Different but Equal? Post-Secondary Streaming in Ontario: A Comparison of the Labour Market Outcomes of College and University Students

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Abstract:

Community colleges are often perceived as a more expedient route to equivalent, or even higher levels of the labour market as the university sector. They are sometimes viewed as a democratizing force in post-secondary education, and Ontario colleges have described themselves as different, but equal to universities. However, contemporary national and provincial data offers empirical evidence which disputes such claims. This paper examines the graduation and employment rates, income levels, occupational sectors, socio-economic status and other variables of college students in comparison to university students, and suggests that colleges may be better described as a continuation of high-school, class based tracking which leads to distinctly different, and lower levels, of the labour market in comparison to the university sector.

Introduction

Does community college attendance lead to high status, well paying professional level employment? The specific 'career focus' and applied orientation of college programs are frequently said to offer greater employment options, income, and stability in comparison to university programs. While the college sector has historically suffered from low status (Brint & Karabel, 1989), its alleged superiority over university education has become accepted by much of the population in the contemporary era (Allen, 1998, pg.7, Giles and Drewes, 2001, pg.1)[1]. Popular anecdotes of unemployed university graduates, waiters with PhD's, and liberal arts graduates rushing to colleges to obtain specific vocational skills abound (Allen, 1998, pg.7). Only 25% of the population believes that a university education is the best post-secondary route, compared to 35% who feel a technical college diploma is the best choice, while 37% feel that a trade-apprenticeship, or a high school program with vocational courses is the best educational route for young people to take (Walters, 2004, pg.3)[2].

However, are these beliefs supported by empirical data and quantifiable fact? Are the labour market outcomes of college students equivalent, or even superior to university outcomes? Does community college attendance lead to professional level employment? As an important issue within the broader research field of education and work linkages, this paper will review empirical data from Ontario and Canada (as well as some comparative US data and theorizing) regarding the labour market outcomes of contemporary community college students, and compare them with university graduates in order to begin answering the previously posed questions.

Employment Rates: College and University Graduates Compared

College promotional material frequently make impressive claims regarding the employment rates of graduates, often boldly asserting rates as high as 98%. Such rates however, are not indicative of the overall employment picture of college students. Rates vary *considerably* according to field, and while some programs can boast high employment rates, the following must be considered: the college wide graduation rate in Ontario is only 56%[3] (Drea, 2004, pg.2) with some programs having graduation rates well below 20%. Only 61% of those who graduate are employed full-time (30 hours a week or more), while 9.5% are working part-time (only 10.1% of whom do so by choice), 9.2% are unemployed and 19.2% are not in the labour force (some of whom have ceased searching for employment). Of those working full-time, only 66% are employed in

[1] An Ontario poll found close to ¾ of adults believing that technical and vocational training should be emphasized at the expense of university education (Globe and Mail, July 15, 1998, pg. A6).
[2] In another article, Walters (2003) suggests that for-profit technical institutions exploit these popular sentiments in their advertising and public relations by encouraging recent university graduates to enroll in their programs in order to 'get skills' for the 'real world' (pg.3).
[3] The rate for Ontario Universities is 71% (Donner and Lazar, 2000, pg.6).

positions related to their field of study (Provincial Overview of Survey Results, 2003)[4]. Thus, in direct challenge to the inflated employment rates of graduates reported by the colleges themselves, only a minority (approximately 20%) of college students will graduate and land full-time employment in an occupation related to their field of study within the initial years of graduation.

More broadly, college graduates have significantly higher unemployment rates compared to university graduates. The unemployment rate for 25-29 year old high-school 'drop-outs' is between 20.9 - 22%, while the rate for high-school graduates ranges from 10.3 -14%. The rate for college graduates is just under 9%, while university graduates hold the lowest rate of between 4.1%-6.7% (Maslove, Fischer, and O'Heron, 1998, pg.4, Allen,1998, pg. 46).

University graduates have consistently maintained better employment rates than college graduates since the 1970's. While part-time employment has increased in recent years, a university degree buffers graduates against this trend as it is only those with less credentials who have seen an increase in part-time employment (Allen, 1998, pg.44). Whereas the employment outcomes of most workers have stagnated or worsened, the outcomes of university graduates have been improving in the 1990's (ibid., pg.20).
Allen, Harris, & Butlin (2003) confirm that:

> Unemployment rates for young community college graduates follow a pattern similar to rates for young adults in general through economic upswings and downturns, while the rate for university graduates is less likely to be affected by the business cycle (pg.'s 6-7).

The post-secondary graduates who are most likely to be employed on a full-time basis are: 1) those with university post-graduate degrees, followed by 2) university graduates, 3) college graduates and 4) graduates of trades programs (Walters 2004, pg. 7).

Income Levels

As evidenced by the public opinion surveys cited in the introduction of this paper, the belief that college graduates command salaries higher than the holders of 'obsolete' university degrees is fairly widespread. The empirical data however, does not lend support to this belief. Under few, if any circumstances do college graduates earn incomes comparable to university graduates. Walters (2004), surveying the Canadian National Graduate Survey writes:

> There does not appear to be any clear evidence that college and trades graduates have narrowed the earnings gap when compared with graduates of university programs. Trades, and then college, graduates are clearly at the bottom of the earnings hierarchy…In fact, the gap between them and university undergraduates appears to have widened slightly…When comparing the

[4] In comparison, the rate for Ontario University graduates was between 80-85% (Council of Ontario Universities, 2003).

> earnings of graduates of different fields of study, there does not appear to be solid evidence that the new economy has increasingly favoured graduates with technical and applied skills (pg. 6).

In general, Canadian university graduates earn 54% more than high-school graduates and 37% more than college and trades graduates (Ferrer and Riddell, 2002, pg. 9). Boothby and Drewes (2004) find that the income premium gained from completing a college diploma is "less than half and often as little as a third of the earnings advantage associated with university completion at the bachelor's level" (pg.2).

Comparing the annual incomes of women in the early 1990's, Allen (1998) finds that women high-school graduates in their 20's earn *higher* salaries than women in the same age group with post-secondary certificates and diplomas ($27,795 vs. $25, 519) while university graduates in the same group earn $33, 906 (pg.53). Certificate earning women in their 50's earn only slightly more than high-school graduates, $32, 440 vs. $29,321, while the university-educated group earned close to $46, 000 ($53, 759 for post-graduates) (ibid). Men in the 20-29 year-old age group with post-secondary diplomas and certificates earn higher incomes than the same group with just a high-school diploma ($34, 024 vs. $29, 530) while the university educated group earned just under $40,000. However, the earnings difference between high-school graduates and the post-secondary group for men in their 50's erodes, as high-school graduates earned $49,541 in comparison to the post-secondary diploma groups income of $49, 949. In contrast, university educated men's income matured to the greatest extent by their 50's to $69,181 (post-graduate degree holders earned just over $74,000) (pg.54).

For 25-29 year old men, attending post-secondary (non-university) without graduating does little to improve their income ($31,320) which is similar to the same group with just a high-school diploma ($30, 579). For 25-29 year-old women, attending non-university post-secondary with out graduating may actually work against them, as non-completers earn close to a thousand dollars a year *les*s than the same group with just a high-school diploma ($22, 601 vs. $23, 404). In contrast, 25-29 year-old university educated women earn roughly a third more than both these groups, at $32,669 (ibid., pg.50). In addition to higher salaries, university graduates also receive better benefits packages compared to less-educated workers (Maslove, Fischer, and O'Heron, 1998, pg.6).

Much has been made in recent years about university graduates combining their degree with an apparently more marketable, applied and 'practical' college diploma. This practice appears to work *against* university graduates as those who combine both credentials yield earnings lower than those with just a university degree, casting serious doubt on the claim that university graduates should supplement their degrees with college training:

> The labour market places a zero or even negative value on a college diploma or trades certificate when combined with a university degree. One explanation for this phenomena is that those who go directly from high school to university tend

> to be higher ability students. If so, employers could screen applicants according to their combinations of educational programs (Ferrer and Riddell, 2002, pg. 20).

Walters (2003) finds that Canadian college graduates who acquire a university degree *after* their college diploma, earn higher incomes than those with just a university degree. However, university graduates who complete a college diploma following their degree, earn *less* than those with just a university degree. Those who earn two college diplomas earn less than university graduates and only slightly more than those with just one college diploma (pg.9, Boothby and Drewes, 2004, pg. 2).

Importantly, the income gap between university and college graduates actually widens as workers mature in age. For men in their 50's, a university degree in any field yields greater income returns than *any* college field.

> Indeed, the earnings of those with post-secondary certificates or diplomas are little above those of high school graduates, so trade, technical, vocational and career programs are the ones whose utility is really called into question by the census data (Allen, 1998, pg.26)[5].

Do Colleges Offer Occupational Mobility? [6]

College programs are highly specific and narrow, restricted to particular occupations, and the immediate labour markets of local employers and industries (Mobley, 2002, pg. 264). Thus, the occupational skills and credentials of graduates often become redundant rather quickly, limiting mobility as college skills and credentials are often not transferable to different occupations and industries. The findings of Silver, Lavallee and Pereboom (1999) suggest that in comparison to degree holders, college graduates are limited by their credentials in 'external mobility' (the ability to change jobs or employers by ones own volition), 'internal mobility' (the ability to increase pay and advance within the same firm), and the 'screening/signaling' function of their credentials, which signal to employers that potential employees posses particular qualities, characteristics, and knowledge[7]. Where college training is limited to a particular occupation in a specific

[5] The credential with the highest earnings and employment rates is a graduate level university degree; these graduates earn substantially more than those with only a university undergraduate degree (Allen, 1998, pg. 29).

[6] It is important for the purposes of this paper to distinguish *occupational* mobility from *class* mobility. While it is possible that a number or college graduates obtain employment which offers relatively higher wages, status and/or skill levels than their parents, this does not entail upward class mobility from the working-class into the professional/managerial class. One may obtain inter-class mobility – moving up to higher levels of one class, without fundamentally committing 'class suicide'. The limited mobility that college credentials *may* offer students might be better referred to, to use Zwerling's (1982) term as 'horizontal' mobility.

[7] There is evidence that college credentials work to negatively screen applicants. The highly touted college IT programs in the US offer a telling example. Although these programs enroll large numbers of students, "community colleges do not make a significant contribution to the supply of IT workers" (Lerman, Riegg, Salzman, 2000, pg.2) as "the large IT firms are not very interested in hiring community college graduates because they have the money and resources to recruit at four year college's" (ibid., pg. 22). Although IT

industry, university liberal arts graduates "construct their own career ladders" and have greater mobility and flexibility in the labour market and can more readily use their credentials and skills to adapt to changes, different occupations and industries, advancing in the hierarchies of their own firm, and substantially increase their income with age (Allen, 1998, pg.25).

Added to the strong signaling/screening value of a university degree, degree holders enjoy greater mobility due to, in part, the university focus on developing broad generic skills; analytical reasoning, communication, and other cognitive skills which have greater transferability (and cultural capital) within the hierarchies of individual firms and between employment sectors, as opposed to the narrow occupational training offered by colleges (Giles and Drewes, 2001, pg.2). College credentials limit graduates in this sense as curricula focuses on the carrying out of specific applied tasks to the determent of developing the 'soft skills' required for higher levels of employment hierarchies. IT managers suggest that these 'soft skills' of communication, problem solving and the like, were of high importance in their decision to hire IT workers (Lerman, Riegg, and Salzman, 2000, pg. 15). Through focusing on technical skills, colleges credentials in this example are a barrier to employment in the IT industry.

Status and Hierarchy Levels

The credentials and occupational sectors that college programs are geared towards restrict the ability of graduates to access advanced levels in the labour market hierarchy. Although at times fairing better than high-school graduates, college graduates appear limited to lower-intermediate levels of the labour market, while university graduates are overwhelmingly concentrated in management and professional occupations, and can use their more flexible credentials, skills and cultural capital to reposition themselves into a vast array of industries and professions.

The majority of 25-29 year-old Canadian university graduates (70.6%), are employed in 'professional/managerial' occupations, while 7.7% are employed as 'clerical workers', and 4.3% are categorized as 'blue collar' workers. Approximately 7% are 'service workers', and roughly10% are in 'sales' (Allen, 1998, pg. 49)[8].

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employment increased by 34% during the mid to late 1990's, almost ¾ of newly hired workers had undergraduate and graduate degrees, while less than 10% had community college AA degrees (ibid., pg.5). "Hiring managers at the large IT firms confirmed the contentions of the college faculty, admitting that their firms never recruit community college graduates. Their reasons varied. Some claimed that student's who were serious enough about a career in IT would go on to a four-year college, especially given the numerous financial aid options available today. To them, an associate's degree signaled a lack of motivation. Other hiring managers argued that the theoretical foundations and critical thinking skills required to obtain a bachelors degree in computer science are necessary to succeed in the field" (ibid.,pg.22).

[8] The categories 'service workers' and 'sales' may be misleading here, as university graduates who are employed in sales and service occupations are in the higher factions of these industries, earning high incomes, in the professional business sectors, such as contracted accounting, and legal and management services (Allen, 1998, pg.16).

In contrast, the top-ten industries that Ontario college Applied Arts graduates work in include 'administrative and support services', 'nursing and residential care facilities', 'food services and drinking places', 'amusement, gambling and recreation industries', and 'general merchandise stores' (Provincial Overview of Survey Results for Ontario, pg.24), while the top-ten occupations include 'early childhood educators'[9], 'retail sales and clerks', 'other protective services', 'customer service, information and related clerks', and 'cashiers' (pg.26).

The top-ten occupations for Business graduates include 'general office clerks', 'retail salespersons', 'customer service' and 'receptionists and switchboard operators' (pg.26). Top industries for graduates of Health related fields include 'nursing and residential care facilities', 'personal and laundry services', 'health and personal care stores', 'food services and drinking places' and 'administrative and support services' (pg.25). Unlike the other three fields, most of the top occupations that Health program graduates are employed in appear related to their field. However, most are of the assistant variety; 'nurses aides and orderlies', 'ambulance attendants', 'registered nursing assistants', 'elemental medical and hospital assistants' and 'other aides and assistants in support of health services' (pg. 27).

The top-ten industries Technology graduates work in include 'transportation equipment manufacturing', 'administrative and support services', 'repair and maintenance', 'trade contracting', 'fabricated metal product manufacturing', and 'chemical manufacturing' (pg.25). Top occupations include 'tool and die makers', 'customer service, information and related clerks', 'retail sales persons and related clerks' and 'machinists and machining and tooling inspectors' (pg.27). While 23% of 1995 Canadian university graduates held jobs 5 years after graduation in which they were 'overqualified', 38% of college graduates working full-time held positions that did not require a college level credential (Allen, Harris, & Butlin, 2003, pg. 5). Donner and Lazar (2000) suggest that many Ontario college students leave their programs before completion as they find employment after one or two semesters. They suggest that many of these positions require only a specific skill, and not necessarily a credential (pg. 21). If this is the case, one could conclude that many of the occupations college programs are geared towards do not require post-secondary credentials, and thus could also be filled by high-school graduates.

College 'Career' Programs: High-Tech or Repackaged Vocationalism?

> It seems clear that, by design, community colleges are not academically or socially select institutions. With a considerable proportion of the curriculum devoted to either remedial or vocational training, the typical community college does not deliver a highly demanding academic program for the majority of its students. Community colleges enroll students who are more likely to be a minority, who have much less academic preparation and lower achievement levels, and who come from families of considerably lower social class. Many

[9] An occupation which is amongst the lowest paid in the province.

> studies have shown that these factors are associated with low rates of persistence and attainment (Lee and Frank, 1990, pg. 179).

The City of Toronto suggests that most new Toronto jobs of the future will require college credentials over university ones (Summers and Drea, 2004, pg.2). However, the 'high-tech' jobs of the near-future identified by both the city and the Association of Colleges of Applied Arts and Technology of Ontario as being in high demand include refrigeration and air condition mechanics, horticulture technicians, cooks, carpenters, machinists, tool and die makers, mill wrights, electricians, and constructions trades (ibid.,pg's.5-6). US college 'career' programs, include 'Parks and Recreation', 'Transportation', 'Secretarial', 'Cosmetology', 'Protective Services', and 'Home Economics' (Alfonso et el, 2005, pg.211). "Technological studies" in Ontario includes construction, and TV and electrical repairs (Economic Council of Canada, 1992, pg.2). Many of these 'high-tech' programs are the same ones that students and parents rejected as low status, 'blue collar manual labour' in the 1960's and 70's (see Brint and Karabel, 1989), with updated and impressive sounding titles.

Although approximately 15% of college students are enrolled in 'professional degree' programs, there is little evidence that these programs credential students to enter into mid and upper-middle level positions, as most of the students enrolled in these programs are 'up-skilling' employees already skilled and presently working in firms, primarily in the professional and managerial categories (Economic Council of Canada, 1992, pg. 4, Learman, Rieg & Salzman, 2000). These programs represent the shifting of 'up-skilling' costs from private interests to the public sphere, rather than a upgrading of college programs to compete with the university sector.

Colleges and the Division of Labour; Separating Execution from Conception

While most university graduates are employed in professional and managerial roles, exercising a degree of autonomy over their labour, and contributing to the long-range planning, strategizing and conception phase of production, college graduates, (effectively barred from professional status), appear to be limited to, at best, semi-professional status, working under the direction of university graduates.

The earlier work of Canadian scholar Robinson (1982) provides a useful theoretical framework analyzing the role of colleges in contributing to the highly specialized mental/manual division of labour within advanced capitalist labour processes. He finds that the high-end college programs train and creditialize workers for sub-professional roles ('technicians', 'technologists', 'paraprofessionals', and 'assistants'), who work under the direction of university-trained professionals;

> The community college system plays a crucial role in this fragmentation of knowledge. In many cases, the programs available to students relegate them to places in the labor process which are associated with lower to intermediate rungs in the hierarchy of knowledge. Graduates of university programs on the other

> hand, are placed in the upper reaches of the hierarchy. If we refer to the division between mental and manual labor…it is not difficult to locate community college graduates on the manual side of the division in contrast with university students (pg.149).

College credentials and training limit graduates participation in the upper-managerial levels of production, relegating them to, at best, lower-level management echelons, such as management support (Ibid. pg.'s 150-151). Occupations are often clerical in nature, lacking autonomy, and control and direction over the organization of work. These programs prepare students to fill positions between manual, semi-skilled labour and lower supervisory positions; somewhere between "lower level craftsmen and university trained engineers" (Ibid. pg.153-154).

The Socio-Economic Status of Students: Colleges and Universities Compared

The student base of the US college sector is distinct from the university sector. Disproportionately represented in college programs are students from lower to intermediary socio-economic backgrounds, who rank academically in the bottom half of their high-school classes, and are far more likely than university students to come from non-academic tracts, and have lower parental education levels in comparison to university students (Lee and Frank, 1990, Bailey et el, 2004).

Canadian colleges appear to attract a similar student body. The Economic Council of Canada (1992) describes the high-school 'technological' programs which many students are enrolled in before attending college as tending to "be geared towards high-risk students and/or low achievers; (while) the staff of vocational schools frequently do not have advanced formal qualifications" (pg. 2). Donner and Lazar (2000) overview the demographics of Ontario college students which demonstrate their distinctness from the university student body (pg. 16). Recent research of an Ontario college reveal that the student body of one academic program consisted primarily of students with similar backgrounds described in the US literature (Tambureno, 2004).

The socio-economic status (SES) of Canadian medical students reveals a striking contrast. One survey found that approximately 2/3 of first-year medical students come from the two highest ranking income neighbourhoods ($49, 575 - $138, 590), while roughly just 6% are from the lowest income neighborhood group ($18,324 - $38,686) (Dhalla et el 2002, pg. 1033). Nearly 30% have parents with incomes of over $120,000, close to 25% had parental incomes of between $80,000 - $120,000, and only 15.4% had parental income below $40,000 (Ibid., pg. 1032). Close to 70% had Fathers who were professional or high level managers, while only 5% had Fathers who were 'semi-professional, technician, or middle managers ', and just over 17% had fathers who were 'supervisor, foreperson, skilled, semi-skilled or unskilled labourers'(ibid.)[10]. Approximately 2/3 had fathers with university degrees (most of which were post-

[10] A significant portion of college graduates are employed in this category.

graduate degrees) while just over 15% had fathers whose highest level was high school or less (pg.'s 1030-1031)[11].

The paternal educational levels of Canadian college students provides a striking contrast. Approximately 22% did not graduate from high-school, while 19% went no further than high-school, 10% had apprentice/trade certification, 16% attended a college or technical institute and only 22% had university experience (11% of survey respondents had no response) (The Canadian College Student Survey, 2004, pg. 13).

Clift (1999) documents the educational levels of the fathers of university undergraduates in the province of British Colombia (BC), challenging the belief that university accessibility has increased since the 1960's. He finds that contemporary students with university-educated parents are more likely to enroll in university compared to the 1960's, while those whose parents lack university education are more likely than in the past to:

> Appear to have been diverted to non-university programs. This result is confirmed to some extent by a 1998 Statistics Canada study of 1994 data which found that high education credentials and high-status occupation both positively affected the educational outcome of children (pg. 2).

Clift, Hawkey, and Vaughan (1998) document that while women now comprise the majority of Canadian university students, and 'equity' groups have substantially increased their presence in the university student body, class inequality and stratification has remained largely static, and in fact, those of higher socio-economic groups have increased their share of the percentage of the Canadian university student population. Students with university educated fathers have increased their share of the university student population by more than 25% since the 1960's, while those whose Fathers had low-levels of attainment have decreased by more than a quarter. Students of low SES have been diverted into non-university institutions or away from post-secondary education completely, the authors contend (pg.3).

In explaining the universally high community college attrition rate, Uba (1997) suggests that many students in colleges have been academically and socially marginalized throughout their lives, and face a 'cycle of despair', characterized by motivational difficulties and a history of poor school performance (pg.6). As she explains:

> The literature supports the notion that disproportionate drop out rates (formal or otherwise), incomplete assignments, and low final grades in first year courses are not simple attitudinal manifestations, but symptoms of poor motivation arising from a kaleidoscope interaction of diverse psycho-social and

[11] These demographics lend strong support for the 'class reproduction' theory of post-secondary education. Clearly, the majority of medical students come from privileged class positions, and will themselves occupy similar positions. The majority of college students come from lower class backgrounds, and as previously cited data demonstrates, will, at best, work as assistants to these future doctors.

> environmental factors…misperception and ill-informed expectations, inexperience, difficulties in managing competing scholastic, domestic, and employment demands, lack of confidence in one's skills, and feelings of low efficacy and poor self esteem are hardly uncommon among college students…(many of who are not) well-directed or attentive (pg.5*).*

Tracking within the College Sector

US research demonstrates the existence of tracking within the community college sector, with the students in academically oriented programs coming from higher SES backgrounds relative to vocational-occupational students. Bailey, Leinbach, Scott, Alfonso, Kienzl, and Kennedy (2004) characterize community college students enrolled in university transfer academic programs as occupying a intermediate SES between university students and college occupational students in most demographic measures (pg.3). This suggests that colleges augment rather than challenge social stratification in post-secondary schooling, while giving the illusion of offering higher education to the disadvantaged; "we must conclude that these institutions are not reducing social stratification in academic higher education to any degree" (Lee and Frank, 1990, pg. 178, pg. 191).

Bailey Leinbach, Scott, Alfonso, Kienzl, and Kennedy (2004) argue that:

> Currently, certificate programs do not strengthen the academic skills of students whose skills are poor when they enroll, and earning a certificate does not usually lead to higher levels of educational attainment. Since certificate-seekers tend to be more educationally disadvantaged than other community college occupational students…(pg.6).

Concluding Remarks

In reference to the increasingly popular belief that a technical certificate has superior labour market value in comparison to a university degree, Allen (1998) writes "The problem with the common argument is that it is wrong… The survey data make it quite clear that university education is part of the solution, not part of the problem" (pg.'s 42-43). Compared to university graduates, college graduates are more likely to be unemployed, employed part-time, and employed in an occupation unrelated to their field of study. The occupational mobility of college graduates is restricted by their narrow skills and credentials, which also limits their ability to pursue their studies to advanced levels[12]. A significant number of college graduates (roughly half of the top occupations and industries) will be employed in unskilled, low-level service sector occupations. The highest levels which college graduates are employed in is the paraprofessional/assistant level, in which they work under the authority of university graduates, and are divorced from conceptual level work.

[12] Close to 1/3 of Canadian college students plan on continuing on to university programs (Canadian College Student Survey, 2004, pg.17). However, college credentials are often not recognized by universities.

The income levels of college graduates are substantially less than university graduates, and that gap widens with age. For some groups, including women in their twenties and men and women in their fifties, the earning premium for college attendance is minimal, and at times negative compared to high-school graduates. College students are disproportionately from marginal socio-economic backgrounds, many being the first in their family to attend post-secondary schooling [13], and the data suggests that in most instances, college attendance does not alleviate this condition to any great extent.

Lee and Frank (1990) conclude:

> In an educational sector that touts its particular benefits for disadvantaged and minority students and attracts such students in large numbers, students are relatively unlikely to move on to the next academic stage. Since the family background and advantage that students bring to the institution are the stronger predictors of academic success within them, we can offer little evidence from analysis that community colleges change individuals much. Although many students are using community college as an alternative route to four year colleges, it is only those who could attend four year college in the first place by virtue of higher family income and better academic preparedness and motivation who appear to be taking advantage of this inexpensive alternative (pg. 191).

The authors suggest that while it is possible for disadvantaged students to use college to 'transform' themselves and develop academic skills in order to continue with post secondary education, "these institutions do not seem to be inducing such changes in students", as those who use colleges to advance are not from the most disadvantaged groups (pg. 190). Students who transfer from college to university are from higher socio-economic backgrounds compared to the typical college student, more closely resembling the SES of university students, are more likely to have been in the academic track in high school and are less likely to be a minority (Lee and Frank, 1990, pg. 184).

Beyond Narrow Vocationalism

While it is clear that a university degree pays greater dividends in the labour market in comparison to a college diploma, the argument could be made that given the academic, social, and economic limitations of the college student base, a college diploma – for some groups of students - has higher economic pay offs in comparison to those with no post-secondary experience at all. However, an important qualitative question that ventures beyond the limitations of this paper, and beyond the debate over the labour market, is the question over personal development and the quality of life of the non-traditional students who enroll in college programs. University liberal arts outcomes place at least some concern with qualitative measures of educational success, including the impact of the experience on individuals and society, moral development, and psycho-social changes. Community colleges however, show little concern for such personal and social development issues (Calder and Melanson, 1996). Such pursuits appear foreign in the

[13] It should also be noted that the Ontario Graduation rate remained relatively consistent since the 1970's, (50%) and now around 56 % (Drea, 2004, pg.1).

vocational discourses of the college sector. If 'education' in its humanistic interpretation includes such pursuits as broadening students understanding of the human condition, an appreciation of aesthetic beauty, intellectual growth, acquiring a broad range of knowledge, critical thinking, self and social understanding, and personal growth, then it could be argued that colleges systematically deny their disadvantaged students an 'education', and instead offer them limited training as hired hands and 'hewers or wood and drawers of water'. Tracking and streaming marginalized and minority students into terminal vocational training in the place of education is not a recent phenomena, as evident in the writings of prominent Afro-American leader W.E.B. Dubois, who urged his community to "fight for all time against any proposal to educate black boys and girls as servants and underlings". He argued:

> The college (i.e. University - AT) curriculum or the curriculum of the industrial school depends not so much on its content – on its actual studies, as on its aim. The aim of the higher training of the college is the development of power, the training of a self whose balanced assertion will mean as much as possible for the great ends of civilization. The aim of technical training on the other hand is to enable the student to master the present methods of earning a living in some particular way…we must give to our youth a training designed above all to make them men of power, of thought, of trained and cultivated taste; men who know whither civilization is tending and what it means (Quoted in Pincus, 1980, pg. 336-337).

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