveal the government's increased interest in research and development and the role that governments play in shaping research priorities around the needs of the market (Chan and Fisher 2008: 3). Using a case study of the University of Ottawa, Chan and Fisher (2008) argue that these federal and provincial policies place pressure on faculty to obtain research grants and to contribute to knowledge production within a highly competitive environment (2008: 49, 55). The

authors (2008) note that research-intensive universities, such as the University of Ottawa, have a larger role as they are expected to contribute to the knowledge economy (55).

Coleman and Kamboureli (2011) document an “intensification within Canadian universities of the pressure to attract external research funding from governments and corporations to balance their budgets, but also to produce knowledge that is [...] applicable to the needs and priorities of [...] private and government sectors” (xiv).

Coleman and Kamboureli (2011) trace the emergence of this “culture of research” through research policy documents generated inside and outside of the university (xv).

Disciplines easily able to adapt to the culture of research are those primarily focused on “discovery-for-application,” meaning those fields in which knowledge can be produced

for sale in the market (Coleman and Kamboureli 2011: xvii). Looking at various

documents, including *The University into the Twenty-first Century* in 1984 and

National Conference on University Research and the Future of Canada in 1988,

Coleman and Kamboureli (2011) show that the perception of the role of universities shifted in the mid-1980s towards the view that universities were to service the state,

public and private sectors, the marketplace, and globalization (24). They argue this

reformulation of the university’s role “affected the overall ethos of university life”

(2011: 28). The universities submitted to the global pressures to generate knowledge

that met the needs of the marketplace (Coleman and Kamboureli 2011: 31).

The interest in postsecondary institutions’ research function is the result of a globalization discourse that reduces knowledge to a commodity to be sold in the marketplace. Knowledge that has commercial relevance is regarded by governments as a means to enhance economic productivity and to remain competitive in the global

economy. As human capital theory suggests, knowledge is important for economic development because it enhances labour productivity and allows individuals to exploit resources more efficiently and effectively, thus increasing profits. As such, research conducted by postsecondary institutions, primarily universities, has become an integral part of governments' economic development agendas. There is also greater emphasis placed on research carried out in collaboration with the private sector.

2.2.2 Mass Access

In addition to research, governments are also concerned with postsecondary institutions' educational/instructional function insofar as postsecondary institutions are assumed to provide individuals with the skills and knowledge needed to compete in the global economy. As Clark et al. (2009) say, it is thought that "productivity can only be enhanced through innovation and increases in efficiency that in a knowledge-based economy are dependent upon a highly qualified workforce" (51). With calls for postsecondary education systems to produce highly skilled labour comes calls for increased access to postsecondary education institutions. Côté (2014) writes that this understanding of postsecondary institutions' role is informed by human capital theory. It is the theory typically endorsed by policy makers in most governments who see mass participation in universities as necessary in "knowledge societies" since it is assumed that these institutions produce the human capital that contributes to economic growth (208). As a result, this theory is used by governments to justify expanding their university systems, with a fifty percent youth participation-rate being a common goal (209). These views are buttressed by economic analyses that support these basic assumptions. Arum and Roska (2011) cite the work of economists Claudia Goldin and Lawrence Katz who

argue that increased investment in U.S. postsecondary education attainment is required for both economic growth and reduced inequality since the labour market values the skills thought to be acquired from college (2).

While colleges have expanded their programs considerably in order to accommodate increased enrolments, there is an enrolment bias towards the universities. In Ontario, which already has a high university participation rate by international standards, there is continuous pressure placed on universities to expand accessibility to baccalaureate programs because increased access is seen as necessary to the province's future competitiveness and productivity (Clark et al. 2009: 1). In 2009, the Higher Education Quality Council of Ontario reported that Ontario had 26 percent of its population aged 25-64 with a university degree, ranked behind only the United States and Norway at 30 percent, and Netherlands at 28 percent among OECD countries (Clark et al. 2009: 13). Clark et al. (2009) suggest any further increases in the university participation rate will require drawing from groups that historically have been underrepresented in postsecondary education, such as "students with low or moderate family incomes, students from families with no history of attending higher education, First Nations students, students with disabilities, and others" (1, 31). Clark et al. (2009) say the concerns with increasing access for these groups partly reflects a societal commitment to social equity, but increasingly these concerns "reflect [...] the recognition of the importance of achieving full development of our human resource potential for national and provincial economic well-being and development," and this is part of Canada's and Ontario's response to the challenges of globalization (17). Furthermore, "for governments whose economic strategies depend on increasing the share of workers

whose skills and abilities can attract well-paying employers and investors, expanding higher education to include non-traditional groups is essential to success” (Clark et al. 2009: 31). In Ontario the case is made that high participation rates are a key element in increasing the province’s competitiveness and in alleviating poverty through increasing participation in the economy (Clark et al. 2009: 51).

In a globalized world, a skilled and educated labour force is essential if nations wish to remain economically competitive with other nations. The supposed existence of a knowledge economy means many of the jobs being created can only be performed by individuals who possess sophisticated skills and knowledge. These assumptions have led international organizations and governments to call for increased access to postsecondary education. In this framework, education is a solution for economic problems. Education alleviates poverty and contributes to economic growth by producing and distributing human capital. This has led to policies that aim to increase access for historically underrepresented groups, as they represent a largely untapped source of wealth.

2.2.3 Workforce Preparation

Commitment to the goal of increased access to postsecondary education to create a highly educated and skilled labour force implies a redefinition or a shift in the relationship between students and educational institutions. There has been an increasing demand for programs and curricula that will prepare students for the workforce by providing them with the skills and knowledge required by the labour market (Hyslop-Margison and Sears 2006: 2). Part of the demand comes from governments. In the 1980s the Ontario provincial government moved to knowledge-based strategies for economic development, and one of their strategies was to address the supply constraint in

engineering and related programs (Clark et al. 2009: 42). In 1989, the provincial government made science and engineering programs one of their five priorities for enrolment expansion and provided funding for universities willing to meet this need (Clark et al. 2009: 42-43). A larger undertaking was the establishment of Access to Opportunities Program (ATOP) in response to industry concerns about the shortage of spaces in computer science and software engineering in the late 1990s (Clark et al. 2009: 43). Introduced during the technology boom, ATOP offered incremental operating funding to universities that would double their enrolment in these programs – with industry expected to pick up some of the costs – and the government offered to deregulate tuition fees in these programs (Clark et al. 2009: 43). The provincial government also offered funding to all colleges to expand technology-related programs (Clark et al. 2009: 43).

Part of the demand comes from students and their families. In Ontario, a substantial part of the growth in demand for baccalaureate education has been in career-focused programs rather than in the liberal arts, and it seems likely the demand for applied, job-oriented education will only increase as the number of baccalaureate students expands (Clark et al. 2009: 2, 16). Students are encouraged to pursue vocationally-relevant courses of study that provide the technical skills ostensibly required in the economy (Barrett and Meaghan 2006: 6); courses of study perceived to lack such utility may be regarded as a “bad investment.” This shift is evident in the colleges as well. Although Ontario’s colleges were created explicitly to prepare individuals for the workforce, they have also fulfilled other functions, such as helping individuals to change and enrich their lives, helping communities to improve their quality of life, and providing

a supportive and nurturing environment in which to learn (Clark et al. 2009: 21). Cited by Clark et al. (2009), John S. Levin argues these ancillary services performed by colleges in both Canada and the United States are being marginalized in response to the pressures of globalization, as the mission of colleges in the last two decades of the twentieth century places “less emphasis on education and more on training, less emphasis on community social needs and more on the economic needs of business and industry, and less emphasis upon individual development and more on workforce preparation and retraining” (Clark et al. 2009: 21).

In the United States, Slaughter and Rhoades (2004) comment that education and employment are closely coupled in the new economy (285). Students increasingly choose majors linked to the new economy, such as business, communications, media arts, etc., in order to secure a return on their educational investment (Slaughter and Rhoades 2004: 1; Giroux 2007: 124-125). The idea of choosing majors in order to maximize economic returns is linked to human capital theory. Indeed, speaking about the political economy of curriculum development, Slaughter (2002) mentions that one of the dominant narratives is the human capital narrative (266). In this narrative, curricular change is driven by students’ economic interests (Slaughter 2002: 266). Students, assessing their possibilities in the labour market, are more likely to enter fields that will increase their human capital, such as business and computer science, and thus enhance the returns on their investment in postsecondary education (Slaughter 2002: 266).

Brint (2002) provides empirical evidence that the old arts and sciences core of the university has been shrinking and the occupational and professional programs, i.e., the practical arts, have been expanding in the U.S. (231). For Brint (2002), the practical arts

includes business, engineering, computer science, nursing, education, and other fields oriented to preparing students for careers (232). In 1970-71, practical arts fields accounted for approximately two-thirds of all graduate degrees, whereas approximately thirty years later they accounted for nearly 80 percent (Brint 2002: 232). At the undergraduate level, the fastest growing fields over the last three decades have been occupational in almost every case (Brint 2002: 233). The fastest growing field has been business, which in 1970-71 accounted for one-seventh of all undergraduate degrees and approximately thirty years later accounted for one-fifth (Brint 2002: 233).

Slaughter and Rhoades (2008) comment that the idea of college education as preparation for employment in the new economy is ascendant (42). This is also observed by Kerr (2002) who says “education for the sake of a job has replaced education for the sake of one’s total life experience” (4). His comment is based on the emergence of educational markets servicing adult re-entry students interested in occupational advancement (2002: 4). That particular market, composed of students in the 25-65 age category, constitutes 40 percent of all enrolments on a head-count basis, Kerr notes (2002: 4). He argues this market is likely to become more important as advanced training is required in order to move up the hierarchy (2002: 7). It is in this context that Kerr (2002) says postsecondary education will become even more of an appendage to the labour market (7). The knowledge economy requires white-collar service workers to repeatedly upgrade their skills to keep pace with changes in the technology-intensive workplace, so workers are increasingly seeking to re-enter postsecondary education in the form of continuing education and distance education (Slaughter and Rhoades 2004: 285). This instrumentalist attitude, according to Aronowitz (2000), pervades large sections of

academia (37).

The globalization discourse, along with human capital theory, has shaped the purpose of postsecondary education around the requirements of the labour market. Education becomes increasingly geared towards preparing students for employment. This has an effect on the curricular content postsecondary institutions provide. Governments invest in the development of programs with perceived economic utility, such as computer science and business. Students wishing to maximize the return on their investment in postsecondary education pursue these programs.

2.2.4 Postsecondary Education as an Investment

The preceding discussion highlighted that students may be selecting courses based on their perceived economic utility. Speaking about Ontario, Clark et al. (2009) suggest the increasing number of students applying to attend postsecondary education is in part a product of students' and their parents' correct assessment that "post-secondary education will significantly increase the likelihood of accessing secure employment with the prospect of career advancement" (25). This view of postsecondary education, especially university education, turns learning into something primarily aimed at increasing an individual's earning potential (Holborow 2012: 102). It is suggested that if postsecondary education confers economic benefits to individuals, it is individuals who should be responsible for paying for it (Holborow 2012: 102).

The rise in tuition fees has reinforced the idea that postsecondary education is an investment. In the United States, tuition and fees (not including room and board) increased from \$9,903 to \$25,143 in private four-year colleges and from \$2,303 to \$6,585 in public four-year colleges in constant 2008 dollars from 1978 to 2008 (Arum and Roska

2011: 15). Slaughter and Rhoades (2004) argue that rising tuition fees have heightened students' and parents' expectations about postsecondary education with regard to returns on investment in their human capital (12). Rising tuition fees have also been accompanied by a shift from grants to loans as financial aid, the rationale being that postsecondary education is largely a private good since the benefits primarily accrue to individuals (Slaughter and Rhoades 2004: 283; Arum and Roska 2011: 15).

Clark et al. (2009) note how statistics are marshalled by government agencies and postsecondary institutions to show that a postsecondary education does confer economic benefits. One indicator is the gap in earnings between workers with a university or college education and workers without (Clark et al. 2009: 29). In Canada, the earnings gap between workers aged 25-34 with a high school education and those with a postsecondary education widened between 1980 and 2005 (Clark et al. 2009: 29); this widened gap seemingly indicates the returns on postsecondary education have increased. There is also research that demonstrates workers with a postsecondary education earn more and are more likely to be employed full-time year-round than workers who are high school graduates only (Clark et al. 2009: 29). Government-sponsored surveys of recent graduates in Ontario over the past decade suggest graduates from university and college programs fare well in the labour market on average (Clark et al. 2009: 29). Furthermore, Canadian employment statistics that show an increase of two million in the number of jobs filled by those with a university education between 1990 and 2006 while jobs filled by those without a postsecondary education fell by 1.3 million over the same period of time suggest a postsecondary education is necessary for an individual's employability and economic welfare, as well as for ensuring the competitiveness of the province and the

nation (Clark et al. 2009: 50). Unsurprisingly, students increasingly see postsecondary education as essential to economic security (Clark et al. 2009: 31).

Instead of thinking about postsecondary education as a public good, it is increasingly conceived as a private good because of the economic benefits said to accrue to individuals who participate. Because it is seen as a private good, it is argued that individuals should have to pay more of the costs of their education. This reinforces the economic role of postsecondary education in an era of globalization. Individuals come to expect their investment in postsecondary education will adequately prepare them for the ever-changing labour market.

2.3 Critiques

Human capital theory and the human capital theory view of postsecondary education is not without its critics. The critiques to be addressed in this section focus on the actual theory itself and its application to postsecondary education systems with respect to the educational or instructional function of these institutions, especially when it comes to drawing connections between postsecondary education and economic outcomes.

Tan (2014) comments that human capital theory can be criticized for a terminological shift it brings about (435-436). Whereas labour and capital were traditionally conceived as two distinct components in production, the term human capital effaces this distinction and treats labour as a type of capital (Tan 2014: 436). Bowles and Gintis (1975) argue the shift toward treating labour as a capital good seems in hindsight to have been “virtually inevitable” (74). In conflating labour with capital, the relationship between workers who sell their labour power for a wage and those who own and control the means of productions is erased (Bowles and Gintis 1975: 79). But Bowles and Gintis

(1975) make the point that “educated workers do not control, much less own, the means of production” (79). At the time of writing, Bowles and Gintis (1975) stated that human capital theory was perhaps the ultimate step in the elimination of class as a central economic concept (74). Human capital theory abstracts from the social relations of production in favour of focusing on technical relations (Bowles and Gintis 1975: 75).

Bowles and Gintis (1975) also challenge the view that educational phenomena are solely a product of individual choices. Human capital theory claims individuals make a variety of calculations before deciding to invest in their human capital development (Bowles and Gintis 1975: 77). Individuals are said to take into consideration current and future labour market conditions, the skills required to perform certain jobs, the economic and non-economic benefits those jobs confer, and the costs to be incurred in pursuing activities to develop their inner resources in line with labour market requirements (Bowles and Gintis 1975: 77). In this view, the supply of educational services is a result of individual demand for them, and the supply of human capital is the simple aggregation of these individual calculations and subsequent decisions (Bowles and Gintis 1975: 77-78). However, Bowles and Gintis (1975) argue this individual choice model is incapable of explaining the social organization of schooling (77, 78). Human capital theory fails to take into account how individual choices with respect to education work within economic constraints determined wholly outside the sphere of individual choices (Bowles and Gintis 1975: 78). Tan (2014) is critical of this view as well. He says human capital theory is quite limited in its attempts to explain educational phenomena because its assumptions regarding human motives, goals, and decisions are not strongly supported (2014: 420). Individual decisions about pursuing or not pursuing education is not a completely rational

process based on vigorous cost-benefit analysis (Tan 2014: 421). Instead, decisions of this kind are influenced by a whole range of social and cultural factors that human capital theory does not address (Tan 2014: 420).

The absence of social and cultural factors in human capital theory reinforces the narrative that individuals are masters of their own destiny. Human capital theory, Steinberg (1985) argues, views individuals as capable of overcoming any obstacles that stand in the way of success, so long as they possess human capital (68). He states that “human capital” encompasses familiar middle-class virtues such as hard work, perseverance, self-sacrifice, and instrumental-rationality (1985: 68). The marketplace thus rewards those who are culturally deserving (Steinberg 1985: 68). This assumption is problematic, however, as it tends to confuse culture and class (Steinberg 1985: 70). With regard to education, treating it as something pursued by those who have the requisite cultural values, those who have a “taste” for education, ignores the social scientific research pointing out the material preconditions for educational attainment (Steinberg 1985: 70). As Steinberg (1985) says, “if the education of one generation is mainly an artifact or by-product of the social class of its parents, it is hardly surprising to discover that human capital of this kind is associated with higher earnings. It is rather like saying that capital begets capital” (70). For Steinberg (1985), the problem with human capital theory is not its recognition that people differ in human capital, nor is the problem its exploration of human factors that yield economic dividends, rather it’s that these differences and these factors are removed from historical, political, economic, and social context (71, 73). As a result, human capital theory is ill-equipped to answer questions concerning the sources of human capital (Steinberg 1985: 71). Steinberg (1985)

concludes by asserting that human capital theory's reductionism diverts attention away from structural forces and places cultural blame on the victim (73).

The importance of placing phenomena in social and historical context is demonstrated by Bowles and Gintis's (1976) discussion of the conventional account of the link between education and income. According to the "technocratic-meritocratic" view (i.e., human capital theory), earnings reflect economic productivity, economic productivity is dependent on the level of cognitive skills an individual has attained, and each year of education increases cognitive skill levels (Bowles and Gintis 1976: 109). Thus, each year of education indirectly leads to higher incomes (Bowles and Gintis 1976: 109). However, Bowles and Gintis (1976) argue that cognitive requirements account for little of the association between education and economic success (47). While they say certain forms of cognitive development are fostered by formal education, the link between educational attainment and occupational success is better explained by the social class origins of students (Côté 2014: 210). Therefore, Bowles and Gintis (1976) claim there is a pervasive overestimation of the importance of cognitive performance in understanding education in the U.S. and its relationships to economic life (9). The technocratic-meritocratic perspective has difficulty accounting for findings that show reduction in inequality of years of schooling has not been matched by an equalization of the income distribution in the United States (Bowles and Gintis 1976: 34), or trend data that suggests the link between social class origins and occupational attainment has remained constant during the twentieth century in the United States (Collins 1971: 1008).

It is fair to question whether the observations Bowles and Gintis (1976) and Collins (1971) made hold up today. Fortunately, there is contemporary scholarship that

addresses the issues they discussed. Many academics have directed critical attention towards the human capital theory assumption that all forms of education, including postsecondary education, provide students with the skills and knowledge required in today's economy (Collins 2002; Arum and Roska 2011; Côté and Allahar 2011; Côté 2014).

Aronowitz (2000) critiques the view that treats colleges and universities as “knowledge factories.” He argues that attempts by educational administrators and planners to transform the general liberal arts curriculum have been unsuccessful in overcoming the imperfect fit between school and work (29). This imperfect fit is evident in the documented concern among employers and business leaders that graduates are not “job ready” because they lack the required skills (Aronowitz 2000: 29; Arum and Roska 2011: 1). Furthermore, Aronowitz (2000) remarks that high-level general education, arguably the best preparation for new types of knowledge work, is declining in the community colleges and in many four-year schools (112).

Collins (2002) remains critical of the view that rising educational requirements are determined by the functional requirements of jobs in the modern economy, noting he has not seen any evidence that leads him to believe educational requirements are demand-driven (26). Instead, Collins (2002) explains rising educational requirements using the concept of “credential inflation.” Increases in the supply of educated persons at a given level minimizes the value of the attained credentials (Collins 1971: 1015). Credential inflation is largely supply-driven, not demand driven (Collins 2002: 26). It is “driven by the expansion of schooling, like a government printing more paper money, not from demand by the economy for an increasingly educated labor force” (Collins 2002: 26). He

argues that the idea that some number of persons who make it through the educational system acquire skills relevant to their jobs, let alone apply them at any point in their careers, is at best a “quarter-truth” (2002: 28). Furthermore, the assumption that more schooling is a means for reducing economic inequality is questionable given that the massive expansion of educational access throughout the twentieth century has not reduced the association between occupational attainment and family background (Collins 2002: 28-29). Instead, as educational attainment has expanded, the value of the degree on the occupational marketplace has declined, which in turn stimulates demand for higher levels of education (Collins 2002: 24).

Credentialism is an alternative perspective that presents challenges for human capital theory because the assumption that postsecondary institutions increase students’ economic productivity is not needed to explain educational phenomena. What opens doors to certain occupations is credentials, not human capital. This position is represented by Côté and Allahar (2011) who argue that universities in Canada have adapted to a context of fiscal constraint by embracing corporate management principles that have helped create the credentialist approach to universities (92). By presenting themselves as providers of marketable credentials, universities encourage a “student-as-consumer” model whereby students feel entitled to the credential they have paid for (Côté and Allahar 2011: 91-92). According to Côté and Allahar (2011), this contributes to a culture of student disengagement (92). The existence of a culture of student disengagement seemingly contradicts claims that postsecondary education is important in the knowledge economy, since disengaged students presumably would not acquire the skills and knowledge seen as vital (Côté 2014: 197). Côté (2014) refers to this as the “study-

time/knowledge paradox” (197).

There is empirical evidence that students have not been acquiring the skills attributed to a postsecondary education. Arum and Roska (2011) cite the work of labour economists Philip Babcock and Mindy Marks (3). Examining U.S. data from twelve individual-level surveys of student time use from the 1920s to today, Babcock and Marks found that today, full-time college students on average report spending twenty-seven hours per week on academic activities, a drop from roughly forty hours per week in the early 1960s (Arum and Roska 2011: 3). Average time spent studying fell from twenty-five hours per week in 1961 to twenty hours per week in 1981 and thirteen hours per week in 2003 (Arum and Roska 2011: 3). It seems *prima facie* that such a drop would result in individuals acquiring less skills from their postsecondary education, but Arum and Roska (2011) conducted their own study to assess the extent to which students are acquiring skills from their education in order to provide empirical support. Using the Collegiate Learning Assessment (CLA), a measure designed to assess critical thinking, analytical reasoning, problem solving and writing, they sampled 2,322 students from their freshman entrance to the end of their sophomore year (Arum and Roska 2011: 21, 35). They concluded that students only minimally improved by a standard deviation of 0.18 over the course of their postsecondary education (2011: 35). These findings support Côté’s (2014) assertions.

As intimated above, the advent of a culture of student disengagement and the related decline in skills acquisition can be explained by the priorities postsecondary institutions set for themselves. Slaughter and Rhoades (2004) provide insight into the eclipse of the educational function of postsecondary institutions by a marketing function

(302). They argue that as postsecondary institutions adopt more of an economic orientation to students, the consumption versus the educational dimensions of a postsecondary education become increasingly emphasized (2004: 279). Colleges and universities engage in market-like activities in order to extract revenue from students (Slaughter and Rhoades 2004: 279). These activities serve the interests of the institutions more than the interests of the students (Slaughter and Rhoades 2004: 283). What they call “academic capitalism in the new economy” turns postsecondary education into a commodity to be marketed and consumed (2004: 284). Since institutions are focused on the bottom line, monies are likely to be shifted to non-instructional services, buildings, and personnel to make the institutions more attractive to potential consumers (Slaughter and Rhoades 2004: 284, 292). In the new economy, there is an intense focus on attracting students because tuition is an increasingly significant share of institutional revenues (Slaughter and Rhoades 2004: 295). Slaughter and Rhoades (2004) comment that colleges and universities are coming to be marketed more as fun places rather than as challenging places in which to learn and become educated, an ironic outcome given that public policy increasingly emphasizes the workforce and economic development roles of postsecondary education (298).

Côté and Allahar (2011) suggest universities are driven by a for-profit model in the postsecondary education system that rewards them for increasing enrolments (87). As a result, these institutions rely on their marketability in order to attract students (Côté and Allahar 2011: 87). The emphasis on marketing their services has had a detrimental impact on universities’ educational role. Having to do more with less, Côté and Allahar (2011) describe how many universities have replaced written and oral assignments with

multiple-choice tests. This means students are increasingly evaluated in terms of their ability to remember information rather than to produce it. This hints at the gradual confusion of “knowing something” and “being able to communicate that knowledge effectively” (Côté and Allahar 2011: 85). The idea that universities are increasingly producing graduates who struggle to perform the latter is at odds with the narrative surrounding the “knowledge economy.”

There are many academics who have questioned the economic benefits of postsecondary education claimed by human capital theory (Livingstone 1997; Aronowitz 2000; Collins 2002; Hyslop-Margison and Sears 2006; Côté and Allahar 2011; Holborow 2012). As per human capital theory, increasing the supply of human capital should spur economic growth. This assumption has been contested. Livingstone (1997) remarks that school enrolment rates have continued to increase since the 1970s, yet average incomes have stagnated, unemployment rates have worsened, and underemployment of highly educated people has become a problem (9). He argues human capital theory fails to account for “a growing general gap between peoples' increasing learning efforts and knowledge bases on the one hand, and the diminishing numbers of commensurate jobs to apply their increasing knowledge investments on the other hand” (1997: 9). Holborow (2012) claims the human capital view of education mistakes “individual enterprise as the prime mover of economic growth” when in fact it is “capital investment for the profit motive” (103). If this is true, then attempts to create economic demand from increasing the supply of educated labour will not work. Côté and Allahar (2011) provide some evidence for this by noting how the Canadian government’s attempt to promote mass access to universities in the hopes that the supply of university graduates would stimulate

demand has resulted in an oversupply of university graduates (Côté and Allahar 2011: 91). Supply-side economics has encountered problems when faced with the reality of globalization, which sees the production of fewer jobs at decent pay and the shift towards low-skilled service sector work (Aronowitz 2000: 157; Collins 2002: 26-27; Hylsop-Margison and Sears 2006: 22).

In an attempt to defend human capital theory, some advocates have focused on documenting the continuing relative economic benefits for those with some form of postsecondary credential, such as lower unemployment rates and higher earnings (Livingstone 1997: 9). As Côté and Allahar (2011) describe, stakeholders in the university community point to studies that show university graduates have lower unemployment rates and higher salaries than those with other types of education (45). However, these studies fail to acknowledge the fact that youth salaries have declined by 20-30 percent over the past few decades while those of university graduates have been stagnant, so that the better earning power of graduates is relative to non-graduates of the same age-range and not to older workers (Côté and Allahar 2011: 57).

Côté and Allahar (2011) say policies based on human capital theory fail to distinguish between applied and general programs (46). They argue human capital theory is better in explaining outcomes for applied and professional degrees because these programs are specifically designed to increase the concrete skills sought by employers (2011: 46). The problem is the broad application of human capital theory to include liberal arts programs, the result of which is to promote a “pseudo-vocationalism” that conflates university education with job training (Côté and Allahar 2011: 57)

The critical voices in this section identify a variety of issues that present problems

for the dominant narrative as it relates to postsecondary education. Human capital theory's individualistic framework does not take structural factors into consideration when attempting to explain social phenomena, such as education; therefore, it presents a partial and arguably distorted account that serves to justify inequalities by abstracting from power relations present in society. There is also the difficulty of orienting education to the market. Postsecondary institutions' priorities have changed in response to the pressures of globalization, so that the education function is increasingly superseded by an emphasis on marketing credentials to consumers to attract revenues. This arguably contributes to a culture of student disengagement whereby students are less likely to acquire the skills and knowledge ostensibly required in the so-called knowledge economy. Furthermore, the benefits of postsecondary education claimed by human capital theory are contradicted by the actual experience of globalization, in which average real wages have been declining, low-skilled work has been increasing, and unemployment and underemployment for postsecondary graduates is not uncommon.

The literature reviewed above in these three sections provides a general, but by no means exhaustive, overview of the dominant narrative that shapes how postsecondary education systems are perceived. The connection between human capital theory and a globalization discourse that affirms the need for nations to be competitive in the international marketplace has reconfigured the role of postsecondary education systems. The role of postsecondary education systems in the era of globalization is to produce human capital and knowledge that confers a competitive advantage and thus contributes to economic prosperity for individuals and for society as a whole. This globalization – human capital theory discourse has been met with challenges, some of which were

described in the final section of this chapter. Given what has already been said about this topic, I intend to contribute to the conversation by more closely examining the link between neoliberalism and human capital theory. While it is true that critical voices have already drawn the connection, I would argue that important insights can be had from tighter scrutiny. It is my contention that the emergence of human capital theory in postsecondary education discourse is associated with the rising influence of neoliberalism.

Chapter 3 – Context

The previous chapter addressed human capital theory and its relationship to postsecondary education in the era of globalization. It also addressed some of the criticisms that have been made of the globalization – human capital theory discourse. In this chapter, I want to extend that discussion in order to set up the context for the chapters to follow. In particular, I would like to discuss human capital theory and its relationship to postsecondary education in the era of neoliberalism. I will first begin by discussing neoliberalism more broadly, primarily focusing on its development in the United States and Britain, before moving to discuss the influence of neoliberalism in Canada and how this relates to the use of human capital theory in Ontario's postsecondary education discourse.

3.1 Neoliberalism: Discourse and Reality

In the United States, the collapse of the stock market in the late 1920s led to a major economic depression. In this context, President Franklin D. Roosevelt introduced the New Deal, a set of policies and programs that established basic rights for labour (e.g., the Wagner Act) and established a social welfare system built around Social Security (Derber 2013: 113). The New Deal was arguably implemented in recognition of a capitalist system perceived to be unsustainable if left unchecked (Derber 2013: 113). From the 1930s to approximately the 1970s, a broad consensus was established that governments should take a more active role in achieving economic ends such as full employment, economic growth, and the welfare of its citizens, even if this meant intervening in or substituting for market processes (Harvey 2005: 10). During the New Deal period union coverage reached historical highs, governments actively intervened in

industrial policy, and governments set standards for the social wage by creating a variety of welfare systems, such as health care and education (Harvey 2005: 10-11; Palley 2005: 21). It was a period in which capitalism was regulated and governments provided many services (Connell 2010: 26). Harvey (2005) argues a “class compromise” had been struck between capital and labour (10). The political-economic organization that emerged is commonly referred to as “embedded liberalism” because market processes and entrepreneurial and corporate activities were subject to a series of social and political constraints and a regulatory environment (Harvey 2005: 11).

The New Deal and the welfare systems created as a result are typically labelled “Keynesian,” although this is contested (Lewis 2003: 31; Harvey 2005: 10). The label refers to the economic theories of John Maynard Keynes, a British economist whose work had become prominent during the 1930s. Narrowly framed, Keynesianism implies the countercyclical use of fiscal and monetary tools to even out the business cycle and perpetuate high rates of employment (Lewis 2003: 32). Fiscal tools such as taxing and spending could be used by governments to increase aggregate demand and restore employment when the economy was underperforming and employment fell below what was considered acceptable (Lewis 2003: 32). Supply does not create its own demand, so governments have to intervene in order to ensure full employment (Lewis 2003: 30). Budgetary deficits could be run by increasing spending and/or cutting taxes to put money into the economy in order to stimulate demand. Conversely, if employment was at an acceptable level and inflation was presenting problems, then governments could reduce demand by taking money out of the economy to pay down the debt accumulated when deficits were run (Lewis 2003: 32). This could be achieved by incurring budgetary

surpluses by increasing tax and/or reducing spending (Lewis 2003: 32). Keynesianism provided intellectual justification for the welfare state by assigning economic importance to full employment, labour unions, social security, and high wages (Lewis 2003: 34). The association between Roosevelt's New Deal and Keynesianism has much to do with the proactive role of the state in the economy and the use of fiscal and monetary tools to manage business cycles and ensure reasonably full employment (Lewis 2003: 31; Harvey 2005: 10; Palley 2005: 21).

The welfare state that had been established after the Great Depression in the United States and elsewhere in the world encountered difficulties in the mid-1970s (Harvey 2005: 12). The difficulties were outlined in a 1975 report released by the Trilateral Commission, entitled "The Crisis of Democracy." The Trilateral Commission is a Rockefeller-funded organization formed in 1973 for the stated purpose of fostering greater cooperation among North America, Western Europe, and Japan. The objective of the report was to investigate the state of democracy in those three regions.

Samuel P. Huntington, the academic who authored the section on the United States, argued that government spending had led to inflation, which was stifling the economy (Crozier, Huntington and Watanuki 1975). Between 1965 and 1975, total government expenditures had risen from 27 percent of the Gross National Product (GNP) to 33 percent, while governmental purchase of goods and services had only risen from 20 percent in 1965 to 22 percent in 1974 (Crozier, Huntington and Watanuki 1975: 68). This difference meant a substantial proportion of the increase in spending was in the form of transfer payments, such as welfare and social security benefits, rather than to additional governmental contributions to the GNP (Crozier, Huntington and Watanuki 1975: 68).

Government spending on such things as education, health, and social security had led to increasing deficits, especially in the late 1960s (Crozier, Huntington and Watanuki 1975: 75). In 1968, the deficit was \$17 billion and in 1971 it was \$27 billion (Crozier, Huntington and Watanuki 1975: 75). In nine of the ten years after 1965 the federal budget showed a deficit, the total deficit for those ten years estimated to be \$111.8 billion, of which \$74.6 was amassed from 1971 to 1975 (Crozier, Huntington and Watanuki 1975: 75). Huntington argues the excess of expenditures over revenues was one major source of inflation which had become a problem in the United States and other industrial countries in the early 1970s (Crozier, Huntington and Watanuki 1975: 72-73). Huntington and the other authors conclude that excessive governmental expenditures were the result of a variety of groups pressing their demands on government, thus leading them to say “inflation is the economic disease of democracies” (Crozier, Huntington and Watanuki 1975: 164).

Indeed, in the 1970s there was a serious capital accumulation crisis. In 1975, inflation had risen to 26 percent and unemployment topped one million in the United States (Harvey 2005: 57). There is also evidence that corporations’ profits were being cut into. The source of the accumulation crisis is debated, but Rinehart (2001) notes there are three common explanations. Some scholars argue the source of the crisis was the rising wages of workers in the developed countries (Rinehart 2001: 168). Others argue it was the collapse of the Breton Woods agreement, which had fixed world currencies to the U.S. dollar and allowed state controls over international capital flows (Rinehart 2001: 168). But most scholars, according to Rinehart, argue the source of the crisis was heightened international competition from European and Asian countries (Rinehart 2001:

168).

Harvey (2005) argues that “neoliberalism” emerged in the midst of this crisis as the answer for restoring the conditions for capital accumulation (13). He defines neoliberalism as “a theory of political economic practices that proposes that human well-being can best be advanced by liberating individual entrepreneurial freedoms and skills within an institutional framework characterized by strong private property rights, free markets, and free trade” (2005: 2). Since neoliberalism “holds that the social good will be maximized by maximizing the reach and frequency of market transactions,” it therefore “seeks to bring all human action into the domain of the market” (Harvey 2005: 3).

Regarded as the father of neoliberalism (though he rejected the label), Milton Friedman (1982) argued that governmental power must be limited and decentralized to preserve freedom (3). According to Friedman (1982), the government is a paternalistic entity because it imposes collective decisions on individuals (33-34). He decries the principle that “some shall decide for others” and rejects collectivism in any form, whether it be communism, socialism, or the welfare state (34). Collectivism is inimical to individual freedom. Instead, Friedman argues the major function of government is to provide security, to preserve law and order, to enforce private contracts, and to foster competitive markets (1982: 2). The bulk of economic activity in society, he argues, should be organized through private enterprise operating in a free market system, and this system of “competitive capitalism” is the only one capable of ensuring economic freedom and political freedom (1982: 4).

Harvey (2005) explicates the assumptions on which neoliberal theory is based. According to neoliberal theory, the state has two responsibilities with respect to markets.

The first responsibility is to ensure they function properly (2005: 2). The second is to aid if necessary in their creation if they do not already exist (2005: 2). Aside from this, the state must drastically limit its intervention in markets (Harvey 2005: 2). Neoliberal theory suggests that state-run sectors should be turned over to the private sphere and be deregulated (Harvey 2005: 65). It is argued that privatization and deregulation combined with competition will eliminate bureaucratic obstacles, increase efficiency and productivity, improve quality, and reduce costs to consumers through cheaper goods and services and tax reductions (Harvey 2005: 65). The state should lift controls over commodity and capital movements since international competition is said to improve efficiency and productivity, lower prices, and thereby control inflationary tendencies (Harvey 2005: 66). Continuous increases in productivity will raise living standards for everyone who opens their markets to global exchange (Harvey 2005: 64, 66). Thus, neoliberal theory claims free markets and free trade can best secure the elimination of poverty, both domestically and worldwide (Harvey 2005: 64-65).

The “neo” in neoliberalism signified adherence to the free market principles of neoclassical economics that had emerged in the second half of the nineteenth century to displace classical economic theories (Harvey 2005: 20). It is important to briefly discuss neoclassical economics before proceeding further. (The following discussion of neoclassical economics is drawn exclusively from Wolff and Resnick [1987].) Neoclassical economics argues individual behaviour is motivated by rational self-interest. The aggregate end product of individuals maximizing their own self-interest is the economy. Individuals are presumed to voluntarily enter the market and every transaction therein is held to be mutually beneficial, or else it would not occur. Wolff and Resnick

comment that neoclassical theory is reductionist in that economic development is explained in terms of assumptions about individual human nature (Wolff and Resnick 1987: 7-8, 16).

According to neoclassical theory, a “private enterprise market economy” has two key institutions: private property and competitive markets. The existence of competitive markets prevents individuals from controlling market prices, which guide the decisions of buyers and sellers. The determination of prices by markets is taken as an indication of the freedom individuals have with respect to their property. This type of society allows for the achievement of maximum wealth; it provides the opportunity for individuals to attain their “maximum production and consumption potential.” The optimal performance of markets allows societies to produce as much as possible with the resources they have. This efficiency derives from individuals acting rationally in their own self-interest. Therefore, the conclusion is drawn that self-interested behaviour on the part of individuals will generate the most wealth for society, assuming market equilibrium (Wolff and Resnick 1987: 47-48, 88-89).

In a private enterprise market economy wages are determined by our “nature as rational consumers and productive human beings.” Barring market imperfections, incomes are determined by individuals’ preferences for work or leisure or the marginal productivity of their labour. Thus, wage inequalities between individuals in society are explained by recourse to individuals’ human nature or their access to technology. This leads to the conclusion that “the relatively rich are rich because they choose to be so, while the relatively poor are poor because they choose not to be rich.” Thus, wealth is distributed according to what each individual contributes, and what individuals contribute

depends on their preferences and their productive capabilities (Wolff and Resnick 1987: 71-72, 80, 87).

Market imperfections disallow the efficient allocation of production inputs and consumption outputs. One source of market imperfections is held to be state interference in markets. In the case of deviations from a full employment equilibrium, neoclassical theory suggests inaction unless the market imperfections are caused by price distortions resulting from the actions of private individuals. If the state does more than maintain competitive markets and private property, it might well become a contributing factor to an economic depression. This is because markets inherently tend towards equilibrium (e.g., supply equals demand) in a private enterprise market economy when individuals are left to their own selfish devices. Assuming the state restricts itself to maintaining private property and competitive markets, those markets will allow individuals to achieve and reproduce a full employment equilibrium (Wolff and Resnick 1987: 98, 103).

Both neoclassical economics and neoliberal theory provided an intellectual basis for attacking the welfare state. The emergence of neoliberalism was a response to the embedded liberalism that prevailed in the post-WWII period (Côté 2014: 205-206). Neoliberalism aimed to free capital from the strictures of the welfare state (Harvey 2005: 10; Braedley and Luxton 2010: 3). Palley (2005) argues that neoliberalism frames market failure in terms of “government failure,” placing blame on the bureaucratic inefficiencies and lack of market-styled incentives attributed to government (27). It is claimed if markets were not restrained they would efficiently and effectively satisfy all economic needs (Shaikh 2005: 41).

Neoliberalism took root in both Britain and the United States under Margaret

Thatcher and Ronald Reagan, respectively (Harvey 2005: 9). Harvey (2005) comments that Thatcher undertook to dismantle Britain's welfare state by confronting trade unions on the basis of her electoral mandate to tame public sector trade union power, emphasizing competitive flexibility, reducing taxes, encouraging entrepreneurial initiative, and creating a business-friendly climate (Harvey 2005: 22, 58). Thatcher also sought to privatize state-run sectors of the economy to increase governmental revenues and free government from future obligations to failing enterprises (Harvey 2005: 60). The enterprises were prepared for privatization by reducing their debt and "improving their efficiency and cost structures, often through gutting labour" (Harvey 2005: 60). The valuation of these enterprises often benefitted private capital through hidden subsidies (Harvey 2005: 60). By the time Thatcher left office, she had eradicated inflation via monetarism and strict budgetary control, curbed union power, tamed the labour force, and built middle-class consent for her policies in the process (Harvey 2005: 58, 59).

Historian Howard Zinn recounts Reagan's policies. In his first four years in office, Reagan cut \$140 billion in social programs and increased spending on military defence by \$181 billion (Zinn 2003: 577). He also proposed tax cuts of \$190 billion, most of which went to the wealthy (Zinn 2003: 577). Despite the tax cuts and increased military spending, Reagan claimed he would still balance the budget because the tax cuts would stimulate the economy and generate new revenue (Zinn 2003: 577). However, Department of Commerce figures showed that periods of lowered corporate taxes (1973-1975, 1979-1982) did not show higher capital investment, but instead a steep drop (Zinn 2003: 577). The sharpest rise of capital investment (1975-1979) took place when corporate taxes were slightly higher than they had been the preceding five years (Zinn

2003: 577). Welfare programs were attacked by both political parties, which Zinn (2003) argues was presumably done to gain political support from a middle-class public that believed their taxes were supporting undeserving people (e.g., teenage mothers and the lazy), despite the fact that welfare consumed a tiny percentage of the taxes and military spending consumed a larger percentage of it (Zinn 2003: 578-579).

Bipartisan support in Congress allowed the Reagan administration to lower the tax rate on the very rich to 50 percent and in 1986 a “tax reform” bill was sponsored that lowered the top rate to 28 percent (Zinn 2003: 580). As a result of all the tax bills from 1978 to 1990, the net worth of the “Forbes 400” tripled (Zinn 2003: 580). Approximately \$70 billion a year was lost in government revenue as a result of the tax rates, so that in those thirteen years the wealthiest 1 percent of the country gained a trillion dollars (Zinn 2003: 580). Zinn (2003) argues that not only did the income tax become less progressive during the last decades of the twentieth century, but the Social Security tax became more regressive (581). By the end of the Reagan years, the gap between the rich and poor in the United States had widened substantially (Zinn 2003: 581). In 1980, CEOs of corporations made forty times as much in salary as the average factory worker; by 1989 they were making ninety-three times as much (Zinn 2003: 581). In the dozen years from 1977 to 1989, the before-tax income of the richest 1 percent rose 77 percent while the poorest two-fifths of the population experienced a small decline (Zinn 2003: 581). And because Reagan’s tax reforms disproportionately favoured the rich, the richest 1 percent saw their after-tax income increase 87 percent in the decade ending in 1990 (Zinn 2003: 581). In the same period, the after-tax income of the lower four-fifths of the population either went down 5 percent or went up no more than 8.6 percent (Zinn 2003: 581)

As evidenced from Thatcher and Reagan's policies and practices, neoliberalism took direct aim at the welfare state. Also apparent from the Thatcher and Reagan years is the growth in inequality. Harvey (2005) argues there is strong evidence that neoliberalization is associated with the restoration of power for economic and political elites after the accumulation crisis in the 1970s (15, 19). He suggests increasing inequality and the redistribution of wealth upward has "been such a persistent feature of neoliberalization as to be regarded as structural to the whole project" (Harvey 2005: 16). It is also noteworthy that when neoliberal principles conflict with the need to restore or sustain elite power, the principles are deviated from (Harvey 2005: 19). Harvey (2005) thus makes the important point that a distinction should be made between neoliberalism in theory and neoliberalism in practice, and that the two are not always necessarily the same (19).

Since the 1970s, neoliberalism in political and economic practices and thinking has only become more pervasive (Harvey 2005: 2). The past three decades provide an abundance of examples that lends support to Harvey's (2005) claim that neoliberalism has been a political project to restore the conditions for capital accumulation and to restore the power of elites (19). Such examples include growing economic and social inequality, corporate control over the political process, and government policies that benefit the powerful and harm the powerless, to name only a few.

Since the 1970s wealth has increasingly been concentrated in the hands of the financial sector (Chomsky 2013: 28). Chomsky (2013) describes how this concentration of wealth affects politics. He says "concentrations of wealth yields concentration of political power. And concentration of political power gives rise to legislation that

increases and accelerates the cycle” (Chomsky 2013: 28). The policies of political parties, such as tax reform, serve the “immediate interests of investors and large corporations” (McChesney 1998: 8); for example, the share of federal taxes paid by corporations dropped from 23.2 percent in 1960 to 11.4 percent in 1998 (Derber 2013: 116). While enriching the wealthy, these policies have also increased social and economic inequality, destabilized the global economy, and generated conflict (McChesney 1998: 8). The influence of money in politics has further restricted citizens’ “choice,” given that neoliberalism has become the shared agenda of most political parties (Munck 2005: 66).

Compared with the New Deal era, the neoliberal period has witnessed substantially slower economic growth and widening income inequality both domestically and internationally (Palley 2005: 25). From 1979 to 2000, the gap between the rich and poor more than doubled (Derber 2013: 125). The gap is such that the richest 1 percent of Americans in 2000 had more money to spend after taxes than the bottom 40 percent combined (Derber 2013: 125). Between 1973 and 2000, average real income of the bottom 90 percent of Americans fell 7 percent, while the top 1 percent saw their income rise 148 percent, the top 0.1 percent had a 343 percent rise, and the top 0.01 percent had a 599 percent income rise (Derber 2013: 125).

In practice, neoliberal policy has promoted labour market deregulation (Palley 2005: 23). A consequence has been a drop in the real value of the minimum wage, the undermining of unions, and heightened job insecurity (Palley 2005: 23). Wage and income inequality have subsequently widened (Palley 2005: 23). Harvey (2005) argues the privatization of responsibility has “doubly deleterious effects” in a “context of diminished personal resources derived from the job market” (Harvey 2005: 76). As the

state withdraws from welfare provision and minimizes its role in areas such as health care, public education, and social services, it leaves more people vulnerable to impoverishment (Harvey 2005: 76). The social safety net is reduced to a bare minimum in favour of a system that emphasizes personal responsibility (Harvey 2005: 76). Personal responsibility, however, becomes an ideological justification of inequality, in conformity with the neoclassical assumption that we get what we deserve as a result of our efforts (Armstrong 2010: 187).

Lewis (2003) argues neoliberalism has paralleled globalization since the 1980s and 1990s (97). Neoliberalism justifies removing barriers to market forces to ostensibly provide the highest level of general welfare (Lewis 2003: 97). McChesney (1998) argues globalization is the result of powerful governments, especially the United States, imposing trade deals and other accords that make it easier for corporations and the wealthy to dominate national economies across the globe without concern for the people in those nations (13). According to neoliberalism, free trade is the best way to foster economic growth, but the real effect of international competition is to reward the strong and punish the weak (Shaikh 2005). From this perspective, the neoliberal push for free trade can be viewed as a strategy most beneficial to the advanced firms of the rich countries (Shaikh 2005: 48).

In a global environment, investment strikes and capital flight can be used to curtail unions and government spending (Lewis 2003: 101). After the experience of the accumulation crisis in the 1970s, which cut into corporate profits, capital disciplines states that fail to keep inflation low (Lewis 2003: 101). Thus, states have adopted strategies of “competitive deregulation” favourable to capital (Lewis 2003: 101). The

argument is made that without deregulation, a country and its firms will be less able to compete because regulatory requirements will keep cost structures too high to attract capital (Lewis 2003: 101). If trade is not liberalized, domestic production will be inefficient, costly, and uncompetitive (Lewis 2003: 102).

In politics, globalization is used as a tool to realize neoliberal policy outcomes (Lewis 2003: 102). Hart-Landsberg (2006) comments that “free-trade” agreements like FTAA and institutions like the WTO facilitate the expansion and enhancement of corporate profit making opportunities (2). Instead of being the “rising tide that lifts all boats,” the “neoliberal era has been marked by slower growth, greater trade imbalances, and deteriorating social conditions” (Hart-Landsberg 2006: 8). The search for profits has pressured third world countries to change their investment regimes, “with the great majority designed to create a more liberalized, deregulated, and ‘business friendly’ environment in order to attract foreign direct investment” (Hart-Landsberg 2006: 10-11). Indebted countries are also captive to transnational corporations and international financial institutions. In return for debt relief, these countries must implement structural adjustment policies, which include cuts in welfare and public sector expenditures, more flexible labour market laws, and privatization (Harvey 2005).

Neoliberal policies and processes have given greater control to private interests to maximize their personal profit (McChesney 1998: 7). Neoliberalism has not advanced social justice and equality, but instead has created and intensified injustices and inequalities (Braedley and Luxton 2010: 6). In many countries real wages have declined while capital accumulation has amassed unprecedented wealth (Braedley and Luxton 2010: 19). Given the preceding, neoliberalism may best be understood as an ideology.

Neoliberalism as a theory of political and economic practices is often at odds with the reality produced by the implementation of neoliberal policies.

The preceding discussion of neoliberalism raises interesting questions about human capital theory. As illustrated in the previous chapter, human capital theory is often understood in the context of a globalization discourse that claims human capital is a precious commodity in the international marketplace. Within this framework the increasing prominence of human capital theory in postsecondary education discourse, both nationally and internationally, is understood to be a product of the role that postsecondary institutions play in producing and distributing human capital for the global economy. However, within the framework of neoliberalism, as both discourse and reality, different explanations can be offered. In the remainder of this chapter I will provide some reasons for the emergence of human capital theory in Ontario's postsecondary education discourse. I suggest neoliberal and neoclassical views of governments, especially of government expenditures, are important for understanding its increasing prominence since the 1980s. In order to explain why, it is first necessary to look at how neoliberalism has pervaded Canadian politics.

3.2 Neoliberalism in Canada

In Canada's post-war period, federal governments endorsed Keynesian-inspired deficit financing as a policy tool to compensate for cyclical economic underperformance (Lewis 2003: 3). However, persistent rather than countercyclical deficits emerged in the mid-1970s (Lewis 2003: 3). The corporate elite began to express concerns over corporate taxes, rising public deficits, social spending costs, big government bureaucracies, and regulations (Clarke 1997: 11). These concerns were heightened in 1975 when Pierre

Trudeau introduced wage and price controls, which business leaders saw as a massive intrusion by the government into a free market economy (Clarke 1997: 11). The interference led to strong opposition from Canadian business (Lewis 2003: 88). The revival of neoclassical economic theories, which identified big government as the source of these economic problems, provided an intellectual justification for opposing government intervention and the social welfare state (Clarke 1997: 15). Economic think tanks and advisory bodies, like the C.D. Howe Institute and the Economic Council of Canada, adopted these theories and they soon became influential among government officials in Ottawa as well as several of the provincial capitals (Clarke 1997: 15). The creation of the Business Council on National Issues (BCNI) in 1976 also served as an important vehicle for corporate leaders to “derail the just society” (Barlow and Campbell 1995: 49).

Canadian business had never strongly supported the Keynesian consensus, but acquiesced because post-war rates of growth and productivity maintained profits at an acceptable level (Lewis 2003: 104). Rinehart (2001) notes that despite occasional recessions and persistent poverty, the period between the end of World War II and 1970 was one of unprecedented economic growth and prosperity (149). When profits and productivity began to decline in the 1970s and 1980s, the traditional pre-World War II opposition to deficit finance re-emerged (Lewis 2003: 104, 105). The profit rate in the world’s seven wealthiest countries fell from 25 percent in 1965 to 12 percent in 1980 (Rinehart 2001: 149). Between 1965 and 1976 the corporate rate of return fell by 16 percent in Canada (Rinehart 2001: 149). Measured as total profit to the stock of fixed capital, Canadian corporate profits generally declined from 1953 to 1972, though profits

worsened substantially in the mid-1970s and early 1980s (Lewis 2003: 105). Regardless the causes of the accumulation crisis, Canadian capital started to look outward at opportunities for freer trade and investment (Lewis 2003: 105).

It became clear in the 1970s that Keynesian prescriptions for the economic recession were not working (Clarke 1997: 14). The Liberal government's economic policies led to unprecedented inflation which turned into stagflation in the mid-1970s (Gonick 1987: 102). In the early 1980s, with inflation reaching a high of 12% and the official unemployment rate at 13%, the Trudeau government was persuaded by the BCNI to shift its focus to reducing inflation and to adopt a more passive industrial strategy orientation (Barlow and Campbell 1995: 50; Clarke 1997: 25). With the perceived failures of many of the Trudeau government's policies to address economic decline, it became increasingly doubted that direct government intervention worked (Lewis 2003: 85). The breakdown in Canada's Keynesian consensus was a result not just of these policies but also of the tension created from their interference with the autonomy of private decision making (Lewis 2003: 87-88). The Mulroney Conservatives came into power in 1984 with a strong mandate for economic renewal (Clarke 1997: 25).

The Mulroney government inherited a large federal debt when it entered office (Strain 2007: 44). The tax measures introduced by the Liberal government adversely affected government revenues, creating a series of deficits and raising the debt (Barlow and Campbell 1995: 82). The 1981-83 recession compounded the problem so that by 1985, the federal debt was 42 percent of the GDP (Barlow and Campbell 1995: 83). The Mulroney Conservatives made the debt a priority. Michael Wilson, laying out the government's agenda for economic renewal, stated one of the objectives was to "put our

fiscal house in order so that we can limit, and ultimately reverse, the massive build-up of public debt and the damaging impact this has on confidence and growth” (Strain 2007: 44).

Clarke (1997) illustrates the influence the BCNI and the Howe Institute had on Mulroney’s economic policies from the beginning. Lowered corporate taxes in the United States led big business in Canada to push for the same, with the BCNI promoting tax reform in the mid-1980s (25-26). The loss of public revenues from lowered corporate taxes was countered with the BCNI’s recommendation to introduce a national sales tax, which was implemented as the Goods and Services Tax (GST) in January 1991 (26). In addition to advocating tax reform, the BCNI, along with other interested organizations, insisted that deficit reduction should be the top national priority (29). This meant reducing spending on social programs, since it was argued these types of expenditures create fiscal problems (29). In the lead-up to Michael Wilson’s 1989 budget, the Howe Institute had been calling for an overhaul of Canada’s social programs, more privatization of health care, and a replacement of postsecondary education assistance with direct transfers to students (30). The 1989 federal budget did not disappoint. Unemployment Insurance, Family Allowance, and Old Age Security were designated for cuts (30). The federal-provincial cost-sharing agreement for the Canada Assistance Plan (CAP) was broken by freezing transfer payments to Ontario, Alberta, and British Columbia (30). Transfer payments to the provinces for health care and postsecondary education would also be reduced, and instead the provinces would be given tax points to raise public revenues for these programs (30).

Contrary to received wisdom, the cuts to these programs did not alleviate the

nation's fiscal troubles. Instead, the federal debt remained a growing problem. Over the course of the Mulroney government, federal debt held by the Bank of Canada went from 10.5 percent in 1984 to 6 percent in 1993 (Barlow and Campbell 1995: 83). The government turned to private banks, who profited from this arrangement since the government allowed them to earn interest on the cash reserves they held with the Bank of Canada (Barlow and Campbell 1995: 84). The implementation of these monetary policies multiplied Ottawa's debts (Clarke 1997: 30). The Mulroney Conservatives would use public revenues to service the growing debt, which the Finance Department's own research showed was due entirely to the compounding of interest on the original debt (Barlow and Campbell 1995: 86). Debt interest payments had reached \$43 billion by 1991 and were consuming one-third of government revenues, more than the combined spending on transfers for education, health, welfare, and unemployment insurance (Barlow and Campbell 1995: 86).

Though evident in the last years of Trudeau's Liberal government, it was Mulroney's government which really indicated a shift away from Keynesian-influenced policies (Prince and Rice 2007: 164). The Mulroney government advocated free trade, deregulation, privatization, tax reform, and hostility to the federal deficit (Lewis 2003: 112; Gutstein 2014: 14). Because of these commitments it can be said Mulroney embraced goals held by both Thatcher and Reagan (Strain 2007: 43). From 1984 to 1993 the Mulroney government would justify most of its policies in terms of their utility in enhancing Canada's ability to compete in an increasingly competitive global economy (Lewis 2003: 138). Rather than eliminating the deficit, however, fiscal shortfalls were at record levels by the time Mulroney left office (Lewis 2003: 112). The economic

recession in the early 1990s was a contributing factor. High unemployment and the rising costs of welfare and unemployment insurance payments resulted in an estimated net loss of \$47 billion in public revenues for governments at all levels (Clarke 1997: 31). The drop in corporate tax rates from 15 percent in the mid-1980s to around 7.5 percent by 1993, a product of Michael Wilson's adoption of the BCNI's tax reform initiatives, added to the financial difficulties (Clarke 1997: 31).

Lewis (2003) describes the severity of the recession in the early 1990s and its effects. In 1991 the unemployment rate was 10.2 percent, remaining nearly the same at 10.1 percent in 1996 (149). These figures do not include the drop of over 4 percent in the labour participation rate from 1989 to 1996 (149). The cumulative employment loss from 1990 to 1996 was double that from 1982 to 1986 (147). It is worth noting that between 1988 and 1994 thirty-seven BCNI companies cut 215,414 jobs and increased their combined annual revenues by \$32.1 billion, despite the BCNI's promises in 1988 that the Canada-United States free trade deal would create jobs (Clarke 1997: 31). It seems plausible that the free trade agreement was a contributing factor in the unemployment crisis. According to Lewis, the employment rate did increase after 1996 but was unable to reach its 1989 peak (2003: 149).

Continuing to detail the dismal economic conditions in the 1990s, Lewis (2003) points out that real incomes fell and income inequality increased (148, 153). The restructuring of work to restore profitability exacerbated workers' declining income and their fear of job loss (149). According to one set of figures, temporary employment, part-time employment, and independent contracting in Canada likely rose from less than 24 percent of total employment in 1975 to over 29 percent in 1993 (149). Much of this work

is relatively poorly paid, provides few benefits, and leaves little opportunity for advancement (149). In addition to these problems, Canadians were also being taxed too much (150). There was a large imbalance between taxes collected and services provided because a large proportion of government revenues was dedicated to servicing the debt (151).

The Mulroney government was succeeded by Jean Chretien in 1993. At the Aylmer Conference in 1991, Chretien said Canada would have to adapt to the inevitable reality of the global economy, just as Mulroney had said during his time in office (Barlow and Campbell 1995: 98). It was evident from Paul Martin's 1995 budget that this government was committed to the economic principles laid out by Mulroney (Lewis 2003: 3-4). Barlow and Campbell (1995) document the importance of the Aylmer Conference for Chretien's government. In 1994, Paul Martin solicited banker Peter Nicholson's input for solving the debt (98). Nicholson had given a talk at the Aylmer Conference arguing for a "re-appraisal of the role of the nation state" and for Canada's need to respond to the global market if it were to prosper (97). The collaboration between Martin and Nicholson resulted in the "Purple Book," a document which served as the basis for the government's economic plan (98).

Paul Martin's 1995 budget introduced many measures to reduce program spending (Lewis 2003: 174). The budget terminated the Established Programs Financing (EPF) and the CAP and replaced them with the much-reduced Canada Health and Social Transfer (CHST) in 1996 (Prince and Rice 2007: 174). The CHST combined transfers to the provinces for health, education, and social assistance into a single block grant (Barlow and Campbell 1995: 162). The CHST resulted in deep absolute cuts, with the

transfers reduced by over \$6 billion over two years (Lewis 2003: 175; Prince and Rice 2007: 174). The budget targeted Unemployment Insurance, pensions, infrastructure, and also cancelled a promised child-care program (Barlow and Campbell 1995: 128, 138). Martin stated that reform in the structure of government spending was the main achievement of the 1995 budget (Lewis 2003: 187). Social programs were restructured to focus on putting people to work rather than protecting against unemployment (Barlow and Campbell 1995: 98; Lewis 2003: 187). As a result of the Chretien government's actions, program spending was at its lowest levels since the early post-war period (Lewis 2003: 197). Chretien's time in office also signalled that deficit reduction had become a firmly entrenched priority in Canadian politics (Lewis 2003: 187).

In 2006 Stephen Harper was elected prime minister. Gutstein (2014) argues that Harper has followed a neoliberal agenda that began with Mulroney's election in 1984. Gutstein documents the connection between the Harper government and various neoliberal think tanks, such as the Fraser Institute, as well as noting the influence that neoclassical and neoliberal ideas had on Harper as a student of economics (2014). Since his time in office, Harper has attempted to establish private property rights on First Nations reserves (10). Gutstein argues this campaign is backed by a discourse about liberating capital on reserves so that First Nations peoples can prosper like other Canadians (10). The Harper government has promoted major resource development projects across the country that threaten the cultures and economies of First Nations, Inuit, and Metis peoples (Amnesty International 2014: 7). In June 2014 the government approved the construction of the Northern Gateway Pipeline in British Columbia, without the consent of affected First Nations (Amnesty International 2014: 7). The Harper

government's support of tar sands development is justified as a way to create jobs and grow the economy. Harper's enthusiasm for projects like these is seen in the government's active repression of scientific research documenting the detrimental impacts such projects have on the environment. Gutstein (2014) notes that Harper has introduced tax measures that have effectively reduced government revenues. Harper cut the Goods and Services Tax from 7 to 5 percent which cost the government \$14 billion a year in revenue (9). From 2006 to 2013 an additional \$60 billion was lost from reduced corporate taxes (9). In an attempt to recoup lost revenue and reduce budget deficits, which increased after Harper put money into the economy in response to the 2007-08 financial crisis, Harper cut programs and services and laid off 30,000 federal government employees (9). The Harper government has also been a keen advocate of free trade, participating in the establishment of a number of free trade agreements.

Since the early 1980s, but especially with the election of Mulroney in 1984, the federal government in Canada has endorsed neoliberalism as a guiding philosophy, though perhaps to a lesser extent than in Britain and the United States. The Mulroney government's commitment to tackling the deficit by reducing government expenditures, especially on social programs, conforms to neoclassical and neoliberal views of the state's role with respect to the economy. Chretien's Liberal government maintained this position and advanced it by making massive cuts with Paul Martin's federal budgets and restructuring programs to provide incentives to work, all in the name of addressing the unavoidable reality of globalization. The Harper government would ensure the continuation of neoliberalism in Canadian politics by giving tax breaks to corporations, cutting social programs, and signing free trade agreements which ostensibly contribute to

economic growth and prosperity.

The effect of these governments' approach to governance has been to promote the liberation of capital and individual entrepreneurial freedoms from the strictures of the welfare state. This has meant a reduced role for government in providing funds for institutions and programs that serve the public sphere, since this kind of intervention would give way to inflationary tendencies and other undesirable phenomena that threaten Canada's ability to compete in the global economy.

3.3 Government Spending on Postsecondary Education: Canadian Context

3.3.1 National

The policies implemented by successive governments in Ottawa have impacted provincial postsecondary education systems. In the 1970s the federal government altered the way it allocated funds for postsecondary education which added to the fiscal problems Canadian universities were already dealing with at the time (Axelrod 2008: 95). The fifty-fifty cost-sharing arrangement the federal government had with the provinces since 1967 ended in 1977 when the federal government rolled together federal transfers for postsecondary education, hospital insurance, and medical care into a single transfer payment (Axelrod 2008: 95; Clark et al. 2009: 84-85). The new payment, EPF, effectively distanced the federal government from actual program costs and transferred more responsibility to the provinces (Clark et al. 2009: 84). The provincial governments were given discretion in spending the new payment, and this continued to be the case with EPF's successors (Clark et al. 2009: 85). With the introduction of EPF, provincial funding per student in constant dollars fell by 20 percent in Ontario and by 12 percent in the rest of the country between 1977-78 and 1982-83 (Axelrod 2008: 95).

In the 1980s, the federal government limited increases in transfer payments to the provinces for postsecondary education (Canadian Federation of Students Ontario 2013). Adjustments to EPF began in 1982 with the Liberal government, but four budgets under the Mulroney government substantially reduced the transfers (Barlow and Campbell 1995: 161). In 1990, the CAP was capped, ending the cost-sharing principle for Ontario, Alberta, and British Columbia, and saving the federal government billions (Barlow and Campbell 1995: 162, 165). Between 1983-84 and 1994-95, the total cut in federal contributions to postsecondary education amounted to almost \$13.5 billion (Tudiver 1999: 65). The introduction of the CHST in 1996 further reduced transfers to the provinces for social programs, including health and education, by \$7 billion over two years (Canadian Federation of Students Ontario 2013). Between 1985-86 and 2007-08, federal transfers for postsecondary education fell by about one-third in constant dollars (Clark et al. 2009: 85).

Tudiver (1999) describes the inadequate provincial funding for Canadian universities. Between 1976-77 and 1986-87 every province imposed cuts, with some provinces keeping increases below inflation and others reducing the actual amount of grants (65). As a result, total provincial operating grants in constant dollars increased at a rate far below the increase in university operating expenses (65). Because enrolments were rising, the inability of funding to keep pace with universities' operating expenses meant that funding on a per-student basis was significantly affected (65). Over the same period (1976-77 to 1986-87), grants in constant dollars per full-time equivalent (FTE) student fell by an average of 20.2 percent (65).

Tudiver (1999) recounts how university tuition fees increasingly became a

substitute for provincial funding. Government funding for universities peaked in 1978 at almost 84 percent of operating income, with tuition at 13.3 percent (66). In the late 1970s and 1980s, tuition – which had been falling since 1957 – began to increase, keeping pace with inflation as measured by the Consumer Price Index (66). By 1989, government funding had dropped to 80.1 percent of universities' operating income while tuition rose to 16.7 percent (66). Tuition rapidly increased by 58 percent between 1989-90 and 1993-94, while inflation only increased by 16 percent (66). In the 1990s every province except Quebec gave universities more control in setting tuition fees. By 2008, provincial funding comprised 57.5 percent of university operating income, a drop of 26.3 percent from 1978 (Canadian Federation of Students Ontario 2013). Roughly over the same period (1975 to 2005), tuition doubled from 14.7 percent to 30.4 percent of university operating income (Coleman and Kamboureli 2011: xxii-xxiv).

3.3.2 Ontario

In Ontario, government funding for both colleges and universities has been declining since the 1970s, as a share of GDP and on an inflation-adjusted per-student basis (Mackenzie 2004: 1). Clark et al. (2009) note that total operating revenue for both colleges and universities fell by about one-third and about one-quarter, respectively, by the early 1980s as a result of declining government funding per FTE student in the 1970s coupled with the freeze in tuition fees during most of that period (81). Between 1970 and the mid-1980s, government grants per student were among the lowest of the provinces and regulated tuition fees were among the highest (Clark et al. 2009: 91).

Clark et al. (2009) state that provincial funding continued to decline in the 1990s. The provincial government reduced its funding to universities in absolute terms on two

occasions and did not increase its funding for colleges despite increasing enrolments during the early 1990s (81-82). Between the late 1980s and 2001-02, government support for postsecondary education fell from about 0.9 percent of the GDP to 0.55 percent (82). The proportionate loss was roughly the same for colleges and universities during this period (84). Clark et al. remark that government support did increase to about 0.7 percent of the GDP in 2007-08, but they argue that government funding for universities, adjusted for enrolments and inflation, has declined overall since the late 1980s (79, 82).

Since the late 1980s, undergraduate tuition fees in Ontario outpaced inflation by 509 percent and graduate tuition fees outpaced inflation by 724 percent (Canadian Federation of Students Ontario 2013). In the 1990s, the government allowed for significant increases in university tuition fees through deregulation (Clark et al. 2009: 81). Mackenzie (2004) notes that between 1990 and 2002, the share of tuition in university operating expenditures increased from 21 percent to 43 percent (12). As of 2013-14, tuition and fees represented 52 percent of universities' total operating revenue (HEQCO 2015: 5). Since the late 1990s, college tuition fees in Ontario outpaced inflation by 378 percent (Canadian Federation of Students Ontario 2013). College tuition fees increased after 1993 but not at a rate comparable to the universities (Clark et al. 2009: 82). Between 1990 and 2002, the share of tuition in college operating expenditures increased from 17 percent to 31 percent (Mackenzie 2004: 12). These increases in tuition fees have been proportional to the decrease in government funding for postsecondary education (Canadian Federation of Students Ontario 2013). In 2006, a fully-funded tuition fee freeze was lifted by the provincial government under the *Reaching Higher* framework, which allowed undergraduate tuition fees to increase by five percent annually

on average from 2006 to 2011 (Canadian Federation of Students Ontario 2013).

3.4 Neoliberalism and Human Capital Theory

The economic recessions in the 1970s and early 1980s, combined with inadequate government funding, created financial difficulties for the postsecondary education system in Ontario. This situation was compounded by the federal government's increasing reluctance from the 1980s onwards to provide transfers to the provinces for postsecondary education. The reluctance on the part of the federal government is understandable, given the failure of Keynesian policies to ameliorate the crises and the subsequent influence of neoliberalism in Ottawa, as detailed above. Within this context, human capital theory along with globalization rhetoric rose to the fore, the latter evidenced by Mulroney's constant appeals to the need to cut deficits in order to be competitive in the global marketplace. However, as previously stated, I think the emergence of human capital theory in Ontario's postsecondary education discourse can be more fruitfully explained by drawing connections between human capital theory and neoliberalism, both as discourse and as reality. The connections are not controversial: both human capital theory and neoliberal theory derive from neoclassical economics. Human capital theory was developed substantially by the work of economists in the Chicago School tradition, such as Gary Becker, Theodore Schultz, and Milton Friedman. It takes many assumptions from neoclassical economics, most importantly its assumption that human beings are rational, self-interested actors and that social phenomena can be explained by recourse to the individual behaviours of these utility maximizers.

Therefore, if human capital theory shares many assumptions with neoliberal theory, then the use of human capital theory in postsecondary education discourse can be

understood differently from the reigning conventional wisdom that postsecondary institutions are valuable because they produce and distribute the human capital that keeps the global capitalist machine going. In light of neoliberalism as both discourse and as reality, human capital theory in postsecondary education discourse can instead be seen to serve other functions.

One function it serves is to justify decreases in government funding for social programs and services. As Schultz (1981) remarked, education should not be considered a form of welfare because it is an investment in human capital. Interestingly, postsecondary education has been regarded as a means for shifting away from welfare state policies because it ostensibly provides the skills and knowledge individuals need to adapt to an unstable labour market. It follows that spending on programs like Unemployment Insurance can be reduced by increasing postsecondary education participation rates.

With regard to postsecondary education itself, human capital theory could possibly be used to justify either increased government spending or decreased government spending. The former could plausibly be justified on the basis that the postsecondary education system confers tremendous economic benefits. However, it is slightly more complicated than that. Indeed, in many countries governments have increased spending for their postsecondary education systems, but there is a tendency for that money to go towards capital infrastructure, research, and financial aid. What is a shared trend among many countries is the decline in government funding per student and an increase in tuition fees. Increasing tuition fees are justified on the basis that the rate of return for students' investment in postsecondary education is greater than the costs

incurred.

This points to another function served by the presence of human capital theory in postsecondary education discourse: the justification of inequality. The notion of “equality of opportunity” intersects with postsecondary education in such a way that individuals who are unable to integrate into the labour market have only themselves to blame. Because they are unable to integrate, they presumably lack the requisite human capital. If they do not decide to invest in postsecondary education in order to acquire the requisite human capital, then they are responsible for their circumstances, especially since these individuals presumably have the opportunity to pursue postsecondary education because both the federal and provincial governments provide financial aid, albeit in the form of loans more than grants. This line of reasoning corresponds to the neoclassical assumption that individuals get what they deserve.

The burden placed on individuals and their families to cover the costs of postsecondary education while the government withdraws is an example of the privatization of responsibility that is characteristic of the neoliberal period. While personal and individual freedom in the marketplace is guaranteed, each individual is held responsible and accountable for his or her own actions and well-being (Harvey 2005: 65). This principle extends into areas such as welfare, education, health care, and pensions (Harvey 2005: 65). Individuals are expected to take responsibility for themselves and earn through the market to provide for their own needs (Armstrong 2010: 187). Individuals can no longer rely on the “nanny” state to take care of them (Armstrong 2010: 187). Armstrong (2010) points out that it is not only responsibility but also costs that are privatized in neoliberal strategies (196). This is evident in how human capital

theory is used in the discourse to justify shifting costs from governments to individuals via increasing tuition fees. Postsecondary education becomes framed as an investment because it is said to confer future economic benefits worth the initial costs. The intersection of postsecondary education with the idea of equality of opportunity is problematic, especially in the neoliberal period of increasing inequality.

Lastly, human capital theory reinforces the marketization of postsecondary education that has proceeded apace since the 1980s. The claims of human capital theory are enticing and are no doubt used to attract potential students to postsecondary education. In a context of fiscal constraint, partly caused by reduced government funding, postsecondary institutions rely more on private sources of funding, such as tuition fees. Promising benefits to students, like increased likelihood of full-time employment and higher annual incomes, whether borne out in reality or not, may be a way to increase the number of students enrolled in the postsecondary education system. Additionally, promising increased economic returns to society can also be a way of attracting taxpayer money for research carried out in postsecondary institutions, primarily universities.

This discussion has provided alternative explanations for why human capital theory emerged in Ontario's postsecondary education discourse in the 1980s and why it has become the popular way of understanding the postsecondary education system's role in society today. This chapter will serve as the context against which I will shortly compare the Ontario postsecondary education reviews and the results of my content analysis.

Chapter 4 – Methodology

The purpose of my research is to empirically document the increasing presence of human capital theory in Ontario's postsecondary education discourse. The influence of human capital theory in relation to postsecondary education since the 1980s has been asserted by many scholarly sources, as demonstrated in previous chapters, but there has not yet been to my knowledge an attempt to provide a systematic empirical analysis of the role of human capital theory in Ontario's postsecondary education discourse over time. I intend to contribute to the scholarly discussion by providing such empirical evidence.

In addition to my primary focus on human capital theory, I am also interested in how the idea of "liberal education" has developed over time in Ontario's postsecondary education discourse. Forcefully enunciated by Cardinal John Henry Newman in the nineteenth century, liberal education has since been the ideal to which institutions of higher education are meant to strive. Broadly speaking, a liberal education teaches students to reason well in all matters and to seek the truth (Hussey and Smith 2010: ix). Knowledge is to be pursued for its own sake and not as a means to some other end. This distinguishes it from other forms of education, such as professional education, that are structured to achieve some particular and narrow end (Newman 1915: 129). To the extent that a liberal education does have a practical end, it is in the training of good members of society who are capable of discharging their civic duties (Newman 1915: 151; Côté and Allahar 2011: 13).

The decision to include liberal education in my research arises from a curiosity about the relationship between the idea of liberal education and human capital theory as

it is applied to postsecondary education. There are grounds for arguing that the two are incompatible. Several academics have expressed concern over the withering of liberal education in the past three decades as postsecondary institutions, specifically the universities, have changed to meet economic ends (Tudiver 1999; Chan and Fisher 2008; Slaughter and Rhoades 2008; Côté and Allahar 2011; Côté 2014). A good illustration of this is provided by the Freshman Survey conducted almost every year between 1971 and 2013 by the Higher Education Research Institute at the University of California at Los Angeles (Berrett 2015). The freshman students who take the survey are asked whether the purpose of college is to develop a “meaningful philosophy of life” or to “become well-off financially” (Brint 2002: 236). In the early 1970s, nearly three-quarters of the freshman students said it was essential to them to develop a meaningful philosophy of life and about one-third felt the same about being financially well-off (Berrett 2015). In 2013, the reverse was true, with about three-quarters concerned with being very well-off financially, whereas one-third were concerned with developing a meaningful philosophy of life (Berrett 2015). I suggest students’ increasing concern with the economic benefits of postsecondary education is indicative of a more general trend, and therefore propose a general hypothesis: over time instances of human capital theory in postsecondary education discourse will increase while instances of liberal education will decrease.

To empirically document this, I will conduct a content analysis of government-commissioned reviews of Ontario’s postsecondary education system from 1962 to 2005. Content analysis is a research method that uses a set of procedures to make valid inferences from text (Weber 1990: 9). The central idea is that the many words of the text are classified into much fewer content categories (ibid: 12). Each category may consist of

one, several, or many words, phrases, or other units of text which are presumed to have similar meanings (ibid: 12). Because I am interested in postsecondary education discourse, in particular the degree to which human capital theory and liberal education are present in it, content analysis seemed an appropriate approach.

Drawing from scholarly sources (e.g., Becker 1975, Schultz 1981; Crocker 2007; Curtis 2007; Riddell 2007), I have defined “human capital theory” as follows:

A theory of investment decisions. Its central concept is “human capital,” which refers to any knowledge or skills a person has that contributes to their economic productivity. Investment in activities that contribute to human capital acquisition yields economic benefits for individuals and societies.

Drawing from scholarly sources (e.g., Newman 1915; Hussey and Smith 2010; Côté and Allahar 2011), I have defined “liberal education” as follows:

An approach to learning that encourages the development of one’s reasoning capabilities in a variety of matters. It stimulates the desire to pursue knowledge for its own sake and not merely as a means to some other end. It prepares individuals to apprehend and contemplate truth, to think independently and critically, and to discharge their civic duties. Thus, a liberal education promotes the creation of an informed citizenry and aims to preserve freedom for person and society.

The operational terms for both “human capital theory” and “liberal education” can be found in Appendix A. Coding rules were mostly devised at the outset to incorporate textual material that could reasonably be deduced from the general definitions provided above; they were also informed by the scholarly literature. The coding rules were further developed by reading through each review and highlighting themes and any other information that had some relevance to my two concepts. In total, twenty-two coding rules were created for human capital theory and thirteen coding rules were created for liberal education. The coding rules for each concept are not mutually exclusive, meaning

text selected for either concept could have been done using more than one coding rule. For each concept, a coding rule was created to select “ambiguous” text which was recorded but did not factor into the total frequency count for either concept in each review. Each coding rule was numbered so that selected text could be numbered according to the relevant coding rule. The units of analysis are phrases and sentences.

The content analysis was conducted manually. For each review, instances of either human capital theory or liberal education were selected according to the relevant coding rule, highlighted by hand, numbered, and then entered into both a Microsoft Excel spreadsheet and a Microsoft Word document. The page number for each review was included in the spreadsheet. The actual phrase or sentence selected was put into the Word document along with a justification for coding if the phrase or sentence exhibited vagueness.

The materials upon which the content analysis was conducted were six government-commissioned reviews of the Ontario postsecondary education system and one government-commissioned discussion paper of the postsecondary education system. The reviews span a period of time from 1962 to 2005. Reviews prior to the 1980s were included in order to provide a broader context against which any discussion of either human capital theory or liberal education in the discourse from the 1980s onwards could be compared. Since these reviews deal with the issue of funding for the postsecondary education system (among many other issues), they are an appropriate source material for my research. Looking at reviews of the postsecondary education system over time provides a good indication of how the discussion concerning spending has changed, in particular how justifications and subsequent legitimations of spending have changed.

These particular reviews were also selected because they were commissioned by the Ontario government, and thus changes in the discourse and the effect the reviews had on postsecondary education policy could be placed in the relevant political context.

Though it could be argued that seven documents is too few to adequately describe the development of human capital theory and liberal education in the discourse over a forty-three year period, I would argue that limiting the number of documents allows for deeper engagement with the material and the potential for more fruitful insights. The seven documents are:

- 1962 Report of the Presidents of the Universities of Ontario to the Advisory Committee on University Affairs
- 1972 Report of the Commission on Post-Secondary Education in Ontario
- 1981 Report of the Committee on the Future Role of Universities in Ontario
- 1984 Commission on the Future Development of the Universities in Ontario
- 1996 Future Goals for Ontario Universities and Colleges (discussion paper)
- 1996 Report of the Advisory Panel on Future Directions for Postsecondary Education
- 2005 Ontario: A Leader in Learning

The first four documents were retrieved from Western University libraries, scanned, and converted into editable PDF's. The last three documents were retrieved from the Ontario Ministry of Training, Colleges, and Universities website, one of which was copied from the website and pasted into a Word document.

There are some limitations to my approach. One such limitation is that by using postsecondary education reviews, which only provide broad policy recommendations, I cannot directly assess the effect the reviews had on government policy. Yet, I do not feel it is a major limitation as the content analysis can be supplemented with other sources to provide a more accurate picture. Another limitation is coder reliability. I conducted the content analysis more than once, but reliability could have been enhanced by having

another person code or by using computer software. My interpretation of the text and how I coded it may differ from another person's judgement. However, this seems unavoidable. As Weber (1990) says, "there is no simple *right way* to do content analysis" (13). Lastly, the fact that many of the coding rules for each concept were not mutually exclusive prevents more detailed analysis. The rules created were adequate for distinguishing between text to be coded as "human capital theory" and text to be coded as "liberal education," but inadequate for distinguishing between categories within each concept.

Chapter 5 – Discussion

5.1 Content Analysis: Results

Table 1. Results of Content Analysis.

Review	Pages	Human Capital Theory – Total Frequency Count	Liberal Education – Total Frequency Count	Ratio (Human Capital Theory Total Frequency Count/Pages)	Ratio (Liberal Education Total Frequency Count/Pages)	Ratio (Human Capital Theory/ Liberal Education)
1962	47	16	22	0.34	0.47	0.73
1972	159	33	74	0.21	0.47	0.45
1981	52	28	23	0.54	0.44	1.22
1984	45	62	43	1.38	0.96	1.44
1996a	12	25	7	2.10	0.58	3.57
1996b	66	72	32	1.10	0.48	2.25
2005	108	71	21	0.66	0.19	3.38

1996a refers to discussion paper; 1996b refers to full review.

The results of the content analysis are presented directly above in Table 1, as well as in Appendix C. The assertion that instances of “human capital theory” would increase over time while instances of “liberal education” would decrease over time seems to be half-correct. It is the case that human capital theory, except for two drops (1981; 1996a), increased between 1962 and 2005 in terms of frequency count. Over the same period of time, instances of liberal education fluctuated but remained fairly consistent; in the 1962 review 22 instances of liberal education were coded, whereas in the 2005 review 21 instances were coded. From the frequency count alone, it would appear my assertion that liberal education would decrease over time was incorrect. However, it is difficult to evaluate my assertion using only frequency count because of differences in the page length for the reviews. The page lengths vary from a minimum of 12 pages (1996 Discussion Paper) to a maximum of 159 pages (1972 Review). To account for this, ratios of human capital theory and of liberal education to the page count for each review were

calculated; they are displayed in Table 1. For human capital theory, the ratios show an increase in the 1980s and 1990s, dropping to 0.66 in the 2005 review, a value approximately double that of the 1962 review. For liberal education, the ratios show it remained fairly consistent, except for a rise to 0.96 in the 1984 review and a drop to 0.19 in the 2005 review, a value less than half that of the 1962 review. Ratios were also calculated for each review to determine the degree to which human capital theory occurred in relation to liberal education. The ratio of human capital theory to liberal education reveals the same pattern noted above, but presents the information in a compact way that makes it easier to understand the relationship between these two concepts over time. In the 1962 and 1972 reviews, the ratios of human capital theory to liberal education were 0.73 and 0.45, respectively, indicating that instances of human capital theory occurred approximately three-fourths as often as liberal education in 1962 and approximately half as much in 1972. In each of the following reviews, the ratios begin to reverse. The ratios are 1.22, 1.44, 3.57, 2.25, and 3.38 for 1981, 1984, 1996a, 1996b, and 2005, respectively. These figures indicate that instances of human capital theory began to eclipse instances of liberal education, beginning with the 1981 review. These results suggest that liberal education was given more consideration than human capital theory prior to the 1980s, but less consideration after.

With regard to the suggested incompatibility between liberal education and human capital theory as applied to postsecondary education, the results of the content analysis clearly demonstrate that it is possible to discuss both. However, it is one thing to maintain the importance of these two views in discourse, and another thing to maintain them in practice. By this I mean that changes in the structure of the postsecondary

education system to ostensibly meet the challenges posed by the global economy, a goal which finds intellectual support from human capital theory, is inimical to the conditions required for the provision of a liberal education and for the creation and broad dissemination of knowledge concerned with fundamental social issues. Furthermore, though appeals to the importance of liberal education are made in each document, the discussion of its importance is more nuanced in the 1962 and 1972 reviews, as seen in the next section. In the reviews that follow there appears to be a ritualistic reaffirmation of the importance of liberal education before moving on to what seems to be the primary concern: the economic importance of the postsecondary education system. The Fisher and Bovey Commissions affirm the objectives laid out by Davis and later by the OCUA, but their reports focus overwhelmingly on the economic role of the university system, and the same is true for the Smith and Rae Commissions.

5.2 Ontario Postsecondary Education Reviews

I will briefly describe each review in order to acquire a deeper understanding of the material and how specific elements of the reviews relate to the broader context laid out in the Literature Review and Context chapters. I will also incorporate some contextual information in order to create a coherent narrative that links the reviews together.

5.2.1 Post-Secondary Education in Ontario 1962-1970

In 1961 an Advisory Committee on University affairs was created, initially chaired by John Robarts, who would become Ontario's Conservative Premier from 1961 to 1971 (Cameron and Royce 1996). The following year the Advisory Committee invited the presidents of all the public universities at the time to meet and devise a plan for future expansion (Cameron and Royce 1996). This task was delegated to a sub-committee of

senior university officials, chaired by the vice-principal of Queen's University, J.J. Deutsch (Cameron and Royce 1996). The results were published in the report, *Post-Secondary Education in Ontario 1962-1970*. In this report, the committee states they are addressing the problem of providing postsecondary education for greatly increased numbers of students (Deutsch 1962: 1). Cameron and Royce (1996) note the rapid growth in high school enrolment and the prospect of thousands of students graduating from high school in 1966 and 1967 inspired provincial planning for alternative postsecondary options. The report itself is largely a discussion of how to accommodate this expected influx of students, the authors saying their "theories of what is ideally desirable must be subject to practical considerations of speed" (Deutsch 1962: 1).

What is interesting about this report is the committee's explicit commitment to liberal education and the way they distinguish liberal education from other types of education. It is of course true the committee made recommendations based on the perceived needs of the economy. For example, the committee says ongoing technological advances in society would require the production of graduates with technical knowledge (Deutsch 1962: 16). However, they suggest institutes of technology be created to provide this service rather than relying heavily on the universities to perform this task (Deutsch 1962: 16). They comment "some diploma courses of a technological nature which the universities have been obliged to offer ought to be taken off their hands" (Deutsch 1962: 16). The distinction between the role of the universities and other postsecondary institutions is also indicated in the committee's comments about "academic preparation," something that falls to the universities and is different from professional training. For instance, in their discussion of teachers' colleges they equate "academic preparation"

with “work in the liberal arts at the university level,” and note that if individuals pursuing teachers college are to also acquire a university education, the latter should happen before the former (Deutsch 1962: 14). This is consistent with their assertion that academic preparation should precede the acquisition of technical skills (Deutsch 1962: 17). The committee’s overt concern in this report, aside from figuring out how to accommodate students, is with providing liberal arts education for all able to benefit from it (Deutsch 1962: 15).

5.2.2 The Learning Society

In 1969, the Robarts government appointed a second commission, the Commission on Post-Secondary Education in Ontario, and tasked it with figuring out how to revise the postsecondary education policy framework in Ontario (Cameron and Royce 1996). Douglas Wright was designated chair of the commission (Cameron and Royce 1996). The scope of the commission’s mandate included universities, colleges, and adult and continuing education (Cameron and Royce 1996). The commission’s report, *The Learning Society*, provided a comprehensive review of the postsecondary policy framework and made a variety of recommendations, including the creation of a policy framework that distinguished between operating grants for instruction and operating grants for research, tuition freedom for institutions, performance reviews for all faculty, greater differentiation among institutions as to mission and programs offered, and the creation of a committee to conduct overall coordination and planning (Cameron and Royce 1996).

This report, submitted in 1972, is notable for its stated emphasis on learning as the primary purpose of postsecondary education institutions above all other considerations.

The committee comments that “however learning may actually proceed, it remains the essential goal and purpose of education. Ultimately, nothing must interfere with the human-centered nature of post-secondary education” (Wright 1972: 35). Thus, the postsecondary education system “should be oriented towards serving individual students rather than the institutions themselves, future employers, or the professions. Other purposes should be secondary” (Wright 1972: 35). This stands in stark contrast to the rhetoric increasingly used since the 1980s to describe the purpose of the postsecondary education system. Furthermore, this report also questions many of the assumptions that seem to be taken for granted in today’s discourse. For instance, the committee remarks that “education is not a cure-all for society’s many ills. The goals of social mobility and equitable income distribution should be pursued principally through appropriate economic policies” (Wright 1972: 27). Compare this to later reviews where claims that postsecondary education is a means for economic growth and a means for economic mobility are constantly made.

The committee directly critiques what they call “the cost-benefit approach to education” (Wright 1972: 31). The cost-benefit approach “analyzes the educational system in terms of economic returns: for so much public and private expenditure or investment, so many economic benefits are presumed to accrue to society in heightened productivity, skills, and the development of learning capacities. The idea, in short, is not just more scholars for the dollar, but also more dollars through better allocated scholars” (Wright 1972: 31). This cost-benefit approach is essentially human capital theory, given the latter’s focus on the individual benefits and societal benefits of investing in activities that improve individuals’ human capital. Asking why we should not try to maximize the

rate of return on public investments in postsecondary education by investing in those sectors deemed to be most productive, they argue:

“To think of the educational system in terms of economic costs is partial and distorting. Apart from the inherent difficulty of calculating such returns, many benefits other than economic returns are derived by society. The broadening of intellectual horizons, the enhancing of life experience through the arts, the opportunity for creative, reflective, and recreational opportunities are all educational returns of great value, yet they cannot be calculated in dollars alone. Further, there is a bias in the cost-benefit approach towards an uncritical acceptance of our present society” (Wright 1972: 31).

They conclude their discussion of the cost-benefit approach to education by saying it provides a useful perspective but “it is more meaningful to assess education in terms of social benefit” (Wright 1972: 31). Although they reject the cost-benefit approach, the authors of the report do make recommendations that acknowledge the importance of the relationship between postsecondary education and work. They suggest the postsecondary education system must expand programs for continuing education and manpower training to allow individuals to adapt to their economic and social environment (Wright 1972: 39, 95). The commission’s recommendations were seen as “too radical” and were largely rejected by Bill Davis’s Conservative government (Cameron and Royce 1996).

5.2.3 The Report of the Committee on the Future Role of Universities

In the 1970s, the Davis government had been attempting to align the costs of an expanding university system with restraint in public spending (Cameron and Royce 1996). Axelrod (2008) mentions the fiscal problems facing the universities were serious enough for the Ontario Council on University Affairs to title its 1979 report, *System on the Brink* (94). The onset of an economic recession in the early 1980s would only

compound this problem. In this context, the government initiated another inquiry to provide advice on an appropriate fiscal and policy framework for the universities (Cameron and Royce 1996). This commission was chaired by Harry Fisher. The government hoped Fisher's 1981 report, *The Report of the Committee on the Future Role of Universities in Ontario*, would help in reconciling the publicly endorsed objectives for Ontario universities with the levels of public funding then available (Cameron and Royce 1996). Instead, the report called for increased levels of funding from the government, or else the structure of the university system would have to be drastically altered to make it more economical (Clark et al. 2009: 14). The report's authors proposed one alteration, which involved reducing the number of universities so that Ontario would have one comprehensive university offering a broad range of programs, no more than four full-service universities offering a more restricted range of programs, and four or five special-purpose universities (Fisher 1981: 51).

The Fisher Report begins with the committee voicing its approval of objectives for Ontario's universities laid out by Bill Davis in 1967 and the Ontario Council on University Affairs (OCUA) in 1978 (Fisher 1981: 1-2). These objectives, Davis's in particular, acknowledge the importance of universities as providers of liberal education. While the committee reaffirms these objectives, they argue the objectives understate "the urgency of the challenges" facing society and the importance of maintaining the quality of universities (Fisher 1981: 2). The committee draws a connection between the quality of universities and the "health" of the economy. The universities serve an important function in society because they develop the trained professionals and conduct the research needed for economic growth (Fisher 1981: 4).

The Fisher Report is significant in that it focused more on the economic contributions of the university system than the previous two reports had. The committee even comments that its preliminary report had been “criticized for its failure to give adequate weight to the values of liberal and general education” (Fisher 1981: 5). The committee explains “its emphasis in the preliminary report on the enormous contribution that the universities have made in training highly qualified manpower, and on the crucial importance of maintaining this capacity, resulted from its judgement that this role of the universities is not well understood” (Fisher 1981: 5). This emphasis appears to be more or less maintained in the final report.

The report also references the government’s economic development initiatives, the Board of Industrial Leadership and Development (BILD) and the proposed Innovation and Development for Employment Advancement Corporation (IDEA) (Fisher 1981: 2). The committee claims these initiatives will not be successful “unless the universities, which provide the base for innovations, technology, and development, are maintained” (Fisher 1981: 2). In particular, support for basic research is essential because of its potential for applications that produce profits for Ontario and Canadian industries (Fisher 1981: 15, 19, 46). They recommend the BILD programs and IDEA provide funding for university research for this purpose (Fisher 1981: 47). Though not explicitly called an “investment,” the Fisher Report does argue for increased spending on the basis of the system’s economic contributions. The committee argues that “provisions for real increases in [government] spending, can be justified in terms of Ontario’s critical need for economic and social development. Ontario needs educated mind-power and both basic and applied research if it is to have any hope of succeeding with its economic

development goals as well as its goal of providing quality and accessible services for the people” (Fisher 1981: 22). On the point of “educated mind-power,” the committee recommends addressing the shortage of graduate students in programs like “computer science, business, and some areas of engineering and the basic sciences” because graduates in these programs contribute to the province’s competitiveness in industry and business (Fisher 1981: 13). The committee also suggests universities should collaborate more with industry and government, a recommendation that would become increasingly popular from this point on (Fisher 1981: 46). The authors of the report state that if the resources are not available, some degree of accessibility will have to be sacrificed in order to preserve quality (Fisher 1981: 20). As with the previous review, Axelrod (2008) remarks that the recommendations of this commission were ignored (95).

5.2.4 Ontario Universities: Options and Futures

Shortly after the Fisher commission submitted its report, the Davis government appointed a new commission, chaired by Edmund C. Bovey (Clark et al. 2009: 14). The commission was tasked with developing an operational plan that would provide for more clearly defined, different, and distinctive roles for the universities (Cameron and Royce 1996; Clark et al. 2009: 14). The 1984 Report, *Ontario Universities: Options and Futures*, emphasized quality in teaching and research, proposed differential funding corridors, recommended a faculty renewal and adjustment fund (rationalized as replenishing the stock of productive human capital), called for the enhancement of university research capacity, advocated higher tuition fees conditional upon an income-contingent loan repayment plan, and recommended that institutional differentiation take place by compelling universities to compete with each other for a significant portion of

public funds (Cameron and Royce 1996; Axelrod 2008: 95).

Just like the Fisher Commission, the Bovey Commission stated its support for the objectives of universities proposed by Davis and OCUA (Bovey 1984: 3) while continuing its predecessor's focus on the economic functions of universities. This 1984 report, in relation to the reviews I've included in my research, represents a pivotal moment. It is the first review to explicitly regard the university system as an "investment." It is also the first (and only) review in my research to use the term "human capital." The committee says "the measures we have advocated to promote the well-being of our university system are also investment decisions. Like all such options, they may not be without risk; but we are confident that a sound partnership between Government and our universities will yield positive returns to our economy and society" (Bovey 1984: 1). The committee also refer to the Ontario public as "the ultimate stakeholders" in the university system (Bovey 1984: 1). The university system is likened to an investment because it performs dual functions: it develops human capital and it develops knowledge (Bovey 1984: 2). The authors of the report claimed these dual functions of the universities were essential for meeting the needs of Ontario and of Canada during the 1980s and 1990s (Bovey 1984: 2).

As evident from the preceding, this report is firmly rooted in human capital theory. The report consistently refers to the importance of Ontario's universities in the knowledge economy because it produces the human capital and knowledge that contributes to economic productivity and economic competitiveness. With regard to the demand for graduates, the authors claim universities must produce "graduates capable of working at the forefront of knowledge-intensive areas," since this is the direction society

appears to be heading in (Bovey 1984: 10). It is also noted that knowledge-intensive industries will increasingly look to universities to provide knowledge that serves their interests (Bovey 1984: 6). This last statement highlights the importance of knowledge production in the supposed knowledge economy, and thus the importance of university research. The report's authors argue that expenditures on "resource-intensive research" is important if the "universities are to contribute to the technological growth and development of Canada," and that "such expenditures should be considered as investments required to support the intermediate and longer-term social and economic development of Canada, and of Ontario" (Bovey 1984: 8, 34). Support for resource-intensive research is regarded as more important than support for "core instruction and related research" (Bovey 1984: 34). The committee also advocated closer linkages between postsecondary education and the private sector (Bovey 1984). "In an increasingly knowledge-based society and economy the potential for mutual benefits to universities and industry from closer links between them is likely to be of benefit to society as a whole" (Bovey 1984: 27). As such, one of the recommendations made involves creating incentives to encourage technology transfer to Canadian industry (Bovey 1984: 15).

As mentioned above, one of the recommendations the commission made was for increased tuition fees. The rationale for this recommendation was that "a larger proportion of total costs [...] be borne by tuition fees in recognition of the added personal benefits that users receive" (Bovey 1984: 17). The committee argues that "repayment of the costs of a post-secondary education would be directly related to earnings, the potential for which is usually significantly enhanced by the receipt of that education"

(Bovey 1984: 24-24). Higher tuition fees were further justified by asserting low tuition fees “would transfer tax dollars from lower and middle income Canadians to upper income Canadians” and that persons who do not pursue university education would not want their tax dollars to go to those that do (Bovey 1984: 24-25). The economic recession in the early 1980s likely affected the public’s perception of postsecondary education spending. The government’s increasing withdrawal from funding postsecondary education in the 1980s necessitated finding other sources of revenue, and universities increasingly turned to tuition fees and the private sector.

With regard to the latter, it is mentioned in the report that concerns were being raised that universities were increasingly being converted into “instrumentalities of industry and economic development” (Bovey 1984: 27). The committee responds to these concerns by arguing that, though they are legitimate concerns, the knowledge produced by universities is necessary for economic development (Bovey 1984: 27). They suggest the solution is not to separate the universities from the private sector, but to encourage their collaboration while maintaining the intellectual integrity of the universities (Bovey 1984: 27).

Though there was support for the report within the university community, the agenda was rejected by David Peterson’s Liberal government in 1985 (Cameron and Royce 1996; Axelrod 2008: 96). According to Axelrod (2008), the Peterson government did not want to appear to compromise the policy of accessibility to postsecondary education by raising tuition fees or reducing enrolments (96). The Bovey Report agreed that accessibility was important because it produced human capital for the knowledge economy, but argued that with limited financial resources the priority had to be quality

over access (Bovey 1984: 8). The government did introduce new funding devices that could be traced to recommendations made in the commission's report, such as the use of funding corridors and targeted funding envelopes (Cameron and Royce 1996).

Furthermore, with the election of Mulroney in 1984 and successive governments in Ottawa that embraced neoliberalism as a guiding philosophy, the report's "ethos" only gained traction over time.

5.2.5 Future Goals for Ontario Colleges and Universities

In 1995, Mike Harris's Conservative government came into office with a mandate that included tax cuts, a shrinking of the public sector, the increasing privatization of government-funded programs, and the assignment of prescribed economic goals to the postsecondary education system (Axelrod 2008: 97). This mandate was in line with Chretien's and Martin's economic agenda, which focused on fiscal balance through large cuts in spending for programs and services. The federal government's introduction of CHST in 1996 resulted in major cuts for transfers to the provinces for postsecondary education. In light of the Harris government's agenda, John C. Snobelen, Minister of Education and Training, commissioned an inquiry into the postsecondary education system. In July 1996 a discussion paper was produced entitled *Future Goals for Ontario Colleges and Universities*. The purpose of the discussion paper was to address the sharing of costs of postsecondary education, accessibility, program rationalization, and cooperation among the postsecondary institutions (Ministry of Education and Training 1996a). The discussion paper mentions the current fiscal climate and inadequate level of government funding as a reason for the need to find "cost-effective ways to preserve and enhance accessibility and quality" (Ministry of Education and Training 1996a). The paper

argues “it is essential that every cent allotted to the postsecondary system be put in the service of excellence” (Ministry of Education and Training 1996a: 2). “Excellence” is important because it allows for the achievement of the “maximum possible benefits from the investment of time and money, both by public and students, in postsecondary education” (Ministry of Education and Training 1996a: 5). It is worth pointing out that the framing of this paper in terms of the fiscal context provides a justification for shifting costs from the provincial government, which has to tighten up the purse strings, to individuals.

Another theme of the discussion paper and subsequent report is “accountability.” The authors of the paper say “accountability can be an important means of demonstrating to the public that expenditures on postsecondary education result in significant gains for the province’s economy and its social and scientific development. At the same time, accountability allows us to demonstrate to students and taxpayers that the funds used to support postsecondary education are being used effectively and efficiently” (Ministry of Education and Training 1996a: 6). The effective and efficient use of financial resources is to be demonstrated to various stakeholders by evaluations showing the system’s ability to produce graduates and research that contributes to the province’s social and economic development and its ability to meet labour market requirements (Ministry of Education and Training 1996a: 6).

The discussion paper’s authors make an interesting comment about the link between access to postsecondary education and social program spending. They note the Harris government’s emphasis on “self-sufficiency and reduced dependence on social support programs will lead to an increased demand for postsecondary education and

continuing education programs that can open up new routes to employment” (Ministry of Education and Training 1996a: 8). This appears to be consistent with Chretien’s and Martin’s emphasis on devising policy to put people to work rather than to provide funding for social programs and services that protect against unemployment. The authors note that “failing to provide educational opportunities could result in decline in employability of the province’s workforce, with a corresponding increase in government expenditures on social services such as unemployment insurance, welfare, law enforcement, and correctional services” (Ministry of Education and Training 1996a: 9). They mention holders of postsecondary education credentials have had consistently lower unemployment rates than those without (Ministry of Education and Training 1996a: 3). This reinforces the human capital narrative that postsecondary education contributes to individuals’ human capital development, which allows them to more effectively adapt to labour market instability, thus reducing the need for government provisions, such as Unemployment Insurance.

5.2.6 Excellence Accessibility Responsibility

The discussion paper was followed up with the December 1996 report of the Advisory Panel on Future Directions for Postsecondary Education, titled *Excellence, Accessibility, Responsibility*. David C. Smith was appointed chair of the commission. The report recommended less regulation, greater accountability for postsecondary institutions, institutional performance assessments, more partnerships between postsecondary institutions and private sector institutions, easier transferability between colleges and universities, and legislation that would allow for privately-funded universities with the authority to grant degrees (Axelrod 2008: 98). The title of the report indicates the

commission's commitment to achieving excellence in the postsecondary education system and increased access within a context of shared responsibility, given the "financial pressures on the public purse" (Ministry of Education and Training 1996b).

Just as previous commissions had done, the Smith Commission argues that the postsecondary education system plays an important role in ensuring Ontario's competitiveness in the global knowledge economy (Ministry of Education and Training 1996b). The report's authors claim the structure of the economy places a greater premium on participation in postsecondary education, since the jobs being created require highly educated persons (Ministry of Education and Training 1996b). Because of this, more and more students are seeking to attend postsecondary education to acquire the skills and knowledge needed to function in the knowledge economy (Ministry of Education and Training 1996b).

The Smith Commission maintained the conventional position with regards to tuition fees. "Students [...] are responsible for making the most of the public investment in their education and for contributing the best they can to the costs" (Ministry of Education and Training 1996b). The report argued "the deregulation of tuition fees with conditions to improve student assistance will allow institutions to set tuition rates that are reflective of the value and quality of their programs and of the economic benefits students derive from education" (Ministry of Education and Training 1996b). The committee notes the fiscal situation of the postsecondary education system and the government will require students and their parents to contribute more through higher tuition fees to preserve the quality of postsecondary education (Ministry of Education and Training 1996b). As in the previous discussion paper, this report references statistics pointing to

“higher employment rates, greater labour force mobility and stability, and higher earnings among college and university graduates compared to those with high school diplomas or less” as evidence confirming the value of postsecondary education (Ministry of Education and Training 1996b). Relatedly, an interesting piece of text in this report that can be connected to human capital theory is the suggestion that taking out a loan to invest in education is analogous to taking out a loan to make a business investment, and thus interest on money borrowed should be deductible from income in calculating income tax (Ministry of Education and Training 1996b). Human capital theory is also apparent in the justifications the committee gives for the necessity of increased funding from the government and from the private sector. Noting that some have likened the inadequate funding of the postsecondary education system to a “disinvestment,” the report recommends the province “renew its financial commitment to postsecondary education, for the sake of Ontario’s future prosperity, competitiveness, and well-being” (Ministry of Education and Training 1996b).

5.2.7 Ontario: A Leader in Learning

In 2005, Bob Rae released a review of Ontario’s postsecondary education system titled *Ontario: A Leader in Learning*. Rae was appointed by Liberal Premier Dalton McGuinty and Mary Anne Chambers, the Minister of Training, Colleges and Universities. The Rae Report repeated the narrative that emerged in the 1980s. Although Rae does briefly address the intrinsic value of postsecondary education, he quickly moves to reiterating the importance of postsecondary education for the economic well-being of Ontario, and thus the importance of increased funding. He says “if a relaxed public opinion convinces governments, students, and administrators to do less, we shall *literally*

be the poorer for it [emphasis mine]” (Rae 2005: 8). “Spending on higher education, whether by the government, the student or the parent, is a good investment,” Rae argues (2005: 12). The report contains many recommendations. Rae calls for new investments in skills training and graduate education at the Masters and PhD levels to produce the skilled workers the economy needs (Rae 2005: 10). With regard to the recommendation to expand graduate programs, the report cites a study by the Ontario Task Force on Competitiveness, Productivity and Economic Progress that points to “underinvestment in university education, particularly the graduate level, as a leading contributor to the 10% productivity gap between Ontario and peer U.S. states” (Rae 2005: 88). Studies like this are used to justify increased access to higher levels of postsecondary education ostensibly to produce the skilled and educated workers needed for the knowledge economy.

Rae extends the Smith Commission’s concern with accountability. He argues investments in postsecondary education should generate tangible and measurable outcomes that validate expectations of return on the investment over time (Rae 2005: 17, 97). Accountability is important, Rae argues, because the public and students will only give money to postsecondary education if they see the value of their expenditures (Rae 2005: 16). As seen with the Smith Report, this concern with accountability reduces the “success” of Ontario’s postsecondary education system to narrow, economic outcomes, such as graduate employment rates. To ensure that spending produces the desired results, Rae recommends transparency in the allocation of provincial funding through core funding for basic operations and strategic investment envelopes for both universities and colleges (Rae 2005: 36). Furthermore, the report recommends that postsecondary institutions prepare multi-year reports that assess their institutional performance to

ensure provincial funds are being allocated in a transparent manner (Rae 2005: 104).

Though the content of the review was relatively uninspired, the effects it had on government policy were important. The Rae Report was prepared in anticipation of the 2005 Budget. It led to the creation of the *Reaching Higher* plan. *Reaching Higher* was touted as the largest multi-year investment in forty years (Ontario Ministry of Finance 2005). It called for a \$6.2 billion cumulative investment by 2009-10, which would represent a 39 percent increase over the 2004-05 funding base (Ontario Ministry of Finance 2005). As recommended in the Rae Report, the *Reaching Higher* plan made a commitment to “substantially expand graduate education by 12,000 students in 2007-08 and 14,000 by 2009-10 through new investments of \$220 million annually by 2009-10” (Ontario Ministry of Finance 2005). The Rae Report also had an impact on tuition fees. In 2006 a tuition framework was implemented which allowed for five percent annual increases in tuition fees until 2009-10, though it was extended beyond that year (Ontario Undergraduate Student Alliance 2012: 7).

The \$6.2 billion commitment over a period of approximately five years raises some interesting questions about the relation of the government to postsecondary education. It has been demonstrated that both federal and provincial governments have been increasingly reluctant since the late 1970s and 1980s to provide funding for postsecondary education and it has been argued that this is in large part due to the influence of neoliberalism. The *Reaching Higher* plan seemingly deviates from this trajectory. This commitment by the provincial government can be explained by mentioning that a significant percentage of the investment is directed towards capital infrastructure, financial aid, and research. In the Literature Review chapter it was noted

that both the provincial and federal government substantially increased funding for research in the mid- to late-1980s while encouraging closer collaboration with the private sector. The subsequent commercialization of research is profitable to businesses and corporations; thus, these economic institutions tend to favour government spending on research conducted by postsecondary institutions, primarily the universities. The increase in tuition fees reveals that students still have to bear a substantial portion of the costs of postsecondary education, even with the McGuinty government's large investment.

In closing this section, I want to address the role of human capital theory prior to the 1980s. It is important to point out that economic ends were always a dominant concern in the reviews I included for my research. The authors of these reviews have always been concerned about producing graduates for the economy and have always assumed the importance of the postsecondary education system to the economic well-being of province. It is unsurprising these assumptions, also found in human capital theory, were present prior to the 1980s. It is worth recalling from the literature review (p.10) that the field of human capital theory was largely developed in the 1950s. It is likely this field had a significant impact on the thinking and practices of businessmen and public officials at the time. Additionally, the assumption that education is important for economic prosperity is part of human capital theory but also predates it. Functionalist accounts of education (of which human capital theory is one) have a long history.

Though the influences of human capital theory can be perceived in the 1950s through to the 1970s, I argue that the language of human capital theory and its assumptions were not as explicit in the discourse at this time; rather, human capital theory operated in the background, only moving to the foreground in the 1980s. In the

1950s and 1960s government and business were enthusiastic about the postsecondary education system, as indicated by the Wright Commission (1972) and Tudiver (1999). The post-war period was one of sustained economic growth, of which increasing school enrolments played a significant part, according to human capital theorists. Thus, corporations and organizations like the Economic Council of Canada were more inclined to call on government to spend more on postsecondary education (Tudiver 1999: 43). In the 1970s, however, an economic crisis emerged. Cameron and Royce (1996) note the provincial government became concerned about the rate of return on public investment in postsecondary education and began to withdraw from its commitment to open-ended funding in the 1970s. Additionally, Stone (2012) argues the idea of postsecondary education as a public good was increasingly displaced in the 1970s by a discourse of education as a private good, as some economists were arguing the rate of return on postsecondary education was negative (81). Thus it appears the onset of an accumulation crisis in the 1970s made corporations less willing to advocate government spending for postsecondary education. In the early 1980s another economic recession took hold and the postsecondary institutions were mired in financial difficulties. The election of Mulroney in 1984 compounded the problem, given Mulroney's commitment to reining in the federal deficit and the subsequent decrease in federal funding during the 1980s.

The economic crises of the 1970s and early 1980s, the reluctance of both the provincial and federal government to provide funding for postsecondary education in the 1970s and 1980s, and the fiscal situation of the postsecondary institutions necessitated a new justification for spending on postsecondary education. Human capital theory provides that justification. In Ontario, human capital theory rhetoric in the postsecondary

education discourse emphasizes the economic benefits students receive from postsecondary education and thus provides a rationale for increasing tuition fees. The increase in tuition fees, spurred on by deregulation in the 1990s, is in part a response to the decline in government funding. Thus, human capital theory provides the intellectual support for the shifting of costs from governments to individuals. Increases in tuition fees also provide postsecondary institutions with much-needed revenue. Therefore, corporations, governments, and postsecondary institutions have a substantial stake in the use of human capital theory rhetoric in the postsecondary education discourse.

The postsecondary education reviews examined here and the results of my content analysis support my claim that human capital theory was not explicit in the discourse prior to the 1980s. It was not until the 1984 review that the idea that postsecondary education is an investment because it confers economic returns was explicitly stated in the discourse.

5.3 Further Considerations

A couple of additional comments on the results of the content analysis are required. It is worth mentioning some of the difficulties encountered while coding and how that may have influenced the results. First, I suspect I overestimated the presence of “liberal education” in the later reviews. For example, I would code text such as “the importance of higher education to the development of society,” a commonly occurring phrase, as an instance of liberal education, yet it is difficult to know what exactly the authors of the reviews mean by statements such as this. When placed in context, it might seem as though the “development of society” is synonymous with economic development. This would not be surprising given the dominance of market ideology in

our society, yet I still coded phrases such as this one as “liberal education.” The purpose of doing so was to give benefit of the doubt to the authors’ concern with non-economic matters. It could be asked why I chose to do this, rather than refusing to code on the basis that the text was too ambiguous to categorize. The primary reason is consistency: such phrases and sentences appeared in the reviews prior to the 1980s, and I coded them as instances of “liberal education.”

Second, the different focus between the reviews and within the reviews, whether they focus solely on the university system or both colleges and universities, or whether they focus on the different functions these institutions perform, such as research or instruction, presented some difficulty for coding. With regards to coding for “human capital theory,” I felt as though the different focus in the reviews did not affect the results greatly, as human capital theory tends to be applied to the entire postsecondary education system, which includes all postsecondary institutions and their various functions. When applied to the university system, the presence of human capital theory simply indicates the extent to which the purpose of this institution is seen in relation to the economy. With regards to coding for “liberal education,” there was some difficulty given that the concept of liberal education is typically reserved for the universities and much less so for the colleges, whose primary function is to prepare students for work. However, I devised the coding rules broadly enough to include any postsecondary institution and their different functions, because it is not uncommon for the authors of the reviews to attribute characteristics specific to the idea of liberal education to the postsecondary education system in general. Additionally, with the development of the coding rules for liberal education, I wanted to incorporate text that talked about the importance of postsecondary

education unrelated to economic ends, something that I think can be traced to the idea of liberal education. It could be argued that this is a departure from the description of liberal education provided in the Methodology chapter, though I would argue that the operationalization was in keeping with the spirit of the concept. Thus, the difference in focus between and within the reviews is handled by a definition of human capital theory, already broad to begin with, and a broadened definition of liberal education that encompasses both colleges and universities and both instruction/education and research.

Chapter 6 – Conclusion

I want to end with some reflections on my thesis thus far. I have described the dominant narrative informing our understanding of the postsecondary education system. The dominant narrative is a globalization discourse that incorporates human capital theory to explain the economic importance of postsecondary education systems in producing human capital and knowledge for the global economy. Having outlined this globalization – human capital theory discourse, I then argued this discourse could be better understood by examining the connection between human capital theory and neoliberalism, both as discourse and as reality. This connection raises some questions about the actual role of human capital theory in postsecondary education discourse. I suggested human capital theory in postsecondary education discourse serves other functions than the ones to be expected from the dominant narrative. Human capital theory rhetoric reinforces neoclassical and neoliberal views of government, and especially of government spending. It provides a justification for reduced governmental expenditures and for increased tuition fees. Thus, it legitimizes the shifting of costs for postsecondary education from governments to students and their families. Lastly, I described my thesis research, which was a content analysis of Ontario postsecondary education reviews from 1962 to 2005 conducted to investigate the development of human capital theory and liberal education in Ontario's postsecondary education discourse over time. It was demonstrated that instances of human capital theory became more prevalent over time, while instances of liberal education, though fluctuating, remained fairly consistent. This trend illustrates the increasing dominance of Ontario's postsecondary education discourse by human capital theory language and logic.

I want to return to the opening chapter of this work. As evident from the contemporary commentary on postsecondary education laid out in the beginning of that chapter, things have not changed much since 2005. The globalization – human capital theory discourse remains the dominant way of understanding the role of the postsecondary education system in Ontario. I ended that chapter by mentioning that this thesis is not just about how we understand the role of postsecondary education systems, but it is also about what we value as a society. So while it is true that questions are beginning to be raised about the postsecondary education system and how it actually functions, there is a tendency for issues to be debated in economic terms. In the remaining pages of this chapter, I want to move away from this narrow economic framework and approach these issues from a different angle. In particular, I want to consider what is lost in the globalization – human capital theory discourse. I argue that an understanding of the postsecondary education system, especially of postsecondary education, in terms of its cultural relevance is lost. To make this case, I will begin by looking at human capital theory's role in the suppression of non-market forces.

Before discussing the connection between human capital theory and the suppression of non-market forces, I first want to offer some qualifications. I am not addressing the question of what skills students actually acquire from postsecondary education. Nor am I trying to argue that postsecondary education systems should not play any economic role in society. Rather, my considerations here are primarily focused on the effect the globalization – human capital theory discourse has on our society as a cultural and democratic entity. In doing so, my arguments are most relevant to the universities, although they can also be applied more generally to the entire postsecondary education

system.

The oppression of non-market forces is often discussed in the literature on neoliberalism. It is held that non-market forces restrain the free movement of capital, and thus they need to be suppressed. This is seen in attempts to dismantle the welfare state, in attacks on unions, and in the ideological hostility to forms of collectivism and social solidarity. Even the term “society” is dismissed. Margaret Thatcher famously claimed there was no such thing as society, only individuals and their families. What the neoliberal era requires is atomized individuals who produce profits for corporations and who spend their increasingly diminishing wages on consumer goods and services. Human capital theory is appropriate for a neoliberal society because one of its functions is the suppression of non-market forces. The term human capital largely restricts itself to knowledge, skills, and any other characteristics that contribute to individuals’ economic productivity. If human capital, the way it is defined here, is valued, then presumably knowledge, skills, and any other characteristics that do not contribute to individuals’ productivity are less valued or not valued at all. When human capital theory is applied to postsecondary education systems, this becomes abundantly clear. We thus see preferences for spending on disciplines and research that in some way contribute to economic productivity and economic competitiveness. Disciplines and research with no perceived economic utility are regarded as unprofitable, and therefore a “bad investment.” Resources are thus shifted to service those areas of the postsecondary education system likely to generate the highest rate of return on investment. Therefore, what becomes valued about the postsecondary education system is what it has to offer to the market. From this perspective, there is no room for “intellectual luxuries” in the

postsecondary education system. As part of governments' programs of fiscal restraint, spending on such luxuries cannot be justified because they do not contribute to governments' goals of remaining competitive in the global economy.

This discourse about postsecondary education systems is remarkable for its anti-social character. It encourages individuals to value postsecondary education systems in terms of the system's economic benefits to them. With regard to public spending on postsecondary education systems, it encourages the public to demand that money being spent produces tangible economic returns, and it encourages the public to be skeptical of providing funding for students, who are said to receive private returns. The logic here is "why should I have to pay if I don't get anything in return?" In the absence of public spending, it is suggested that postsecondary education institutions should turn to the market in order to fund its services. I argue that this discourse, aside from exhibiting anti-social qualities, is ideological. Despite claims that restructuring the postsecondary education system around the needs of the global economy is beneficial for the public, it is actually beneficial for corporate interests. The discourse encourages the public to turn institutions meant to serve them over to these interests. These institutions, which serve an important role in sustaining a vibrant democratic culture, are undermined as a result. The discourse compels the public to sell out these institutions in the hopes of getting something in return. Yet, orienting the postsecondary education system closer to the market has not reduced social and economic inequalities. Instead, social and economic inequalities have increased in the era of globalization as corporations have made out like bandits.

It is argued that greater access to postsecondary education will alleviate economic

inequalities because it provides individuals with the skills and knowledge, or the human capital, needed to integrate into the labour market. However, mass access to these institutions has not minimized inequalities; it seems to have merely reproduced them. If we take credentialism seriously, then it is not necessarily about the skills and knowledge individuals may acquire from their postsecondary education. It is about the credentials that postsecondary education institutions produce. It is also important to point out that while access to postsecondary education has greatly increased, the result has been credential inflation. With credential inflation, individuals are required to climb higher in the educational hierarchy in order to distinguish themselves in the market as educational requirements for even low-skilled work have become higher. This leads to greater demand for graduate programs and professional programs, but access to these higher levels are restricted for many individuals since these programs are expensive and entry is typically reserved for individuals with high grades and money. Individuals who come from privileged backgrounds and have attended private schools are likely to be better prepared for the challenges of postsecondary education; these individuals are also less likely to have to work in order to finance their education, so they will have more time to devote to their studies (if they study) and to pursue extra-academic activities that look good on a resume. These are the individuals likely to have the grades and money required to access higher levels of education.

This raises some questions. If postsecondary education institutions are selling credentials, which ostensibly represent a certain level of human capital development, and if it is these credentials and not the possession of human capital per se that opens doors to the world of work, then who can afford to buy the credentials provided by graduate and

professional schools? Who can afford to buy their way into the labour market? Instead of postsecondary education being a way to even the distribution of human capital in the population, and thus even the distribution of economic resources, it reinforces existing inequalities and legitimates them.

I return to my argument that orienting the postsecondary education system, especially the universities, closer to the market does not benefit the public. Instead, restructuring the postsecondary education system in this way fosters narrow personal development. Treating universities as providers of skills and knowledge for the economy is to confuse “education” with “training.” This confusion, facilitated by the application of human capital theory to the postsecondary education system, undermines the idea that universities should be providers of liberal education. It hinders the development of a meaningful philosophy of life and rules out critical evaluation of society, and instead it instills obedience in individuals. This can be seen when courses in the arts and humanities are underfunded or cut altogether because they are not “profitable.” Gone with these courses and programs is the skills and knowledge that allow individuals to participate meaningfully in society, to think beyond their personal milieus. Thus, the creation of “technicians” to administer the corporate-bureaucratic system necessarily suggests a narrow view of personal development, and I would argue this has harmful consequences for society. One harmful consequence is that individuals may not fully understand the social implications of their role in administering a system that produces and reinforces massive inequalities. As Nussbaum (2010) says, “education for economic growth” hinders this kind of understanding because it interferes with the pursuit of profit (22-23). If individuals are less aware of social and economic inequalities, and of their

root causes, it seems reasonable to say they will be less able to mitigate them. Relatedly, another harmful consequence of such an education is that it weakens the possibility for democratic governance. The dominance of an instrumental rationality in postsecondary education weakens social bonds by fragmenting individuals and reinforcing an egoistic type of individualism. This makes collective action difficult, and collective action is required to overcome the structural issues that have rendered “democracy” an empty term, since the vast majority of individuals do not have a say in the decisions, both economic and political, that affect their lives. The dominant narrative encourages us to turn on each other and attack public institutions that are meant to serve us, thus harming the possibilities for a substantive democracy that could present a challenge to Capital’s dominance.

In conclusion, the globalization – human capital theory discourse serves corporate interests, not public interests. The use of human capital theory in Ontario’s postsecondary education discourse, by offering wonderful economic benefits, legitimates spending on postsecondary education by individuals and their families. It also justifies reduced governmental expenditures on postsecondary education. Governments justify this withdrawal by asserting the need to be fiscally prudent to remain competitive in the global economy, while simultaneously providing large subsidies to corporations via lowered tax rates and other policies. The effect has been a transfer of wealth from the majority of the population to a minority of the population. The use of taxpayer money to fund research is effectively a subsidy to corporations, given the growing commercialization of research. And through higher tuition fees, individuals are paying to be exploited in the labour market to the advantage of businesses and corporations, who

provide little funding for postsecondary education, relatively speaking. The question can be asked, “What is the public really ‘investing’ in?”

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Appendix A: Definitions and Coding Rules

Human Capital Theory (HCT)

Definition

'HCT' is a theory of investment decisions. Its central concept is 'human capital', which refers to any knowledge or skills a person has that contributes to their economic productivity. Investment in activities that contribute to human capital acquisition yields economic benefits for individuals and societies.

Schooling is said to be one of the primary activities that contributes to human capital acquisition. Through schooling, individuals acquire knowledge and skills that enhance their economic productivity, and thus their market value. In addition to individual benefits, schooling also contributes to economic growth through the creation of a more productive labour force. With regards to postsecondary institutions, particularly the universities, research activities are said to contribute to economic growth through the production of knowledge which has industrial and commercial applicability.

Coding Scheme

The following is a list of guidelines for selecting text to be categorized under the concept, 'HCT':

1. phrases/sentences which suggest that postsecondary system is an investment which yields economic/financial returns/gains/benefits/outcomes/results for individuals, economy, and society
2. phrases/sentences which suggest the postsecondary system contributes to economic health/growth/prosperity/well-being/development/wealth/progress/success
3. phrases/sentences which suggest the postsecondary system enhances competitiveness in markets/business/industry/economy
4. phrases/sentences which suggest the postsecondary system enhances economic productivity
5. phrases/sentences which suggest the postsecondary system enhances economic performance
6. phrases/sentences which suggest postsecondary system produces trained labour force/ well-trained workforce/ highly skilled/educated workers/ productive labour force
7. phrases/sentences which suggest postsecondary system meets or should meet employer/workforce requirements
8. phrase/sentences which suggest postsecondary education/training is linked to employment
9. phrases/sentences which suggest postsecondary system produces professionally-trained graduates
10. phrases/sentences which suggest postsecondary graduates contribute to economic health/growth/...
11. phrases/sentences which suggest human capital/ human resources contribute to economic health/growth/...
12. phrases/sentences which suggest postsecondary research contributes to economic ends
13. phrases/sentences which suggest postsecondary education/training increases earnings potential/income/salary for postsecondary graduates
14. phrases/sentences which suggest postsecondary education/training increases job security for postsecondary graduates
15. phrases/sentences which suggest postsecondary education/training increases labour market participation
16. phrases/sentences which suggest postsecondary education/training raises employment rates/levels
17. phrases/sentences which suggest postsecondary education/training confers skills and knowledge necessary for labour market/ workplace/ jobs/ work/ economy
18. phrases/sentences which suggest postsecondary education/training contributes to human capital development/ acquisition

19. phrases/sentences which suggest individuals' skills/talents/knowledge contribute to economic productivity
20. phrases/sentences which suggest individuals' skills/talents/knowledge enhance employability
21. phrases/sentences which suggest individuals' skills/talents/knowledge enhance competitiveness
22. 'Ambiguous' (text under this rule will not be included in final count)

Liberal Education

Definition

An approach to learning that encourages the development of one's reasoning capabilities in a variety of matters. It stimulates the desire to pursue knowledge for its own sake and not merely as a means to some other end. It prepares individuals to apprehend and contemplate truth, to think independently and critically, and to discharge their civic duties. Thus, a liberal education promotes the creation of an informed citizenry and aims to preserve freedom for person and society.

Coding Scheme

The following is a list of guidelines for selecting text to be categorized under the concept, 'Liberal Education':

1. phrases/sentences which suggest the importance of postsecondary education, knowledge, and skills unrelated to economic ends
2. phrases/sentences which suggest the societal, cultural, and national importance of postsecondary system
3. phrases/sentences which suggest postsecondary education has a civic function
4. phrases/sentences which suggest postsecondary education enhances intellectual development
5. phrases/sentences which suggest postsecondary education cultivates critical thought
6. phrases/sentences which suggest postsecondary education contributes to personal fulfillment/satisfaction/development
7. phrases/sentences which suggest postsecondary education is positively related to freedom
8. phrases/sentences which suggest postsecondary education provides broad/general knowledge
9. phrases/sentences which suggest postsecondary education enhances individuals' ability to adapt
10. phrases/sentences which suggest university education is distinct from professional/vocational training/education
11. phrases/sentences which suggest a function of postsecondary institutions is to disseminate research/knowledge
12. phrases/sentences which suggest importance of postsecondary research/knowledge unrelated to economic ends
13. 'Ambiguous' (text under this rule will not be included in final count)

Appendix B: List of Ontario Postsecondary Education Reviews

Title	Source	Year	Sections Omitted from Content Analysis
Post-secondary education in Ontario, 1962-1970	Advisory Committee on University Affairs	1962	Table of contents; appendices
Report of the Commission on Post-Secondary Education in Ontario (The Learning Society)	Ministry of Colleges and Universities	1972	Consolidated recommendations; appendices C, E, F, G, H;
The Report of the Committee on the Future Role of Universities in Ontario	Ministry of Colleges and Universities	1981	No omissions
Commission on the Future Development of Universities in Ontario (Ontario Universities: Options and Futures)	Ministry of Colleges and Universities	1984	No omissions
Future Goals for Ontario Colleges and Universities (Discussion Paper)	Ministry of Education and Training	1996	No omissions
Report of the Advisory Panel on Future Directions for Postsecondary Education (Excellence Accessibility Responsibility)	Ministry of Education and Training	1996	Table of contents; appendices; tables and graphs
Ontario: A Leader in Learning, Report and Recommendations	Ministry of Training, Colleges and Universities	2005	No omissions

Appendix C: Content Analysis Results

Results of Content Analysis – “Human Capital Theory”

Review	Coding Rule Number (frequency of instances)	Number of Repetitions	Total Frequency Count
1962	2 (5); 4 (1); 7 (3); 8 (2); 9 (1); 11 (1); 16 (1) 17 (1); 20 (1)	0	16
1972	1 (1); 2 (2); 4 (1); 6 (1); 7 (14); 8 (3); 13 (1) 15 (1); 16 (1); 17 (8) 22 (20)	0	33
1981	1 (3); 2 (5); 3 (3); 6 (4); 7 (4); 9 (3); 10 (1); 12 (3); 17 (2); 22 (3)	0	28
1984	1 (13); 2 (22); 3 (1); 6 (1); 7 (11); 8 (1); 12 (9); 16 (1); 17 (1); 18 (1); 19 (1); 22 (17)	6	62
1996 (Discussion Paper)	1 (2); 2 (4); 3 (1); 6 (1); 7 (4); 8 (5); 9 (1); 10 (1); 13 (2); 16 (2); 17 (2)	0	25
1996	1 (23); 2 (9); 3 (2); 6 (2); 7 (15); 8 (4); 9 (4); 12 (2); 13 (2); 16 (1); 17 (8); 22 (21)	3	72
2005	1 (21); 2 (17); 3 (1); 5 (1); 6 (4); 7 (8); 8 (4); 11 (1); 12 (1); 13 (2); 16 (1); 17 (7); 18 (3); 22 (19)	0	71

Results of Content Analysis – “Liberal Education”

Review	Coding Rule Number (frequency of instances)	Number of Repetitions	Total Frequency Count
1962	2 (3); 3 (2); 7 (3); 8 (2); 10 (9); 11 (1); 12 (2); 13 (5)	0	22
1972	2 (22); 3 (8); 4 (5); 5 (8); 6 (5); 7 (8); 8 (1); 9 (2); 10 (2); 11 (2); 12 (1); 13 (10)	0	74
1981	1 (2); 2 (14); 3 (1); 4 (2); 6 (2); 7 (1); 8 (1); 13 (5)	1	23
1984	1 (6); 2 (27); 4 (2); 5 (1); 6 (1); 7 (1); 8 (3); 11 (2); 13 (6)	8	43
1996 (Discussion Paper)	2 (5); 4 (1); 6 (1)	0	7
1996	1 (4); 2 (12); 3 (1); 4 (1); 5 (3); 6 (1); 7 (1); 8 (3); 11 (3); 12 (3); 13 (1)	4	32
2005	1 (1); 2 (11); 3 (2); 6 (3); 7 (1); 8 (2); 12 (1); 13 (2)	0	21

Results of Content Analysis – Page Count per Review and Ratios of

Review	Page Count	Ratio – HCT Total Frequency Count/ Page Count	Ratio – Liberal Education Total Frequency Count/ Page Count	Ratio - Human Capital Theory/ Liberal Education)
1962	47	0.34	0.47	0.73
1972	159	0.21	0.47	0.45
1981	52	0.54	0.44	1.22
1984	45	1.38	0.96	1.44
1996 (Discussion Paper)	12	2.10	0.58	3.57
1996	66	1.10	0.48	2.25
2005	108	0.66	0.19	3.38

Appendix D: Content Analysis Data

* “#A” refers coding rule #22 for “HCT” and coding rule #13 for “Liberal Education”

1962 Review

HCT:

1. (#2) [debasing] academic standards would...endanger the...economic health of the Province – p. 1
-sentence also coded under ‘Liberal Education’
2. (#4) our future productivity...depend on the full development of the talents of this ten or twenty percent – p. 1
-sentence also coded under ‘Liberal Education’
3. (#8) what kind of further education will be most likely to assure the students of employment – p.4
4. (#7) as far as the demands for manpower are concerned, it appears that Arts and Science graduates are needed, and will be needed increasingly, in government, industry, teaching, and many other fields – p.4
5. (#7) the shortage of highly-trained scientists in industry is serious – p. 5
6. (#20) the employability of individuals will depend on the degree of their skill and aptitude –p.5
-in context of discussing expanding job areas
7. (#9) the professional schools in the existing Ontario universities will be able to absorb the probable demand and produce the necessary supply of professionally trained people during the next few years – p. 5
8. (#2) there is need for drastic reorganization and expansion of the facilities for technological education – p.6
9. (#11) Efficient industrial activity to-day is based to a great extent upon the skills of engineering technologists –p.16
-discussing institutes of technology, the importance of skills for industrial progress,
And the ‘needs of the Province’
10. (#2) progress of industrial development in Ontario in a few years’ time will be hamstrung if we fail to raise our sights in technological education – p. 16
11. (#7) technicians will also be needed in very large numbers by industry and by the medical sciences – p.17
12. (#16) ability to communicate, to exercise judgment, to master new situations and to acquire new skills will greatly reduce the risk of frequent and prolonged unemployment – p.17
13. (#17) the research needs of the country, for teachers, for pure scientists, and for an almost limitless number of applied scientists in business, industry, and government – p.28
-sentence also coded under ‘Liberal Education’
14. (#2) we are, however, convinced that the special subsidy to attract students into graduate work is an absolute necessity, for the sake of the entire economic...order – p.40
-sentence also coded under ‘Liberal Education’
15. (#8) without it, we cannot hope to look after the undergraduate students who are coming to our doors, and this may amount to condemning them to lack of opportunity and lack of employment – p.40
-discussing need for special subsidy for expanding graduate enrolment
16. (#2) requirements of the Province demand a much increased development of technological training – p.46
-earlier comments about important of technological education for industrial progress

Liberal Education:

1. (#2) [debasing] academic standards would...endanger the social...and intellectual health of the Province – p.1
-sentence also coded under ‘HCT’
2. (#A) our national security, and our health depend on the full development of the talents of this ten or twenty percent – p.1
-sentence coded under ‘HCT’

3. (#2) traditional responsibility of universities to preserve, augment, communicate and transmit the manifold cultural heritage of the race – p.2
4. (#A) to fill the needs of the modern state for graduates, especially in those fields where trained intelligence is vital to the welfare and security of society –p.2
-discussing responsibilities of universities
5. (#3) to make higher education available to all who are qualified and eager for it, so that they may be knowledgeable, self-reliant citizens of the state and of the world –p.2
6. (#10) for a basic liberal education is highly relevant to the kind of world we are moving into, and provides perhaps the soundest foundation for specialized training and re-training for such a world of constant change and innovation – p.5
7. (#8) all the universities regard the teaching of students from the less developed countries abroad as a welcome responsibility, a major contribution to international understanding, and acknowledge that the atmosphere of a campus is the richer for their presence – p.8-9
8. (#10) if more academic preparation is desirable, the committee suggests that it should take place before, not after, the student graduates from a Teachers' College and goes to work – if only for the sake of greater maturity among those who must make decisions affecting children and the very young –p.14
9. (#10) the profession is in favour of an academic preparation that would include some work in the liberal arts at the university level – p. 14
10. (#10) the committee is aware that the Ontario universities have been averse to accepting any responsibility for the professional preparation of elementary school teachers as part of a university course – p.14-15
11. (#10) above all, we are trying to make genuine liberal arts education at the university level available to all who are able to profit from it – p.15
12. (# 10) in this connection it is fair to say that some diploma courses of a technological nature which the universities have been obliged to offer ought to be taken off their hands – p.16
-discussing training of medical technologists
13. (#A) the most useful service the school system can render to the pupils who are potential technicians - - those who have little academic ability - - is to give them as much academic work as they can possibly be cajoled into taking –p.17
-not sure what 'school system' means; could be referring to elementary and secondary schooling
14. (#A) technicians' skills can be taught at any age, and in the interests of the young people the teaching of these skills should be preceded by all the academic education the pupils can absorb – p.17
15. (#3) the committee distinguished between science as a concentrated honour course, producing scientists, and science as part of the background of an educated citizen, and agreed that the latter concept was appropriate to the new institutions – p.19
-discussing possible additional institutions at university level
16. (# 10) the useful terminal programmes of the technological institutes would then be disturbed for the sake of a semi-technological degree programme of questionable quality – p.20
-discussing possibility of converting some technological institutes and vocational schools into composite two-year junior colleges
17. (#10) if the junior colleges were sponsored and administered by universities, the universities would be making themselves responsible for vocationally-oriented terminal courses - - a function which they are possibly unwilling and probably unable to perform properly – p.22
18. (#10) our task assumes a new aspect: it is not merely to develop general arts education for very large numbers of students – p.26
19. (#11) their role includes, besides teaching, the dissemination of existing knowledge and the development of new knowledge through the scholarly work of their staff – p.27
20. (#12) whatever the research involves, its purpose is to add to the total of man's knowledge of himself and his environment –p.27
21. (#12) the research needs of the country, for teachers, for pure scientists, and for an almost limitless number of applied scientists in business, industry, and government – p.28
22. (#7) what is claimed is freedom of thought – p.36
-discussing nature of freedom claimed by universities
23. (#7) pursuit of truth might be distorted – p.36
-implies pursuit of truth is basic to universities; saying it might be distorted

- if freedom to make own appointments to teaching posts is interfered with
24. (#7) without freedom, what they make available to the students will not be university education –p.37
25. (#8) courses of study that are an integral part of scientific and humanistic education and must be offered by most or all institutions of higher learning –p.38
 -in context of discussing courses that must be offered despite seeking to economize operations
26. (#A) the committee thinks that professional training in some fields should be examined carefully to see if the educational requirements are realistic in terms of the work to be done by the professional practitioner – p.39
27. (#2) we are, however, convinced that a special subsidy to attract students into graduate work is an absolute necessity, for the sake of the entire...social order – p.40
 -sentence also coded under ‘HCT’

1972 Review

HCT:

1. (#2) it is a pervasive, molding force that affects all individuals living in our society, intellectually, creatively, and economically – p. vii
 -sentence also coded under ‘Liberal Education’
2. (#6) higher technology, a world of administrative complexity and electric communication, required new knowledge, as well as a better-trained labour force and a better informed citizenry –p.4-5
 -sentence also coded under ‘Liberal Education’
3. (#A) stiffer (and often unrealistic) formal education requirements became a condition of access to both the new and some of the old job opportunities –p.5
 -talking about post-WWII enrolment expansion
4. (#A) the logic of viewing prolonged schooling as a prudent personal investment in a future job or career, within a rapidly growing and industrializing provincial economy, provided youth, parents, and an increasing number of other adults, with plausible practical reasons for wanting more formal education – p.5
 -trying to account for enrolment expansion
5. (#A) similar assumptions led the federal and provincial governments to conclude that universal access to post-secondary education was both a legitimate investment and an important political goal –p.5
 -discussing investment assumption; trying to account for enrolment expansion, not endorsing investment view of education
6. (#A) higher unemployment levels and Canada’s lag behind the United States in its per capita gross national product were largely due to a lag in education, especially at the post-secondary level – p.5
 -discussing investment view of education, not endorsing it
7. (#A) common assumption that postsecondary education was a virtual panacea for personal, social, and economic ills – p.6
 -at later point they problematize this assumption; also coded as ‘Ambiguous’ under ‘Liberal Education’
8. (#7) and as industry and technology began generating needs for a higher level of trained competence, government multiplied the number of student places in existing universities, granted charters for new universities...and founded twenty colleges of applied arts and technology (CAATs), some of which evolved from existing institutes of technology –p.12
9. (#A) in the late 1950s and the 1960s, the federal government was drawn into increasing its support of post-secondary education by its acknowledged obligation to the health of the national economy, specifically to the achievement of stable economic growth and a low level of unemployment – p.13
 -providing historical perspective
10. (#A) During this period, governments at all levels became captivated by an alluring “investment” view of education – p.13
 -providing historical perspective
11. (#A) the widely shared perceptions of the Economic Council of Canada explained the nation’s persistent shortfall of 30 per cent in its per capita gross national product partly in terms of a shortfall in the educational level of its work force – p.13
 -providing historical perspective

12. (#A) the Council reasoned that perhaps about a third of this productivity lag could be attributed to a lag in education – p.13-14
 -providing historical perspective
13. (#A) in the 1960s, patterns of persistent unemployment were attributed in part to the labour force's lack of adequate skills for utilizing the highly complicated technologies of an urban society –p.14
 -providing historical perspective
14. (#A) since the federal government had long participated in vocational training programs, it seemed logical to combat unemployment by substantially expanding that involvement –p.14
 -providing historical perspective
15. (#A) moreover, as students postpone critical career choices in favour of “taking another course”, they may begin to doubt the suitability of their “education” to the needs of the workaday world – p.22
16. (#A) modern society that is dependent upon knowledge both for its technology and to make its moral choices – p.26
 -sentence coded under ‘Liberal Education’
17. (#A) many people believe that it is possible to design our educational system on the basis of projected manpower needs –p.30
18. (#7) we believe that it is preferable to respond to the uncertainties of the job market through a flexible system that permits individuals and educational programs to react to changing needs than to adopt a program of manpower planning linked to a system of rigid certification – p.30
19. (#A) this analyzes the educational system in terms of economic returns: for so much public and private expenditure or investment, so many economic benefits are presumed to accrue to society in heightened productivity, skills, and the development of earning capacities – p.31
 -merely describing this approach, not endorsing it
20. (#A) why should we not maximize rates of return on public investments in post-secondary education by investing in those sectors which analysis shows to be most productive? – p.31
 -merely describing this approach, not endorsing it
21. (#A) some will accompany the need for new departures that will better provide the public with an adequate range of high-quality professional and other services – p.32
 -discussing what public will demand from postsecondary system
22. (#17) an ever-changing economy with its ceaseless demands for new knowledge and new occupational skills has made formal education an integral part of our lives – p. 33
23. (#17) education is essential to remaining in touch with one's changing social and economic environment...-p.33
 -sentence also coded under ‘Liberal Education’
24. (#17) they must be given a suitable array of learning experiences to keep in step with young persons entering the workforce – p.33
 -discussing what adults need
25. (#4) we must have a continual broadening of skills and knowledge to enable us to live in a world where the problems of providing sufficient goods, the social strains of living closely together, and the ecological dangers of ruining our environment all threaten survival itself –p.33
 -sentence also coded under ‘Liberal Education’
26. (#2) society may assent to the allocation of public funds for post-secondary education in the belief that learning and research contribute to social mobility, economic growth, the conquest of nature, social criticism, and personal development –p.35
 -sentence also coded under ‘Liberal Education’
27. (#17) greater attention also will have to be paid to...those who look to postsecondary education for further training in job skills or for chances to pursue new directions and goals – p. 39
28. (#7) second, colleges, universities, and other institutions must enlarge their programs and means of delivery in the fields of continuing education and manpower training, without abandoning their present roles or compromising their integrity – p. 39
29. (#A) employers and professional associations seem either to assume that more education automatically produces a better-qualified employee or professional – although in many cases formal education is not directly related to the skill required – p. 40
 -not endorsing this assumption

30. (#7) to make the many options suggested by our examples readily available to the adult population of Ontario, continuing and adult education and training should be given a central place in the post-secondary system – p.41
31. (#17) it is needed to help individuals adjust to a changing labour market, and it is essential if they are to lead personally fulfilling lives in touch with their changing physical and cultural worlds – p.42
-discussing lifetime learning; sentence also coded under ‘Liberal Education’
32. (#7) there is a pressing need to have programs of manpower training, as part of continuing education, clarified and improved –p.42
33. (#17) manpower training can be conceived as encompassing three categories of activity: the initial process by which the work force acquires the needed skills for productive work; the short, often remedial development of skills through pre-training and retraining programs; and the further long-term development of human resources – p.42
34. (#7) retraining programs of the traditional kind should continue to be provided and improved – p.43
35. (#7) in addition, new programs with a pre-training objective should be created to cushion the shock of rapid change – p.43
36. (#7) to facilitate adequate planning of individual programs, grants to colleges of applied arts and technology should provide for the financing of pre-training and retraining programs on a long-term basis – p.43
37. (#7) lifetime learning suggests an increasing interplay and integration of learning with work – p.44
38. (#7) accordingly, formal programs in universities and colleges should be more fully integrated with opportunity for experience and practice, so that pertinent practical experience gained outside formal institutions may be substituted for conventional laboratory and practice work – p.44
39. (#7) on the graduate level, institutions of post-secondary education should be encouraged to create programs that will permit students to include and integrate into their course of study related research pursued in industry or government – p.44
40. (#7) in a related area, students and employees should be encouraged to intermingle study and work in ways that are now uncommon – p.44
41. (#7) cooperative, part-study/part-work programs should be multiplied in our post-secondary institutions –p.44
42. (#7) the post-secondary system should provide appropriate refresher, updating, and continuing education programs for persons seeking horizontal or vertical movement within or between professional areas – p.69
43. (#8) this considerable shortfall in educational levels betokens as well the presence of a close link between membership in the French-language group and low social status, as gauged by the occupation and income profiles of Franco-Ontarians – p.80
44. (#8) in 1961, the chance of pursuing a career in administration, in one of the professions, as an office or skilled worker, or in manufacturing was significantly lower for French than for English-speaking Ontarians – p.80
45. (#16) and the likelihood of being unemployed or on welfare, or of working in agriculture, forestry, mining, or as an unskilled labourer – jobs socially less esteemed, lower paid, and often seasonal – was significantly greater – p.80
46. (#13) Franco-Ontarians on the average earned markedly less than the English-speaking population – p.80
47. (#A) “On the contrary the desire of the Franco-Ontarian to live in a French milieu is perfectly harmonious with the equal desire to contribute fully to the cultural, economic, and technical progress of his province and of his country” –p.82
-quote from study; not clear whether this is in connection with postsecondary education; sentence also coded as ‘Ambiguous’ under ‘Liberal Education’
48. (#1) “if this is part of the price of national unity then let Ontario pay it gladly, for, in so doing, it will not only do justice to all citizens, but its people will also reap rich dividends culturally and economically, far beyond the cost in facilities and personnel needed to accomplish the result – p.83
-quote from Hall-Dennis Report; discussing need for French-as-a-second-language programs
49. (#15) if a community of Franco-Ontarians is to participate fully in the province’s economic, trade, and professional life, it must have access to the full range of educational opportunities at the post-secondary level – p.84

50. (#17) changes in skills, occupations, and knowledge that an uncertain future will surely demand –p.95
-in ‘Careers and Education’ chapter
51. (#17) closer links between education and work, as well as expanded programs of continuing education, should multiply opportunities for individuals to master – and not be overwhelmed by – economic and social perturbations -p.95
52. (#8) relationships that exist or may exist in the future between educational programs and employment opportunities – p.100
53. (#A) the system we recommend is designed to provide maximum returns from the available funds – p.150

Liberal Education:

1. (#2) it is a pervasive, molding force that affects all individuals living in our society, intellectually, creatively, and economically – p. vii
2. (#3) through education – education as a continuous, life-long process – individuals can participate more fully in our society and at the same time make it a richer and more satisfying environment in which to live – p.vii
3. (#3) higher technology, a world of administrative complexity and electric communication, required new knowledge, as well as a better-trained labour force and a better informed citizenry –p.4-5
-sentence also coded under ‘HCT’
4. (# 2) broader access to education and mission-oriented research were advocated as an effective means to social progress –p.6
5. (#6) it was defended both as an avenue of personal self-fulfilment and as a way of enlarging society’s knowledge of itself and of nature –p.6
6. (#3) it was a badge of responsible citizenship in a liberal society – p.6
7. (#2) it was described as an enlarged base for the articulation and strengthening of Canada’s culture – p.6
8. (#A) common assumption that postsecondary education was a virtual panacea for personal, social, and economic ills – p.6
-at a later point they problematize this assumption; also coded as ‘Ambiguous’ under ‘HCT’
9. (#2) intellectual life in Ontario has always been closely linked to the public post-secondary institutions – p.7
10. (#6) “our objective is to insure that no student who has the capacity will be deprived of the opportunity of attending university and developing his talents to the fullest possible extent” –p.10
-quote
11. (#6) “we must provide whatever opportunities are necessary as a government so that each individual may be assured an opportunity through education to develop his potentialities to the fullest degree and to employ his talents that God has given him to the greatest advantage” –p.10 +12
-quoting John Robarts
12. (#10) a type of training universities are not designed to offer – p.12
-discussing CAATs and what they provide
13. (#A) rising pressure on government to assume national cultural and nation-building responsibilities through education – p. 13
-providing historical perspective
14. (#A) nurseries of a truly Canadian civilization and culture – p.13
-quote from Massey Commission arguing for importance of universities; providing historical perspective
15. (#4) learning and education are fundamentally concerned with the endeavours and attainments of the mind – p.17
16. (#4) yet the working of the intellect remains basic to the learning process and grows all the more important at higher, more complex levels of learning – p. 17
17. (#11) it has produced, too, a generally high level, by world standards, of disseminated knowledge in the community at large – p.17
18. (#2) the essential point remains that institutions of post-secondary education in this province have played a leading role in shaping, enlarging, and transmitting a tradition which today serves as a solid foundation for our intellectual endeavours – p.17

19. (#4) preservation of high intellectual standards is one main goal of post-secondary education – p.18
20. (#2) the idea of social responsibility: that a vital social institution should serve the needs of society – p.18
21. (#7) at its worst, it can mean the rigid and mechanistic workings of bureaucracy, the watering down of educational goals, and restraint on basic intellectual inquiry – whether as unprofitable, subversive, or simply irrelevant to immediate social concerns – p.18
-in support of these values
22. (#7) institutions should be as free of outside direction as possible to guide their own affairs, control their own standards, and make their own innovations, in order to ensure the widest-ranging inquiry and criticism, the highest intellectual quality, and the readiest pursuit of new knowledge – p.18
23. (#5) at its best, it has stood for the freedom of knowledge – on which other freedoms ultimately rest – the power to criticize and to dissent from the accepted norms of society, and the right to decide issues solely in terms of their intellectual validity – p.18-19
24. (#10) and that, should they try to do so, their liberal arts, professional, and graduate teaching programs and their scholarly pursuits would suffer – p.20
-should the universities alone try to meet the learning needs of an increasingly technological society
25. (#6) now we have also come to realize that continuing education throughout life, by diverse means and in many settings, is necessary for a satisfying self-fulfilling existence in a constantly changing and shrinking world – p.21
26. (#2) Ontario's universities and colleges have played a major role in many countries in developing national traditions, culture, and even national self-awareness – p.23
27. (#2) as indicated earlier, an intellectual tradition has already been built up in Ontario, largely through its universities, and this has come to constitute a prominent part of the wider Canadian tradition – p.23
28. (#2) post-secondary education has a duty to maintain its Canadian content in interest and emphasis
29. (#2) special role of post-secondary education in the Canadian intellectual tradition –p.24
30. (#3) modern society that is dependent upon knowledge both for its technology and to make its moral choices – p.26
-sentence also coded as 'Ambiguous' under 'HCT'
31. (#2) finally, special care will have to be taken in appointing staff, designing programs, and even providing curricula to serve minority groups and to foster cultural diversity, intellectual development, and a knowledge of Canadian problems – p.27
32. (#5) and it must cater to society's needs for a widening variety of services, for new knowledge, and for critical assessment of its social values and institutions – p.29
-postsecondary education system must
33. (#3) we can and will attempt to treat him as a responsible citizen of a free society...in designing post-secondary education to serve his needs – p.30
34. (#A) yet any value scheme set forth to shape this kind of education for free and adults must never neglect the fact that Man the Learner has many other aspects as well – p.30
35. (#5) where is there an opportunity for social criticism, innovation, and change in a society geared to a utilitarian acceptance of occupations as they are or are ordained to be? –p.30-31
-critique of manpower planning via education system
36. (#1) to think of the educational system merely in terms of economic costs is partial and distorting – p.31
37. (#1) many benefits other than economic returns are derived by society – p.31
38. (#4) the broadening of intellectual horizons, the enhancing of life experience through the arts, the opportunity for creative, reflective, and recreational opportunities are all education returns of great value – p.31
39. (#1) while the economic approach provides a useful perspective on educational activities, it is more meaningful to assess education in terms of social benefit –p.31
40. (#1) some will arise from the need for new technical and normative knowledge to resolve pressing human and environmental problems – p.32
-demands on postsecondary system
41. (#A) some will result from the multiple educational wants of a much broadened learning community that potentially includes all adults – p.32
-demands on postsecondary system

42. (#4) both the discipline and the rewards flowing from this intellectual process are individual: they are not provided to the learner but achieved by him – p.32
43. (#7) quality in this pursuit, for student and teacher, demands intellectual freedom as well – the latitude to follow one’s individual bent, subject only to the intellectual dictates of one’s own study and its standards – p.32
44. (#7) freedom to explore is vital if quality is to be more than mere technical competence – p.32
45. (#7) without freedom, there is little hope of innovation to produce the new ideas, values, and techniques that enable us to go on adapting and surviving in a world of change – p.32
46. (#5) further, the very adaptation and survival of society depend on the constant critical analysis of its ideas, structure, and activities, and a notably large element of these necessary social analysts and critics is found in the realm of post-secondary education – p.32
47. (#7) in sum, quality in learning as an inherent attribute of post-secondary education hinges on the presence of intellectual freedom – p.32
48. (#A) educational and cultural endeavours do indeed have singular qualities as consumer goods: they are among the few that do not have negative side-effects on the environment and the quality of life – p.33
49. (#9) education is essential to remaining in touch with one’s changing social and economic environment...-p.33
-sentence also coded under ‘HCT’
50. (#2) we must have a continual broadening of skills and knowledge to enable us to live in a world where the problems of providing sufficient goods, the social strains of living closely together, and the ecological dangers of ruining our environment all threaten survival itself –p.33
-sentence also coded under ‘HCT’
51. (#2) society may assent to the allocation of public funds for post-secondary education in the belief that learning and research contribute to social mobility, economic growth, the conquest of nature, social criticism, and personal development –p.35
-sentence also coded under ‘HCT’
52. (#1) however learning may actually proceed, it remains the essential goal and purpose of education – p.35
53. (#1) all facets of the post-secondary educational system – should be oriented towards serving individual students rather than the institutions themselves, future employers, or the professions – p.35
-followed by a sentence saying other purposes should be secondary
54. (#1) it can serve the paramount goal of human development by providing individuals with genuine life choices that are intrinsically valuable and socially acceptable –p.41
-discussing provision of alternatives to formal schooling
55. (#1) it can also help liberate post-secondary institutions from their custodial functions, so that they can pursue their central goals of learning and scholarship –p.41
-following sentence says these goals are threatened in a society which uses post-secondary education as an alternative to underemployment and unemployment
56. (#6) it is needed to help individuals adjust to a changing labour market, and it is essential if they are to lead personally fulfilling lives in touch with their changing physical and cultural worlds – p.42
-lifetime learning is; sentence also coded under ‘HCT’
57. (#9) they need a great diversity of learning environments in which to shape their lifetime goals and to acquire the skills needed to function in today’s complex and ever-changing world – p. 50
58. (#12) traditionally, one of the chief functions of institutions of higher learning has been the expansion of such human knowledge through research and scholarship – p.63
59. (#A) the public interest requires, too, that post-secondary institutions design their professional and para-professional study programs to provide students with a broad understanding of the social implications of their professional activities, and of the interplay and need for communication among related professions and para-professions – p.68
60. (#A) professional education should consist in more than the narrow acquiring of skills –p.68
61. (#2) we expect our teachers to equip our young people for socially and individually satisfying lives in a manner that both preserves important values of the past and prepares individuals for the future – p.69
62. (#A) On the contrary the desire of the Franco-Ontarian to live in a French milieu is perfectly harmonious with the equal desire to contribute fully to the cultural, economic, and technical progress of his province and of his country –p.82

-sentence also coded 'Ambiguous' under 'HCT'

63. (#2) must be given the opportunity of becoming conversant with both English and French so that in the next generation our citizens may be competent to communicate freely with their fellows of the other tongue in Quebec or elsewhere – p.83

-quote from Hall-Dennis report

64. (#2) truly bilingual experiences are culturally enriching and educationally broadening – p.84

65. (#2) they can provide individuals with ready access to the vital centres of French and English-Canadian culture – p.84

66. (#A) interplay of study and work in Ontario a source of individual enrichment and growth – p.98

67. (#1) nor should learning be simply preparation for a livelihood, however real that need may be – p.98

68. (#1) work and education, separately and together, have the potential for becoming complementary parts of an individual's life, bringing to him the deep satisfactions of self-creation that go well beyond monetary return – p.98

69. (#7) freedom of the individual member of the university to dissent, to criticize, to investigate the unknown (which is basic)...-p.108

70. (#2) institutions with a large measure of independence are worth preserving – that they are a fertile source of important social and intellectual values in a free society – p.111

71. (#5) an important duty of college and university teachers is to voice criticism and dissent – p.120

72. (#5) our society looks to them for the closest scrutiny of its institutions; it expects them to question its dominant values and myths, and its accepted theories of nature and social relations – p.120

73. (#2) it can, we think, enlarge society's understanding and mastery of itself and its environment – p.120

74. (#5) but when society asks a group of its members to bite the hand that feeds it, and to do so in connection with the socially sensitive task of teaching, it must protect them in the exercise of that duty – p.120

75. (#11) they have an obligation to share their knowledge and expertise with society through teaching, research, and community service – p.121

76. (#2) the legitimate social and intellectual value of much work done by academics outside their institutions – p.121

77. (#3) students should face the full, general responsibilities of any citizen, as well as their special responsibilities to the task of learning itself – p.122

78. (#7) more freedom in teaching, greater possibilities for innovation and discovery in learning and research, and more critical evaluation of society and its problems – p.122

79. (#3) to these institutions the public entrusts both the education of its citizens and the duty to explore the unknown, question the known, and criticize its social order and institutions – p.137

80. (#5) institutions are supposed to be truly critical of the society that supports them – p.137

81. (#8) such a system will not guarantee breadth – p.141

-discussing need to keep certain disciplines even if no public support for them

82. (#2) the disciplined skills and knowledge necessary for the maintenance and advance of civilization are largely transmitted through education –p.169

83. (#3) what is required, in fact, is still more widely disseminated learning, to enable the ever more involved and delicately balanced processes of civilization to endure and grow – p.169

84. (#2) individual's right (indeed, for the good of society as well as himself) to ask for further educational opportunity at the post-secondary level – p.207

1981 Review

HCT:

1. (#9) to educate and train people for the professions – p.1

-discussing objectives for universities

2. (#2) universities, which provide the base for innovations, technology, and development – p.2

-in context of discussing government's economic development initiatives

3. (#10) they have the major responsibility for developing the professional manpower needed for economic growth – p.4

4. (#2) in any society, the health of business and industry...is related very directly to the quality of the universities – p.4

- sentence also coded under 'Liberal Education'
- 5. (#3) By developing a more educated populace, universities enhance the capacity of our people to...compete successfully – p.4
 - sentence also coded under 'Liberal Education'
- 6. (#9) By educating and training people for the professions, universities assist in providing the highly qualified manpower essential for maintenance and development of our complex technological society –p.4
- 7. (#3) By providing opportunities for study at the highest intellectual level, and by engaging in both basic and applied research, universities contribute in a major way to...enhancing our ability to compete internationally in business and industry –p.4
 - sentence also coded under 'Liberal Education'
- 8. (#6) enormous contribution that the universities have made in training highly qualified manpower – p.5
- 9. (#6) the universities have an essential role to play...in the training of highly qualified manpower – p.5
 - sentence also coded under 'Liberal Education'
- 10. (#7) the ability of the universities to respond to changing manpower needs – p.11
- 11. (#7) rapid technological advance in all fields of endeavour are making programs to "update" professionals essential –p.12
 - universities are to provide such programs
- 12. (#3) it has an important bearing on Ontario as this province strives to retain its competitive edge in industry and business –p.13
 - talking about shortage of graduate students in disciplines such as engineering, Computer science, business
- 13. (#9) if Ontario is to develop the capacity to train professionals in these areas – p.13
 - ambiguous, talking about engineering, computer science, business
- 14. (#6) the production of highly qualified manpower –p.13
 - in context, says this is an essential role of the universities
- 15. (#17) a very important part of this role is fulfilled by the education universities provide students in arts and science – p.13
- 16. (#17) many programs in arts and science...provide the basis for a professional career in the discipline – p.13
- 17. (#12) if we are going to remain competitive, we must make a major effort both to strengthen our research and development activities, and to ensure that research results are carried through to commercially successful applications – p. 15
 - in context of discussing Ontario competing in international market place and necessity of this for income growth and new jobs
- 18. (#1) applied research can provide a large immediate pay-off – p.15
- 19. (#A) the neglect of basic research eventually affects the ability to sustain applied research and development – p.16
- 20. (#A) the many arts and science disciplines that are in effect professional and career-oriented, such as computer science, chemistry, psychology, and economics – p.17
- 21. (#1) university research has had both immediate and long-term benefits in many fields – p.19
 - in context of discussing developments worth millions of dollars to industries in Ontario and Canada
- 22. (# 12) in agriculture, increases in production that have resulted from university research have enabled agriculture to remain a vital industry in Ontario – p.19
- 23. (#1) the committee's judgement is that funding at the level of Model 1(a), including provision for real increases in spending, can be justified in terms of Ontario's critical need for economic...development – p.22
- 24. (#2) Ontario needs educated mind-power and both basic and applied research if it is to have any hope of succeeding with its economic development goals... -p.22
- 25. (#7) the promotion and improvement of the capacity of the universities to respond to the skill requirements of high-technology industries – p.22
 - in context of discussing new economic development priorities, and funds made available to universities as result of Board of Industrial Leadership and Development document and bill incorporating IDEA
- 26. (#6) a solid university infrastructure is needed as a base for the production of highly skilled manpower and research – p.23

- reason for increased provincial funding
- 27. (#2) both research and the education of highly qualified manpower will be required if the province is to reach its goal of economic development...-p.25
- 28. (#7) industry's need for the manpower and research that universities produce -p.39
- 29. (#12) the demands of industry are necessarily short term, but industry, too, ultimately depends on the results of long-term research - p.39
 - discussing importance of basic research
- 30. (#2) attainment of the objectives established for the universities will contribute to the economic...growth of Ontario -p.42
 - sentence also coded under 'Liberal Education'
- 31. (#A) more academic programs in professional continuing education should be provided in co-operation with the professional organizations - p.45

Liberal Education:

1. (#1) to develop a more educated populace - p.1
 - discussing objectives for universities
2. (#4) to provide study at the highest intellectual level - p.2
3. (#A) to conduct basic and applied research, including development and evaluation - p.2
4. (#2) to provide service to the community -p.2
5. (#2) the provision of skills and knowledge that will allow graduates to play a vital role in our society - p.2
6. (#4) the promotion of the powers of the mind so as to create men and women with a love for learning and the motivation to seek new knowledge throughout their lifetimes - p.2
7. (#7) the search for truth and new understanding beyond the frontiers of present knowledge - p.2
8. (#2) the transmission of our common culture both to its student body and to the wider community - p.2
9. (#2) the provision of graduates whose attitudes are consistent with the free society in which we live - p.2
10. (#8) the educated generalists produced by the arts and science programs - p.2
11. (#2) strong and vital universities are essential instruments for the development and improvement of our society -p.4
12. (#6) the responsibility of developing human resources to their fullest capacity - p.4
13. (#2) the health...of the society itself, is related very directly to the quality of the universities - p.4
 - sentence also coded under 'HCT'
14. (#2) Each objective contributes in an important way to the well-being of this province and this country -p.4
15. (#3) By developing a more educated populace, universities enhance the capacity of our people to be creative and innovative, to play a role in the improvement of society...-p.4
 - sentence also coded under 'HCT'
16. (#A) By providing opportunities for study at the highest intellectual level, and by engaging in both basic and applied research, universities contribute in a major way to improving the quality of life in Ontario and in Canada... -p.4
 - sentence coded under 'HCT'; seems to be suggesting importance of intellectual development for economic ends
17. (#2) By their many contributions to community service, universities enrich the communities in which they are located as well as the large provincial and national communities - p.4
18. (#2) society is poorly served if the quality of what the universities do is below acceptable standards - p.4
19. (#2) inferior programs of instruction and low-quality research...are no contribution to Ontario or to Canada -p.4
20. (#1) the committee...reaffirms its belief in the enduring value of liberal education - p.5
21. (#6) the universities have an essential role to play in the personal development of the individual...and in fostering intellectual activity at the highest level - p.5
 - sentence also coded under 'HCT'
22. (#2) visa students enrich the student body and enhance cultural and trade relations - p.19
23. (#A) to fulfill their mandate universities must be free to make the basic decisions on who shall teach, what shall be taught, and who shall be taught - p.35

24. (#A) scholars at Ontario universities must remain abreast of significant advances throughout the world in their areas of expertise and have opportunities to concentrate on work that will enable them to contribute to those advances – p.38
25. (#2) contributions that Ontario universities have made to science, culture, and technology – p.39
26. (#A) the services faculty perform for the community are by-products of their academic and professional activities and often enhance their effectiveness within the university – p.40
27. (#2) attainment of the objectives established for the universities will contribute to the...social growth of Ontario – p.42
-sentence also coded under ‘HCT’
28. (#2) the contributions made to culture, science, and technology, and the long-term benefits of research – p.50
-repetition

1984 Review

HCT:

1. (#A) better enable the universities of Ontario to adjust to changing...economic conditions – p.terms of reference
-also coded as ‘Ambiguous’ under ‘Liberal Education’
2. (#2) their ability to contribute to the...economic...foundations of society – p.terms of ref
-sentence also coded under ‘Liberal Education’
3. (#7) level of enrolment in these programs to respond to changing labour market requirements – p.terms of ref
-professional programs, talking about how adjustments could be made
4. (#A) better enable the universities of Ontario to adjust to changing...economic conditions –terms of ref
-repetition
5. (#1) our conviction that the measures we have advocated to promote the well-being of our university system are also investment decisions – p.1
6. (#1) partnership between Government and our universities will yield positive returns to our economy and society – p.1
7. (#A) enable the universities of Ontario to adjust to changing...economic conditions – p.2
-repetition
8. (#2) their ability to contribute to the...economic...foundations of society – p.2
-repetition
9. (#18) the development of human capital through higher education – p.2
10. (#9) to educate and train people for the professions – p.3
11. (#7) increasing demand for...highly qualified manpower in special areas –p.4
-one of the factors influencing the universities
12. (#7) if the universities are to be responsive to the needs of...the economy –p.4
-sentence also coded under ‘Liberal Education’
13. (#1) recognition of the vital importance of higher education, in an increasingly knowledge-based society and international economy, as an investment in the development of valuable human capital – p.5
14. (#1) university research and scholarship as an investment in the development of knowledge which is a critical element in the growth and vigour of society –p.5
15. (#A) universities have become an integral component of the modern knowledge-based technology-driven society and economy – p.5
16. (#2) the university plays a crucial role in the development of our economic...system – p.5
-part of OFL brief; sentence also coded under ‘Liberal Education’
17. (#6) it acts as a major training centre for the manpower requirements of the economy and as such must recognize its place in overall human resource development priorities – p.5
-part of OFL brief
18. (#12) the research capacity of the university generates the knowledge which allows society to continue to produce on or near the cutting edges of modern technology and in effective competition with producers in other countries – p.5
-part of OFL brief

19. (#7) in both research and education/training, the university is involved in a symbiotic relationship with the economy – p.5
-part of OFL brief
20. (#2) insufficient teaching and research weakens the economy...-p.5
-part of OFL brief; sentence also coded under 'Liberal Education'
21. (#2) it is no coincidence that the amazing expansion of the university system over the past twenty-five years coincided with record economic growth – p.5
22. (#7) the contribution that universities can make to the private sector through the highly educated graduates they produce and the research and scholarship they perform –p.5
23. (#12) the development of closer and more effective linkages between corporations and universities is essential to facilitate not only the production of more technology as a direct result of new knowledge but its diffusion and application within industry – p.5
24. (#2) "there is a strong interconnection between the growth and vitality of this economy and excellence in our university system" – p.6
-quote from a businessman
25. (#A) quality of the universities and the graduates they produce – p.6
26. (#2) importance of first class universities for future Canadian development and progress – p.6
-in context of discussing economic importance of universities
27. (#A) the research conducted in universities not only provides highly qualified manpower...-p.6
28. (#12) the knowledge-intensive industries have increasingly been looking to universities as the sources of new knowledge to serve their particular interests –p.6
29. (#2) in many states and communities in the United States the need to strengthen their research-intensive universities has become a key objective in their goal of ensuring the development of new knowledge-based industries in their regions – p.7
30. (#12) possession of such advanced knowledge in fields undergoing rapid change is of critical importance in relation to developments involving the transfer of knowledge to application – p.7
31. (#1) such expenditures should be considered as *investments*, required to support the intermediate and longer term social and economic development of Canada and of Ontario – p.8
32. (#2) the significance of the...economic contributions of these universities to their communities was also forcefully underlined – p.9
-sentence also coded under 'Liberal Education'
33. (#A) equally important in an era of rapid advances in knowledge is the provision by universities of academic programs enabling those in the professions to improve their qualifications and keep abreast of new developments – p.9
34. (#2) the lowest participation by Franco-Ontarians is in just those areas of study perceived to be most valuable in terms of the future economic growth and development of the country – p.9
35. (#2) remains the need for expansion in the availability of such programs, especially in professional fields and in areas of study related to economic development – p.9
36. (#16) the employment outlook for university graduates... appears to be promising – p.10
37. (#7) graduates capable of working at the forefront of knowledge-intensive areas, such as advanced technology and in the social and health sciences, will be crucial to the long term health of Ontario and of Canada, and universities must meet this need – p.10
38. (#8) the majority of employment opportunities will not require specialization in high technology, but rather graduates who throughout their lifetimes will be adaptable to changing opportunities, who will understand their own specialities within a wider context, and who will be able to utilize new developments within their own fields – p.10-11
39. (#17) representatives of business and labour frequently emphasized the need for graduates who have communication skills, who possess computer and technological literacy in the sense of understanding the wider application of computers and technology, and who are specialists able to transform themselves into functional generalists – p. 11
40. (#7) level of enrolment in these programs to respond to changing labour market requirements –p.11
-repetition
41. (#7) view that increasing numbers of university-trained nurses at baccalaureate, master's and doctoral levels are necessary if the profession is to meet the technological and societal changes facing both the profession and the health care system as a whole –p.11

42. (#2) the demand for graduates in computer engineering and computer science, electrical engineering and engineering management during the next decade, arising primarily from the need to sustain and accelerate growth in the information-based industries in Ontario – p.12
43. (#2) need to reinforce the research capacity of our universities...relates to their capacity to play a leading role in contributing to the development of new and rapidly developing fields of importance to the economic...development of our country – p.13
-sentence also coded under ‘Liberal Education’
44. (#12) reward objectives such as technology transfer to Canadian industry – p.15
-in context of discussing differentiation
45. (#1) the added personal benefits that users receive – p.17
-in context of increasing tuition fees
46. (#A) our research effort while good is constrained in its efforts to meet the competitive challenges of a new era – p. 17
47. (#7) level of enrolment in these programs to respond to changing labour market requirements –p.20
-repetition
48. (#A) for example, in the case of Ryerson its emerging functions in applied research in relation to industry, particularly in the new technologies – p.20
49. (#A) very impressive benefits which would accrue to the system if the opportunity to appoint younger faculty were restored to a normal level – p.21
-in context of discussing human capital
50. (#1) we would be replenishing our stock of productive human capital – p.22
-presence of talented new faculty would confer benefits
51. (#A) the Commission emphasizes very strongly the multiple benefits that would flow from the provision of such a Renewal and Adjustment Fund – p.22
52. (#3) the requirement that our universities possess the capacity to contribute effectively to the development and international competitiveness of Canada – p.23
53. (#A) the important national role played by Ontario universities and particularly the University of Toronto in providing highly specialized and therefore especially expensive graduate programs not available in many of the other provinces – p.23
54. (#2) Michigan is placing a high priority upon the crucial role which its universities will have to play in the economic...revitalization of that state – p.23
-sentence also coded under ‘Liberal Education’
55. (#2) addressing the longer-run capacity of Ontario universities to contribute to the development of Ontario and Canada through their instruction and research – p.23
-in context, by ‘development’ they most likely mean economic
56. (#1) repayment of the costs of a post-secondary education would be directly related to earnings, the potential for which is usually significantly enhanced by the receipt of that education – p.25
57. (#2) in the interests of both the province and the nation additional support to meet the costs of such research is urgently required – p.26
-referring to “resource-intensive” research activity
58. (#1) this would represent a provincial investment in Ontario’s capacity for economic development as distinguished from funding for educational programs – p.26
-additional provincial funding for resource-intensive research
59. (#7) the private sector, which is one of the major beneficiaries of the university system in terms of the graduates employed and the application of research results – p.27
60. (#1) in an increasingly knowledge-based society and economy the potential for mutual benefits to universities and industry from closer links between them is likely to be of benefit to society as a whole – p.27
61. (#1) to support innovative and risky programs with potentially large long-range pay offs – p.27
-talking about use of private funds
62. (#2) society and its economic development need the knowledge which universities preserve and extend – p.27
63. (#12) commercial applications of research and the involvement of faculty in commercial enterprises – p.27
64. (#A) growing realization of the potential benefits to both industry and university from a variety of such linkages – p.28

-industry-university linkages

65. (#7) development of co-operative education programs involving alternating terms in university and industry, operated by a number of Ontario universities – p.28
66. (#12) while the primary research function of universities must continue to lie in basic rather than applied research, there is real value in the constructive interrelationships between basic and applied research encouraged by closer university-industry links – p.28
67. (#2) if a major objective of the Province of Ontario is to stimulate new areas of technology which may be relevant to provincial industrial development, it will be necessary to provide incentives and encouragement for industry-university co-operation – p.28
68. (#A) better enable the universities of Ontario to adjust to changing...economic conditions – p.32
-repetition
69. (#2) the role of universities...in contributing to...economic development, in educating highly qualified manpower –p.34
-sentence also coded under ‘Liberal Education’
70. (#12) we emphasized the importance of support for resource-intensive research within the universities over and above the core instruction and related research covered by the EPF transfers – p.34
71. (#2) this is vitally important if our universities are to contribute to the technological growth and development of Canada – p.34
72. (#2) the contribution of universities to...economic development, providing highly qualified manpower – p.35
-sentence also coded under ‘Liberal Education’; repetition
73. (#2) the Commission recommends that the maintenance and strengthening of a well-functioning, high quality and broadly accessible university system be given a high provincial and national priority as a critical element in restoring growth and competitive vigour to the economy and society – p.36
74. (#1) a recognition of the vital importance of higher education, in an increasingly knowledge-based society and international economy, as an investment in the development of valuable human capital – p.36
75. (#12) a recognition of the equally vital importance in such a context of university research as a base for the development and application of new knowledge – p.36
76. (#A) academic programs in professional continuing education (upgrading and updating in the professions) be encouraged – p.37
77. (#A) universities in designing their undergraduate and professional program curricula seek a balance between general and specialized studies aimed at producing graduates who will be adaptable through their lifetimes and who will understand their own specialities within a wider context and in relation to new technological developments – p.37
78. (#1) the added personal benefits that users receive – p.39
79. (#A) importance both nationally and provincially of enhanced support for resource-intensive research, as distinct from research directly related to education – p.41

Liberal Education:

1. (#A) better enable the universities of Ontario to adjust to changing social...conditions –p.terms of ref
-also coded as ‘Ambiguous’ under ‘HCT’
2. (#2) their ability to contribute to the intellectual,...,social and cultural foundations of society – p.terms of ref
-sentence also coded under ‘HCT’
3. (#2) concentration of academic strengths in areas of intellectual and social importance – p.terms of ref
4. (#A) better enable the universities of Ontario to adjust to changing social...conditions – p.terms of ref
-repetition
5. (#A) better enable the universities of Ontario to adjust to changing social...conditions – p.2
-repetition
6. (#2) their ability to contribute to the intellectual,...,social and cultural foundations of society – p.2
-repetition
7. (#2) the contribution of Ontario’s universities is vital to the development of Canada as a whole – p.2
8. (#2) the provision of skills and knowledge that will allow graduates to play a vital role in our society – p.3

9. (#4) the promotion of the powers of the mind so as to create men and women with love for learning and the motivation to seek new knowledge throughout their lifetimes – p.3
10. (#2) the search for truth and new understanding beyond the frontiers of present knowledge – p.3
11. (#2) the transmission of our common culture both to its student body and to the wider community –p.3
12. (#2) the provision of graduates whose attitudes are consistent with the free society in which we live – p.3
13. (#2) to develop a more educated populace – p.3
14. (#4) to provide study at the highest intellectual level – p.3
15. (#A) to conduct basic and applied research including development and evaluation – p.3
16. (#2) to provide service to the community – p.3
17. (#2) the cardinal role of the universities in the development of new knowledge in scientific and technological fields and in relating this development to its impact upon society and human values
18. (#2) if the universities are to be responsive to the needs of society –p.4
-sentence also coded under ‘HCT’
19. (#8) shrinking nature of the world, which increases the importance of international perspectives in all academic programs – p.4
20. (#2) the increasing public expectation that in the use of knowledge within society greater consideration will be given to the impacts of technology not only on the economy but more broadly upon society, culture and human personal needs, thus pointing to important developing roles for the humanities and social sciences – p.4
21. (#2) importance for undergraduate curricula of...the emphasis upon the multi-cultural diversity of Canadian society – p.4
22. (#A) our national well-being is at stake – p.5
-quote from a respondent to the commission; difficult to tell if ‘national well-being’ is conflated with ‘economic growth’
23. (#2) the university plays a crucial role in the development of our...social system – p.5
-part of OFL brief; sentence also coded under ‘HCT’
24. (#1) insufficient teaching and research...curtails the pursuit of knowledge for knowledge’s sake – p.5
-part of OFL brief; sentence also coded under ‘HCT’
25. (#2) concentrations of academic strengths in areas of intellectual and social importance – p.5
-repetition
26. (#2) their research yields fundamental insights that are not specifically tied to application but which lay the essential intellectual base for future scientific, social, technological and economic advances – p.6
27. (#7) scholarly inquiry, critical appraisal, and weighing of evidence, for instance, are essential to every field of academic endeavour – p.7
28. (#6) as a longer-run strategic objective this policy remains valid both to develop the potential for self-fulfillment of the citizens of Ontario and to make available to the full the human resources which Canadian society will need in an increasingly knowledge-based world – p.8
29. (#2) the significance of the social, cultural...contributions of these universities to their communities was also forcefully underlined – p.9
-sentence also coded under ‘HCT’
30. (#8) the potential loss in the quality of the educational experience for Canadian students within Ontario universities if the international element in their student bodies were to continue to diminish sharply –p.10
31. (#5) the value of studies in the liberal arts and sciences as a basis for developing capacity for critical thinking, leadership and adaptability was often raised in our hearings at the universities – p.11
32. (#1) liberal arts education has beneficial effects not produced by any other kind of education – p.11
33. (#2) need to reinforce the research capacity of our universities...relates to their capacity to play a leading role in contributing to the development of new and rapidly developing fields of importance to the...social development of our country – p.13
-sentence also coded under ‘HCT’
34. (#2) concentration of academic strengths in areas of intellectual and social importance – p.13
-repetition
35. (#1) without eliminating the existence within each university of a coherent core of arts and science undergraduate programs – p.13
36. (#1) an adequate base of undergraduate programs in the liberal arts and sciences must be available in all universities – p.14

37. (#2) Michigan is placing a high priority upon the crucial role which its universities will have to play in the...social revitalization of that state – p.23
-sentence also coded under ‘HCT’
38. (#1) those who see universities as serving a broader function have argued that only by standing apart from the immediate concerns of society can universities realize their full potential as autonomous centres of learning – p.27
39. (#11) universities in turn cannot fulfill their intrinsic function of preserving, transmitting, and creating knowledge without the culture and resources of society to nourish them –p.27
40. (#A) better enable the universities to adjust to changing social...conditions – p.32
-repetition; sentenced also coded as ‘Ambiguous’ under ‘HCT’
41. (#2) not only from the perspective of the province but in terms of what our universities can do to promote the general development and welfare of Canada as a whole – p.34
42. (#11) universities by the very nature of their functions in generating, preserving, and transmitting knowledge, have a wider provincial significance, a significance which is also national and indeed international – p.34
43. (#2) the role of universities in research, in contributing to social...development...makes them a national concern – p.34
-sentence also coded under ‘HCT’
44. (#2) academic concentrations in areas of intellectual and social importance – p.34
-repetition
45. (#8) presence of some international students within our universities does contribute to the quality of the educational experience within Ontario universities – p.35
46. (#2) the contribution of universities to research, social...development – p.35
-sentence also coded under ‘HCT’
47. (#2) concentrations of academic strengths in areas of intellectual and social importance – p.36
-repetition
48. (#1) an adequate and coherent base of undergraduate programs in the liberal arts and sciences be available in each university – p.38
49. (#2) concentrations of academic strengths in areas of intellectual and social importance – p.38
-repetition

1996 Discussion Paper

HCT:

1. (#17) critical need for knowledge and skills that differ from those required in the past – p.1? message from minister
-in response to business and industry requirements
2. (#16) those in the labour force with either a postsecondary certificate or diploma or a university degree have consistently had a lower unemployment rate than those lacking these qualifications – p.3
3. (#9) to educate and train for the professions – p.4
4. (#7) as the skills needed in the Ontario workforce change – p.4
-some programs at colleges and universities offer training and retraining to provide needed skills for workforce
5. (#1) benefits from the investment of time and money, both by the public and student, in postsecondary education – p.5
6. (#7) to help meet employer and workforce requirements for well-educated and well-trained graduates and high-quality research – p.5
7. (#3) to help make Ontario more competitive internationally in all fields of endeavour – p.5
8. (#2) contribution made by postsecondary education to the economic...development of the province – p.5
-sentence also coded under ‘Liberal Education’
9. (#2) education and training...to contribute to the economic...development of their communities –p.6
10. (#1) expenditures on postsecondary education result in significant gains for the province’s economy – p.6
-sentence also coded as liberal education

11. (#10) potential of graduates and research activities to contribute to the economic...development of the province – p.6
-sentence also coded under ‘Liberal Education’
12. (#7) system’s ability to meet employer and workforce requirements for well-trained graduates – p.6
13. (#8) increasingly, an individual’s employability depends on education, training, or retraining at the postsecondary level – p.6
14. (#7) new educational demands generated by...changes in employer and workforce requirements – p.6
15. (#8) the demand for postsecondary education will grow as employability is increasingly linked to level of education – p.8
16. (#8) most good jobs, now and in the future, require at least 17 years of formal education – p.8
17. (#8) extended or continuing learning important to the lives and employment prospects of all citizens – p.8
18. (#13) since 1990, nearly all new jobs in Ontario have gone to workers with postsecondary education, and these new jobs have been created in industries and occupations where the average weekly pay was above the average for all workers – p. 8
19. (#17) increasingly, employers require workers who possess “generic” learning and research skills, thinking skills, and communication skills that allow them to function effectively in new and unfamiliar situations, adapt to changing technologies and jobs, and engage in continuous learning – p.8
20. (#8) increased demand for postsecondary and continuing education programs that can open up new routes to employment – p.8
21. (#2) the government recognizes that Ontario’s ability to provide widespread access to postsecondary education will have a direct effect on the long-term economic well-being of the province – p.8
22. (#16) consequences could include a decline in the educational level and employability of the province’s workforce, with a corresponding increase in government expenditures on social services such as unemployment insurance...-p.8-9
23. (#2) criteria for allocating resources to postsecondary education should emphasize initiatives that can contribute to the economic development of the province and produce graduates who possess skills needed in the labour force – p.9
24. (#6) the provision of postsecondary education meets society’s need for a trained workforce – p.11
25. (#13) it also increases students’ potential earning power...-p.11
-sentence also coded under ‘Liberal Education’

Liberal Education:

1. (#2) develop a more educated populace – p.4
2. (#4) provide study at highest intellectual level – p.4
3. (#2) conduct basic and applied research, including development and evaluation to provide service to the community – p.4
4. (#2) contribution made by postsecondary education to the...social development of the province – p.5
5. (#2) education and training...both to develop their personal potential and to contribute to the...social development of their communities – p.6
-sentence also coded under ‘HCT’
6. (#2) potential of graduates and research activities to contribute to the...social development of the province – p.6
-sentence also coded under ‘HCT’
7. (#6) provides them with additional opportunities for personal fulfillment – p.11
-sentence also coded under ‘HCT’

1996 December Review

HCT:

1. (#1) The province has a postsecondary system of which they can be proud and which has provided tremendous benefit to individuals and to our society –p.1
2. (#2) a first-rate and accessible set of universities and colleges will contribute substantially to the economic...development of our society – p.3

- sentence also coded under 'Liberal Education'
3. (#1) the benefits of meeting this priority are enormous, as are the costs of not meeting it – p.3
 4. (#7) they are responsible for supporting the costs of training and research undertaken for their specific benefit – p.3
-talking about private organizations and individuals
 5. (#A) they are responsible for making the most of the public investment in their education – p.4
-talking about students
 6. (#9) to provide specialized knowledge and training for professions and vocations and to certify standards in the understanding and use of such knowledge – p.4
 7. (#A) a first-rate postsecondary education system is vital for Ontario's future – p.6
 8. (#1) taking out a loan to make an investment in education is analogous to taking out a loan to make a business investment – p.9
 9. (#7) business and other organizations have many specific training needs that colleges and, to a lesser extent, universities can provide –p.10
 10. (#A) we recommend that colleges explore more actively private and international training programs and that the provincial government's coordinating and regulatory role be supportive – p.10
 11. (#1) this province should be a leader, not a follower, in investing in its future – p.15
 12. (#A) there is little room in the global village for second rate, especially in learning – p.15
 13. (#A) with such evident strain on our public resources, we cannot afford to invest in mediocrity – p.16
 14. (#7) solving practical problems in industry – p.16
 15. (#17) acquiring specific skills required in the marketplace –p.16
 16. (#9) training for the ancient and emerging professions – p.16
 17. (#1) [institutions] serve the whole of society, offering enormous returns on the investment in a highly trained and educated labour force – p.16
-sentence also coded under 'Liberal Education'
 18. (#13) but there are also secondary benefits, accruing to individuals by virtue of their participation as students and scholars, not to mention their higher incomes and enhanced security of employment – p.16
 19. (#1) the public, through taxation, has made a great investment in its provincial colleges and publicly assisted universities; it has every right to continue to reap the benefits – p.17
 20. (#1) it promises rewards that have been the inspiration of civilized and prosperous societies throughout history –p.17
 21. (#9) to provide specialized knowledge and training for professions and vocations and to certify standards in the understanding and use of such knowledge – p.19
-repetition
 22. (#2) the importance of higher education...to economic prosperity – p.20
-sentence also coded under 'Liberal Education'
 23. (#6) preparation of knowledge workers for our economy – p.20
 24. (#2) a strong, vital, and accessible university and college system is essential to Ontario's development and competitiveness – p.20
 25. (#2) a belief in the crucial role that high-quality postsecondary education and research play in the...economic...development of the province –p.21
-sentence also coded under 'Liberal Education'
 26. (#17) increasing number of adults seeking to renew their skills as the world of work changes will be looking for flexible learning opportunities in colleges and universities – p.21
 27. (#7) receptive to opportunities for collaboration and cooperation that will benefit learners and employers – p.22
 28. (#1) private organizations and individuals are responsible for supporting the costs of training and research undertaken for their specific benefit – p.22
 29. (#1) students are responsible for making the most of the public investment in their education and for contributing to the costs at a level reflective of the personal and economic benefits that postsecondary education confers – p.22
 30. (#17) type of academic and vocational and advanced training programs that students need now and in the future – p.23
 31. (#1) institutions to set tuition rates that are reflective of the value and quality of their programs and of the economic benefits students derive from their education –p.23
 32. (#7) institution's capacity to be responsive to the needs of...employers – p.23

33. (#A) we heard from members of the postsecondary community who argued strongly that a financial ‘disinvestment’ in recent years...-p.24
34. (#A) we discuss the shared responsibility of all participants to invest in the system – p.25
35. (#A) Ontario would not have the highly-regarded postsecondary system it has today if the Province has not decided many years ago that it was in the public interest to invest in a high-quality, accessible system – p.25
36. (#1) the reduction in resources was likened to a “disinvestment” in postsecondary education in Ontario –p.25
37. (#17) in addition, the restructuring of the Ontario economy and labour force that we continue to experience puts a premium on participation in postsecondary education – p.26-27
38. (#8) significant net gains in jobs requiring postsecondary education –p.27
39. (#8) “[h]igh knowledge industries, though only one-third of total employment, contributed more to job growth than all other industries combined.” – p.27
40. (#17) as the world of work continues to restructure, there will be pressure for higher participation in postsecondary education from both secondary school graduates and adults seeking to renew their skills to function in a knowledge-based economy – p.27
41. (#A) level of investment required to ensure that system is capable of meeting the needs of learners and society – p.27
42. (#A) investment in Ontario postsecondary institutions compared to the investment in other parts of Ontario’s public sector – p.27
43. (#2) it takes decades to build a high-quality, effective postsecondary sector, but that such a system is fragile and can be undermined quickly with devastating consequences for our...economy – p.28
-sentence also coded under ‘Liberal Education’
44. (#3) the postsecondary system is an essential component of the infrastructure required for Ontario to be competitive in the emerging global knowledge-based economy – p.28
45. (#1) benefits that individuals and society derive from education, training and research – p.28
-in context of discussing economic outcomes in same paragraph
46. (#1) statistics pointing to higher unemployment rates, greater labour force mobility and stability, and higher earnings among college and university graduates compared to those with high school diplomas or less, confirm the value of postsecondary education to students – p.28
47. (#2) university research contributes to the economic...advancement of the province – p.28
-sentence also coded under ‘Liberal Education’
48. (#1) the economic benefits of education for individuals translate to the economic benefits for society as a whole – p.28
-sentence also coded under ‘Liberal Education’
49. (#7) there is little doubt that highly skilled workers will be needed to secure the province’s place in a highly competitive economy – p.29
50. (#7) government to point out the economy’s need for more skilled graduates and advanced research – p.29
-quote from CFS
51. (#1) the need for the province to renew its financial commitment to postsecondary education, for the sake of Ontario’s future prosperity, competitiveness and well-being – p.30
52. (#A) the advancement and well-being of our society depends heavily on new information that research provides regarding all aspects of daily life and work – p.32
53. (#12) university research contributes greatly to our economic competitiveness and to the pace of technological, scientific and medical advancement – p.33
54. (#12) the importance of strengthening industry collaboration with universities and colleges in research and development activities – p.34
55. (#1) students should contribute to the costs in recognition of the personal benefits they derive from postsecondary education – p.34
56. (#1) tuition fees could be directly linked to the economic benefits that students derive from their education –p.36
57. (#1) but return on investment calculations are more useful in demonstrating that students should be willing to invest in postsecondary education, than in determining the exact amount of that investment – p.36

58. (#1) a growing tendency on the part of parents and students to view education as a sound investment – p.39
59. (#1) taking out a loan to make an investment in education is analogous to taking out a loan to make a business investment –p.41
-repetition
60. (#3) factors related to international competitiveness, innovation and technology transfer suggest there are opportunities for expansion of support from the private sector – p.41
61. (#1) in view of the high average incomes of the “baby boom” generation, many of whom have reaped the rewards of postsecondary education, this is an excellent time for postsecondary institutions to make the case for increased support from individuals – p.41
62. (#1) growing awareness within the corporate community that philanthropic giving is important because it is, quite simply, an investment in society – p.41
63. (#7) at issue is the capacity to protect the overall integrity and relevance of academic pursuits while maintaining an openness to the perspectives and needs of business and industry – p.42
64. (#7) businesses and other organizations have many specific training needs that colleges and, to a lesser extent, universities, can supply – p.43
-repetition
65. (#6) studies by the training division of the Ministry of Education and Training suggest that while Ontario’s workers are among the best educated in the world, maintaining this position of strength will depend on Ontario’s ability to maintain a good supply of highly-educated, skilled and flexible workers – p.43
66. (#17) this goal will depend to an important degree on activities to upgrade and renew the skills of adults and experienced workers – p.43
67. (#7) colleges and universities will need to be increasingly flexible and responsive in order to serve both private and public sector training markets – p.43
68. (#7) failure to compete effectively in this area will mean that an important opportunity to service Ontario’s private sector...will be lost – p.43
-failure to serve training needs
69. (#A) the government needs to be supportive of this objective, and should not create obstacles or disincentives to the generation of revenues through the sale of specialized education and training services to the private sector – p.43
70. (#7) Ontario colleges and universities should ensure that they have positioned themselves as compelling, competitive candidates to provide required continuing education, upgrading and retraining services – p.44
71. (#7) colleges and universities working with the private sector are establishing a wide range of educational and research opportunities – p.44
72. (#A) the need for coordination with government as it develops and implements its strategic plans for advancing Ontario’s economic position in the international marketplace – p.44
-preceded by a sentence about prospects for increased revenue for Ontario’s postsecondary institutions in international markets and success depending on coordination with government
73. (#A) we recommend that colleges explore more actively private and international training programs – p.44
74. (#9) providing training for professions – p.45
-sentence also coded under ‘Liberal Education’
75. (#A) the mandate of colleges has evolved since their inception so that, today, they are institutions offering a full-range of remedial, postsecondary and advanced training activities geared to support immediate application in the labour market and to promote a lifelong learning philosophy – p.45
76. (#2) together colleges and universities contribute substantially to the economic...foundations of our society – p.45
-sentence also coded under ‘Liberal Education’
77. (#2) it offers Ontario’s citizens a rich array of resources to help them realize their...economic goals – p.45
-sentence also coded under ‘Liberal Education’
78. (#A) these reports called for expanded and improved college-university linkages and for greater ease in the transferability of postsecondary credits in response to the demand for programs which combine theory with practical application – p.46

79. (#A) the designation of a unique credential would strengthen the currency of the education provided by college and reinforce their recognition in the provincial, national and international marketplace –p.49
80. (#A) they [colleges] have recently made a commitment to establish system-wide standards for their two- and three-year diploma programs, incorporating general education and generic skills requirements – p.49
81. (#7) as the colleges develop niches of expertise which will combine theoretical and applied knowledge in ways which are important to specific sectors of our economy – p.50
82. (#1) labour market data strongly indicate that economic returns to postsecondary education are high – p.55
83. (#8) all recent net job creation in Ontario has focused on post-secondary graduates –p.55
84. (#16) employment for those with university degrees or post-secondary certificates and diplomas **increased** by 1 million – p.55
85. (#13) university and college graduates have lower rates of unemployment, higher rates of labour market participation and higher incomes than individuals with less education – p.55
86. (#8) the employment outlook of those without a postsecondary credential is becoming increasingly bleak and a postsecondary credential is becoming a *de facto* minimum requirement for satisfactory employment – p.55
87. (#17) it is also anticipated that higher-level skills derived from postsecondary education will be in higher demand as the job mix in our growing knowledge-intensive labour market continues in this direction – p.55
88. (#17) as the restructuring of Ontario's economy continues, it is expected that demand for both full-time and part-time study will increase, as people of all ages pursue learning to acquire knowledge and skills to remain competitive in the workplace – p.55-56
89. (#7) we believe collaborative institutional arrangements and partnerships with the private sector can offer cost-effective ways to acquire the technology and to develop or adapt curriculum – p.57
90. (#A) protect the currency of an Ontario university degree in the provincial, national and internally competitive academic marketplace –p.64
-discussing possibility of private-funded secular degree granting institutions
91. (#A) producer of university graduates of substandard quality – p.64
92. (#A) we must not destroy that inheritance, either through profligate spending or inadequate investment – p.66
93. (#2) we must, instead, build on it as the surest guarantee of our future prosperity in an uncertain world – p.66

Liberal Education:

1. (#2) a first-rate and accessible set of universities and colleges will contribute substantially to the...social and cultural development of our society –p.3
-sentence also coded under 'HCT'
2. (#2) education and research have characteristics of a public good – p.3
3. (#5) to help students to develop their capacity for critical and creative thinking and expression of ideas and to understand various aspects of the body of knowledge and values concerning the world without and within – p.4
4. (#8) to be a source for the generation of ideas across the spectrum from theoretical and curiosity driven scholarship and research to practical applications of knowledge, and to permit a better understanding within one's country of advances on the frontiers of knowledge regardless of where they are occurring in the world –p.4
5. (#11) to help preserve the body of knowledge and transmit it through students and through direct services to the community – p.4
6. (#12) basic research produces a public good – p.7
7. (#1) learning through research into the fundamental questions of humanity and nature – p.16
8. (#1) discovering and transmitting the wisdom of the past, confronting the moral dilemmas of the present – p.16
9. (#3) [institutions] serve the whole of society...in an informed and responsible citizenry – p.16
10. (#4) postsecondary education...is acquired through active learning – p.16
11. (#A) we propose no attack on conditions required for scholarly inquiry – p.17

12. (#5) to help students to develop their capacity for critical and creative thinking and expression of ideas and to understand various aspects of the body of knowledge and values concerning the world without and within – p.19
-repetition
13. (#8) to be a source for the generation of ideas across the spectrum from theoretical and curiosity driven scholarship and research to practical applications of knowledge, and to permit a better understanding within one's country of advances on the frontiers of knowledge regardless of where they are occurring in the world –p.19-20
-repetition
14. (#11) to help preserve the body of knowledge and transmit it through students and through direct services to the community – p.20
-repetition
15. (#2) the importance of higher education to the development of society...-p.20
-sentence also coded under 'HCT'
16. (#2) a belief in the crucial role that high-quality postsecondary education and research play in the development of individuals and the...social, cultural, and scientific development of the province – p.21
-sentence also coded under 'HCT'
17. (#2) need to ensure lifelong access to the benefits of postsecondary education for an increasingly diverse population of learners and the need to preserve these benefits for the good of society – p.21
18. (#2) education and research have characteristics of a public good – p.22
-repetition
19. (#2) it takes decades to build a high-quality, effective postsecondary sector, but that such a system is fragile and can be undermined quickly with devastating consequences for our society...-p.28
-sentence also coded under 'HCT'
20. (#2) these benefits are but one dimension of the contribution of education to the individual's social, cultural, and intellectual development – p.28
21. (#2) university research contributes to the...scientific, technological, social and cultural advancement of the province – p.28
-sentence also coded under 'HCT'
22. (#6) personal development of individuals contributes to societal development – p.28
-sentence also coded under 'HCT'
23. (#12) university scholarship and research make a major contribution to society – p.32
24. (#2) their role [universities] is to contribute to the betterment of society by developing an educated populace...providing study at the highest intellectual level, creating knowledge through scholarship and research, and providing service to the community –p.45
-sentence also coded under 'HCT'
25. (#1) their overall contribution to society is intended to focus less on the immediate needs of the workplace or the economy and more on developing the capacity for individuals to acquire basic critical skills and knowledge while also advancing their abilities to think clearly, to wonder and explore – p.45
26. (#12) interest of advancing knowledge both here in Ontario and throughout the globe – p.45
27. (#2) together colleges and universities contribute substantially to the...social and cultural foundations of our society – p.45
-sentence also coded under 'HCT'
28. (#2) it offers Ontario's citizens a rich array of resources to help them realize their social...goals – p.45
-sentence also coded under 'HCT'
29. (#7) we believe that the original rationale for tenure to protect individual faculty's freedom of inquiry and expression, or academic freedom, remains valid –p.59
30. (#5) tenure can play a critical role in ensuring that faculty are not harassed or dismissed because the nature of their ideas challenges current orthodoxy – p.60
31. (#8) in our view, narrow program offerings are not characteristic of the kind of institutions that we envisage as universities – p.63
32. (#1) we believe that, by definition, a university must offer, at a minimum, a reasonable range of arts and science programs and be engaged in teaching, research, and community service –p.63
33. (#11) furthermore, we envisage universities as institutions that, at their very core, have an enormous social responsibility for the creation and critical transmission of knowledge that places unique obligations

on its governing body and governance structures that may be fundamentally inconsistent with the obligations of a “for-profit” organization to shareholders or owners – p.63

2005 Review

HCT:

1. (#2) the importance of higher education to...the economy –p.i
-sentence also coded under ‘Liberal Education’
2. (#2) an excellent postsecondary education system, which provides opportunity for the people of Ontario and has a secure future, is essential for a competitive and prosperous society –p.1
-in same paragraph, this sentence follows one about government priority of ‘Strong People, Strong Economy’
3. (#6) excellence in curricular activities to build the skilled workforce and promising scholars of the future – p.1
4. (#6) government objectives for postsecondary education, including the objectives of better workers for better jobs in an innovative economy and an accessible, affordable and quality system – p.1
5. (#2) fundamental role that postsecondary institutions play in the economic...development of Ontario – p.2
-sentence also coded under ‘Liberal Education’
6. (#2) it matters for our...economy – p.5
-education does; sentence also coded under ‘Liberal Education’
7. (#A) their mandate to work closely with local employers to devise courses that would train their students for employment – p.5-6
8. (#2) education, research and innovation lie at the heart of our economy – p.6
9. (#17) what is new is the level and breadth of knowledge and skill required to make our way in the world – p.6
10. (#11) the wealth of Ontario now depends much more on the power of our brains – p.6
11. (#2) today our standard of living, and consequently our quality of life, depends on people having access to education
12. (#8) most jobs now require some level of postsecondary training – p.6
-in same paragraph, followed by suggestion to increase levels of participation
13. (#18) when half of our children are missing the experience, we are losing potential –p.6
-in context of discussing link between education and jobs
14. (#3) it will be to our competitive advantage – p.7
-to invest in higher education, to take it seriously
15. (#1) going to college or university is important enough that governments should invest more, but it is also important enough that we need to encourage students and parents to save and invest in it themselves – p.7
16. (#1) we must also convince the private sector that continued investment in research and innovation and philanthropy for student support are crucial to the future social and economic health of the province – p.7
17. (#7) because the new economy demands it, the number of people attending will need to rise substantially in the years ahead – p.7
18. (#A) our best will allow us to compete with the best in the world – p.7
19. (#2) if a relaxed public opinion convinces governments, students and administrators to do less, we shall literally be the poorer for it – p.8
20. (#A) we need to invest in graduate education immediately –p.10
21. (#18) the need for new investments in both skills training and graduate education – p.10
22. (#17) we must do a better job of training young people in the broad range of skills and talents that are required for the economy of the future – p.10
23. (#7) Ontario needs to expand significantly the number of skilled workers and apprentices it trains, as well as increase opportunities for Masters and PhDs – p.10
-in context of discussing needs of economy
24. (#8) when students drop out of high school and fail to make the transition to higher education, it becomes all the more difficult for them to get better jobs – p.12
25. (#2) education cannot do it alone, but it cannot be done without access to advanced learning – p.12

- breaking cycle of poverty and welfare
26. (#13) good evidence that education improves incomes – p.12
27. (#1) spending on higher education, whether by government, the student or the parent, is a good investment – p.12
28. (#1) money invested in these programs will reduce spending elsewhere – p.13
29. (#A) we can do a better job, starting in elementary school, of celebrating the various skills, professions and talents that make up our society –p.13
30. (#A) wide variety of skills and talents that are available and necessary for a good quality of life – p.13
31. (#A) Ontario’s definition of postsecondary education should explicitly include apprenticeship – p.13
32. (#17) a learning culture is also a training culture – p.14
-in context of discussing apprenticeships
33. (#6) how to ensure much greater participation from all parts of the private sector in developing a skilled workforce is clearly going to be a preoccupation of public policy for some time to come – p.14
34. (#2) the evidence is overwhelming that thriving and vital postsecondary institutions are a critical element in community economic development – p.14
35. (#7) how to ensure that both colleges and universities are meeting labour market needs -p.14
36. (#1) the public and students will only be prepared to provide more funding if they see the value of the expenditure – p.16
37. (#1) both government and students have a strong interest in making sure the money they are investing is well spent –p.16
38. (#1) it is well within human will and ingenuity to ensure that new money means better and more tangible results – p.17
39. (#6) given the centrality of Ontario’s role in accepting new immigrants to Canada and in the training of a generation of skilled people for the new economy, the unreliable nature of federal financial support is intensely problematic – p.18
-in context of discussing need for federal government to increase its spending on higher education
40. (#18) I am calling for an immediate expansion of investment in both graduate education and skills training –p.19
41. (#7) education and training should be seen (among many other things) as a springboard to work –p.21
42. (#1) think of these deferred costs as an investment on behalf of students and their parents, to be repaid later as a “Graduate Benefit” – an investment whose benefits clearly last a lifetime – p.22
43. (#1) core objection that graduates, who have benefitted from attending college or university, should not be expected to bear a reasonable share of the costs of higher education –p.22
-Bob Rae doesn’t accept this
44. (#1) while there is unquestionably a significant social benefit to higher education that should be recognized by a stronger commitment to public funding, there is also an important private benefit to the student and the graduate –p.23
45. (#A) I am recommending that the walls between colleges and universities continue to come down –p.25
46. (#1) I am asking students to recognize that they are significant beneficiaries of education and that tuition levels that fairly reflect the value of that education are reasonable –p.25
47. (#A) reaffirm the mandate of colleges to focus on occupational education and labour market needs – p.29
48. (#A) strategic investment envelopes tied to results and applied to both colleges and universities – p.36
49. (#2) it makes important contributions to economic performance...-p.40
-higher education does; sentence also coded under ‘Liberal Education’
50. (#A) reaffirm the mandate of colleges to focus on occupational education and labour market needs – p.45
-repetition
51. (#2) the province introduced a new type of educational institution that would deliver occupation-oriented programs, be responsive to employer and student needs, and contribute to the economic...well-being of the province –p.47
-discussing CAATS; sentence also coded under ‘Liberal Education’
52. (#2) “the objects of the colleges are to offer a comprehensive program of career-oriented, postsecondary education and training to assist individuals in finding and keeping employment, to meet the needs of employers and the changing work environment and to support the economic and social development of their local and diverse communities” –p.47

- sentence also coded under 'Liberal Education'
53. (#A) colleges provide a continuum of vocational learning from basic skills upgrading to applied degrees – p.47
54. (#13) these students face higher incidences of unemployment, underemployment and lower lifetime earnings than their peers who go on to postsecondary education –p.47
55. (#A) approximately 20% of all adult Ontarians do not have the basic literacy skills they need for sustainable employment – p.48
56. (#17) about 70% of adult immigrants who come to Ontario every year have at least some postsecondary education or training, but may need additional training or language skills to succeed in the labour market – p.48
57. (#2) attracting students who need the services colleges offer for their own success and that of the provincial economy –p.48
58. (#2) as with other types of college education, there is a strong economic imperative to support and grow apprenticeship training – p.49-50
59. (#A) with a mandate focused on occupational training, colleges are well positioned to take on additional roles and work more closely with all training partners, including union training centres and employers at local, regional and provincial levels, to target skills shortages and increase overall apprenticeship enrolments –p.50
60. (#17) as new technology is introduced, employers need workers with higher levels of skill and education – p.50
61. (#17) rapid changes in technology often result in shortages while workers and potential workers acquire the new skills required to be competitive in a global economy – p.50
62. (#7) strengthening the partnership between colleges and industry partners will more fully meet the needs of industry and individuals – p.50
63. (#1) government and institutions, together, must continue to prove to the public that their investment in higher education produces a great return – p.52
64. (#A) the supply of “teaching resources” – a combination of full and part-time faculty, librarians, teaching assistants and technologists, and other staff who dedicate time to teaching functions – is an important foundation on which to build teaching excellence – p.54
-maybe analogous to material resources
65. (#2) institutional program offerings and student services must demonstrably add significant value to the lives of individuals and the long-term economic and social health of the province –p.56
-sentence also coded under 'Liberal Education'
66. (#2) students from other countries who study in Ontario help promote our international reputation, contribute to further trade and economic development opportunities, bring expertise – including high quality researchers and graduate students – to Ontario, and enrich the postsecondary experience for all students – p.58
-sentence also coded under 'Liberal Education'
67. (#17) internationally trained workers will plot a course through the process of language acquisition, skills upgrading and entry to the job market – p.59
-talking about web portal for information
68. (#7) internationally trained workers are better informed about pathways through training, credential recognition and workforce entry – p.60
-talking about one outcome of web portal
69. (#8) the federal government estimates that up to 70% of all future jobs created in Canada will require some postsecondary education –p.62
70. (#5) with a current participation rate of around 40%, Ontario must take a more active approach if it is going to meet its labour market needs and improve its economic performance –p.62
71. (#2) it is also a barrier to realizing Ontario's economic...objectives –p.63
-unequal access; sentence also coded under 'Liberal Education'
72. (#8) the career options higher education opens up –p.66
73. (#A) about half of adults with disabilities are not in the labour force in Ontario, compared to 19% of other adults –p.69
74. (#16) for adults with disabilities in the labour force, the unemployment rate is almost twice the average for other adults and average income is only two-thirds that of other adults – p.69
-disabled people need access to higher education to do better in labour market

75. (#A) graduates who do not realize economic benefits from their postsecondary education would eventually have their loans written off by government – p.80
76. (#1) while obtaining a postsecondary education is an excellent financial investment for most people, it does not work out equally well for every graduate – p.81
77. (#7) expanding graduate enrolment must be about...preparing our industry innovators –p.88
-sentence also coded under ‘Liberal Education’
78. (#1) the Ontario Task Force on Competitiveness, Productivity and Economic Progress has pointed to underinvestment in university education, particularly at the graduate level, as a leading contributor to the 10% productivity gap between Ontario and peer U.S. states – p.88
79. (#7) the acquisition of state-of-the-art equipment and learning resources helps colleges deliver relevant and high-quality skills training and diploma programs that students deserve and employers expect – p.89
80. (#12) research nourishes excellence outside our institutions of higher learning by contributing to knowledge and innovation through pure advancements that result in long-term spinoffs, and through practical and applied solutions to immediate real-world problems – p.90
81. (#1) a clearer public appreciation of the returns from the investment, especially in the important and often misunderstood arena of basic research – p.91
82. (#A) there is no point in investing at the front end if the value of that investment is eroded over time, simply because no one wants to acknowledge the reality of price inflation –p.95
83. (#1) spending on higher education, whether by individuals through tuition fees or philanthropy, or by the public through their government, is investment spending –p.97
-following sentence says there are numerous benefits
84. (#1) some are very direct, such as better jobs, a stronger economy and more young nurses and doctors – p.97
-economic benefits
85. (#1) some are more subtle or indirect, such as the transfer of pure knowledge to applied solutions over time and improvements to the social fabric – p.97
-benefits of investing in education
86. (#A) we should be investing more – p.97
87. (#1) but we also need to know much more about the levels and types of investments that will give us the best returns – p.97
88. (#1) we need to identify measurable outcomes to validate our expectations of return on the investment over time – p.97
89. (#1) in fact, savings opportunities are the most effective way to leverage an increase in our investment – turning bad dollars into good – p.99
90. (#A) students can hold institutions accountable for the quality of programming and services they are buying – p.101

Liberal Education:

1. (#2) the importance of higher education to students, to Ontario society – and to the nation at large –p.i
-sentence also coded under ‘HCT’
2. (#3) education is what drives us forward, inspires innovation and creates an engaged democratic society – p.i
3. (#2) fundamental role that postsecondary institutions play in the...social and cultural development of Ontario – p.2
-sentence also coded under ‘HCT’
4. (#2) it matters for our society...-p.5
-education does; sentence also coded under ‘HCT’
5. (#2) Lafontaine said that education was “the first public good that a government can give to a people” – p.5
6. (#6) people have a right to develop to their full potential – p.6
7. (#1) learning is a value in itself – p.6
8. (#6) the capacity to be curious and reflective is what allows us to grow as individuals – p.6
9. (#2) to be learned and practised in a body of knowledge or a skill, to understand the time and discipline it takes to do something well: these are indispensable cultural values that need to be championed – p.6
10. (#12) basic research remains fundamental to the mission of higher education – p.10

11. (#7) academic freedom is also an important value – p.16
12. (#6) it makes important contributions to...personal fulfillment and social cohesion – p.40
-higher education does; sentence also coded under 'HCT'
13. (#2) the province introduced a new type of educational institution that would...contribute to the...social well-being of the province – p.47
-discussing CAATs; sentence also coded under 'HCT'
14. (#2) “the objects of the colleges are to offer a comprehensive program of career-oriented, postsecondary education and training to assist individuals in finding and keeping employment, to meet the needs of employers and the changing work environment and to support the economic and social development of their local and diverse communities” –p.47
-sentence also coded under 'HCT'
15. (#2) institutional program offerings and student services must demonstrably add significant value to the lives of individuals and the long-term economic and social health of the province –p.56
-sentence also coded under 'HCT'
16. (#2) international study is intensely enriching – p.57
17. (#8) participating students benefit from a broader education experience – p.57
-participation in international study
18. (#A) home and host institutions benefit from a more diversified student body – p.57
19. (#3) Ontario benefits from stronger ties and contacts with the rest of the world and citizens with a better understanding of global issues – p.57
20. (#8) students from other countries who study in Ontario help promote our international reputation, contribute to further trade and economic development opportunities, bring expertise – including high quality researchers and graduate students – to Ontario, and enrich the postsecondary experience for all students – p.58
-sentence also coded under 'HCT'
21. (#2) it is also a barrier to realizing Ontario's...social objectives –p.63
-unequal access; sentence also coded under 'HCT'
22. (#A) expanding graduate enrolment must be about expanding our capacity for discovery and excellence, about preparing our...college and university teachers, and about attracting and keeping great minds in Ontario – p.88
-sentence coded under 'HCT'
23. (#2) research nourishes excellence within universities and colleges by attracting great teachers and students from around the world and enriching the learning environment – p.90

Curriculum Vitae

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