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The Origin and Evolution of an Anomalous Academic Credential: The Ontario College Advanced Diploma

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Article abstract

The Ontario College Advanced Diploma requires three years of post-secondary education and the attainment of learning outcomes like those of a three-year baccalaureate degree. Except for one other Canadian province, no similar academic credential is awarded by colleges in Canada or the United States. For these reasons it has been viewed by some as an anomalous academic credential. This article relates how Ontario colleges came to offer such a rare credential and how the credential survived for over half a century. Employing the concept of path dependence, the origins of the advanced diploma are traced back to the institutes of technology that were first established in Ontario in the 1940s. The article employs a mix of historical inquiry, document analysis, enrolment trend analysis, and literature review methodologies.

THE ORIGIN AND EVOLUTION OF AN ANOMALOUS ACADEMIC CREDENTIAL: THE ONTARIO COLLEGE ADVANCED DIPLOMA

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Abstract

The Ontario College Advanced Diploma requires three years of post-secondary education and the attainment of learning outcomes like those of a three-year baccalaureate degree. Except for one other Canadian province, no similar academic credential is awarded by colleges in Canada or the United States. For these reasons it has been viewed by some as an anomalous academic credential. This article relates how Ontario colleges came to offer such a rare credential and how the credential survived for over half a century. Employing the concept of path dependence, the origins of the advanced diploma are traced back to the institutes of technology that were first established in Ontario in the 1940s. The article employs a mix of historical inquiry, document analysis, enrolment trend analysis, and literature review methodologies.

Keywords: academic credential, diploma, degree, college baccalaureate, path dependence

Résumé

Le diplôme d'études collégiales de l'Ontario—niveau avancé requiert trois années d'études postsecondaires et l'obtention de résultats d'apprentissage similaires à ceux d'un diplôme de baccalauréat de trois ans. Sauf dans une autre province canadienne, aucun diplôme similaire n'est délivré par les établissements d'enseignement supérieur au Canada ou aux États-Unis. C'est pourquoi certains considèrent ce diplôme comme une anomalie. Cet article raconte comment les collèges de l'Ontario en sont venus à proposer un titre aussi rare et comment ce titre a survécu pendant plus d'un demi-siècle. En s'appuyant sur le concept de « dépendance au sentier », l'article retrace les origines de ce diplôme d'études supérieures en remontant jusqu'aux instituts de technologie qui ont été créés en Ontario dans les années 1940. L'article utilise un mélange de méthodologies d'enquête historique, d'analyse de documents, d'analyse des tendances en matière d'inscription et d'analyse documentaire.

Mots-clés : diplôme, diplôme d'études collégiales, dépendance au sentier

Introduction

On April 11, 2022, Ontario's Minister of Colleges and Universities announced that the province's colleges would be allowed, for the first time, to develop three-year bachelor's degrees, to go along with the four-year bachelor's degrees for which they obtained authorization in 2000 (Government of Ontario, 2022b). The Minister's announcement represented the culmination of a decade of efforts by the college sector to gain approval to offer three-year degrees. Colleges Ontario, the organization that represents the colleges, had argued that the knowledge and skill requirements for a three-year diploma and a three-year bachelor's degree were "virtually the same," and thus "requiring colleges to award a diploma to graduates of three-year programs that meet degree standards does those students a disservice by not adequately reflecting their learning achievements" (Colleges Ontario, 2012, p. 9). Colleges Ontario added that in most other countries, completion of a three-year post-secondary program resulted in the award of a degree, and thus Ontario's three-year advanced diploma is "an anomaly that is not understood outside the province" (Colleges Ontario, 2020, p. 4).

This anomaly has existed for the entire history of the colleges. This article addresses two questions concerning the anomaly: the primary focus is on how Ontario colleges came to have such a unique academic credential, and the secondary focus is on how this anomaly has been maintained for so long. The article begins with sections on methodology and data and the theoretical framework; then describes the Ontario College Advanced Diploma, tracing its history from predecessor institutions to the establishment of the colleges; and presents data on enrolment and earnings of graduates, ending with a discussion and conclusions section.

Methodology and Data

The methodologies employed were historical inquiry, document analysis, and literature review. Addressing the first research question involved the identification and examination of a variety of historical sources, including: books, journal articles, academic calendars and other institutional documents, annual reports of government departments and other government reports, institutional archives, dissertations, newspapers, and reports and briefs of higher education agencies and organizations.

The research related to the second question involved analysis of trends and patterns in enrolment in advanced diploma programs and in earnings of graduates. Data on enrolment by credential from Ontario's Ministry of Colleges and Universities are available in two different forms on two different websites. One of these sites is where the Higher Education Quality Council of Ontario (HEQCO) provides statistics on higher education in Ontario (Higher Education Quality Council of Ontario, 2022); the other is one on which the Ontario Government posts data from a variety of government ministries (Government of Ontario, 2022a). Both sources differentiate between the Ontario College Diploma and the Ontario College Advanced Diploma. The HEQCO source provides annual data on FTE enrolment from 1997–98 through—at the time the research for this article was conducted—2017–18. The other source provides fall headcounts by credential for each college for 2012–13 through 2020–21. In addition, a 1985 report that provides data on college enrolment by length of program was found to be useful. The only source of outcome data for the advanced diploma appears to be the Ontario Graduate Outcomes Survey, which has been conducted annually to collect data for Key Performance Indicators (Ministry of Colleges and Universities, 2022). Data from that source on median earnings by credential six months after graduation were examined.

Theoretical Framework

Three different conceptual lenses were used for interpreting the evidence obtained. These were the distinction between local and global higher education markets, path dependence, and the scale of the college baccalaureate. Finkelstein and Jones (2019) have suggested that within many nations, some post-secondary institutions operate in a globalized higher education market, while other institutions continue to function locally "playing by national rules" (Finkelstein & Jones, 2019, p. 4). It has often been noted that one of the defining characteristics of colleges is that they address the educational needs of local industry (Elsner et al., 2015; Wiseman et al., 2012). A study of the labour market for graduates of sub-baccalaureate programs in colleges in the United States concluded that the "sub-baccalaureate labo[u]r market is almost entirely local" (Grubb, 1996, p. 11). If employers of workers with these qualifications establish ongoing relations with educational institutions, the institutions tend to be local ones (Grubb, 1996). In contrast, employers often recruit nationally for professional and managerial positions that require a university degree.

In the globalized sector, the combination of an international market for higher education and the commitment of national governments to greater harmonization of degree structures have contributed to convergence of the basic structure of university-awarded qualifications, that is, "the Bachelor/Master/Doctorate system, which has now achieved almost universal relevance" (Van Damme, 2019, p. 12). In the localized sector, of which colleges typically are the largest component, the pressure to produce skills for national and regional economies has worked against the convergence of "the skills equivalents of national qualifications" (Van Damme, 2019, p. 11). Consequently, there is enormous diversity between nations in the configuration of credentials awarded by colleges (Skolnik, 2021a).

The absence of an international—and in some cases, national—market for the credentials awarded by colleges has both positive and negative effects. On the one hand, this has left nations free to develop the approaches to skill development that best fit national and local needs. However, it also makes possible inequities wherein graduates with same learning attainment in one country receive a lesser credential than those in another country who receive a higher credential.

The concept of path dependence has been used in social science and historical research to explore how initial choices in such realms of endeavour as public policy

or technology may influence the range of choices available later (Pierson, 2000; Mahoney & Schensul, 2006). Many of the examples in the literature on path dependence point to the advantages of early adoption of particular technologies or policy approaches resulting in increasing returns to scale and making it difficult, if not prohibitively costly, to switch to other alternatives (Sorensen, 2015).

Although most of the emphasis in the literature on path dependence is on the restrictive effects of prior decisions, one definition refers also to the ways that policy change is both "shaped and limited" by past policy (Harmsen & Tupper, 2017, p. 351). Harmsen and Tupper argue that British Columbia had options for dealing with later challenges that required better system coordination, options that were not available in Ontario because of differing decisions about system design that were made earlier in those two provinces. Whether or not one agrees with the Harmsen and Tupper characterization of the contrasting policy approaches in British Columbia and Ontario, their emphasis on looking more broadly at how early policy decisions may shape the options available later was found to be valuable for the study of the development of the Ontario College Advanced Diploma, as will be shown later.

A worldwide movement toward colleges that previously concentrated on lower-level vocational education and training offering applied bachelor's degrees began in the late 1960s, accelerated in the late 1980s, and has been the subject of increased attention in many countries recently (Skolnik, 2022). This movement has advanced more rapidly in some countries than others, and consequently there are substantial differences in the scale of the college baccalaureate among different countries.

The scale of the college baccalaureate is important for several reasons. The impact that the college baccalaureate can have both on individuals and on the national or local economy is obviously dependent upon its scale. For an institution that has been concentrating on non-degree programming, its degree programming must reach a minimum scale to make it economical to provide the necessary institutional infrastructure to offer baccalaureate programs (Moodie, 2009; Moodie et al., 2009). It has been suggested that the minimum necessary scale is likely about 20% of institutional activity (Moodie, 2009; Moodie et al., 2009). Wheelahan suggests that this level of activity will enable the institution "to build the economies of scale it needs to meet administrative, reporting, and funding requirements, and to build the culture that is needed to support it [baccalaureate programming]" (Wheelahan, 2022, p. 282).

The scale of the college baccalaureate may also have an influence on its ability to attract students. In many jurisdictions, including Ontario, it has long been the convention that the university is the place to go to earn a bachelor's degree, and that the college is not such a place. So long as this convention is in force, it may be difficult for enrolment in the college baccalaureate to reach a stage of continuous growth. The influence of this convention was apparent in interviews with students in college baccalaureate programs reported in Wheelahan et al. (2017). Nearly all the students expressed concern about public perceptions of the college baccalaureate and about the lack of public awareness that colleges were now awarding bachelor's degrees. Some said they were fatigued from explaining what a college degree was. Despite their discomfort with going against social convention, these students chose to be early adopters of the college baccalaureate. However, others who might benefit from such a program may be reluctant to enrol until the social convention about where to pursue a bachelor's undergoes sufficient change such that the college baccalaureate becomes a normal, or at least widely recognized, part of the higher education landscape.

Critical mass theory suggests that the behaviour of a minority of a population can help to bring about a change in social conventions (Centola et al., 2018). An early and widely cited example pertains to the influence of gender proportions in corporate leadership roles (Kanter, 1977). This body of theory has been applied to a variety of problems in several different fields, and the size of the minority needed to stimulate change in social conventions has been found to be as low as 10% in some cases and as high as 40% in other cases (Centola et al., 2018). It is impossible to predict what the critical minimum size of the minority who enrol in the college baccalaureate must be for it to become a normal part of the higher education landscape. It would be fortuitous if this critical minimum turned out to be close to minimum economic scale, which was earlier suggested to be about 20% of college enrolment.

There has been little research on the factors that may help to explain differences in scale of the college baccalaureate among different jurisdictions. One study suggests that the scale and nature of the university system as it existed prior to the community college baccalaureate being introduced could be a significant factor (Skolnik, 2022). Wheelahan (2022) notes that growing the college baccalaureate has been particularly difficult in countries with liberal market economies. Wheelahan suggests that "the increasingly marketized and hierarchical structure" of high-

er education systems in such countries has placed colleges in a competition with other higher education institutions that "colleges can never win" (Wheelahan, 2022, p. 270). The reasons why colleges cannot succeed in this competition include the facts that colleges are vocationally focused, embrace relatively open admissions, and "prepare people for jobs that are at the less privileged end of the occupational spectrum" (Wheelahan, 2022, p. 273). Wheelahan also suggests that the late stage in the development of higher education systems when colleges appeared or had their principal expansion contributes to their disadvantaged status.

The Ontario College Advanced Diploma

Until the early 2000s the formal title of the academic credential awarded after completion of either a two-year program or a three-year program in an Ontario college was a Diploma. In November 2003, the Ministry of Training, Colleges and Universities issued a Framework for Programs of Instruction (Government of Ontario, 2003), which differentiated between the Ontario College Diploma and the Ontario College Advanced Diploma. In addition to specifying differences in the skills, knowledge, and vocational outcomes for the two credentials, the Ministry document indicated also that the normal duration of studies for the Diploma was four semesters, and six semesters for the Advanced Diploma. Examination of the academic calendars for that period showed that the change of the name of the credential awarded upon completion of a three-year program was implemented by colleges in 2004–2005 or 2005–2006.

Colleges Ontario has argued that the Ontario College Advanced Diploma "is not well understood internationally" because so few places offer a comparable credential (Colleges Ontario, 2012, p. 9). Within Canada, Ontario is the only jurisdiction in which colleges award an Advanced Diploma for three-year programs. The term advanced diploma is used in some other provinces, but in a different way than the term is used in Ontario. A search of academic calendars of colleges in other provinces showed that the advanced diploma is awarded mostly for one-year programs that are like the Ontario College Graduate Certificate.[1] Moreover, college programs of three years' duration were found to be rare elsewhere in Canada except for Quebec and Newfoundland and Labrador. However, the three-year career education programs in Quebec's colleges are not exactly equivalent to the Ontario College Advanced Diploma because in Quebec students enter these programs after Grade 11, while students in Ontario will normally have completed Grade 12 (Beaupré-Lavallée & Bégin-Caouette, 2022).

The three-year diploma in Newfoundland and Labrador dates back to shortly after the establishment of that province's first college, Bay St. George Community College, in 1977 (Gough, 1986). A search of the academic calendar of the College of the North Atlantic in Newfoundland and Labrador revealed a substantial number of three-year programs. Moreover, as in Ontario, technologist programs in Newfoundland and Labrador are of three years' duration. In contrast, technologist programs in other provinces are primarily of two years' duration. However, unlike the case in Ontario colleges, the credential awarded for three-year programs in the College of the North Atlantic is a diploma, the same as for two-year programs, rather than a distinct credential like the Ontario College Advanced Diploma.

There is no credential awarded in community colleges in the United States that is comparable to the Ontario College Advanced Diploma. The most prominent credential awarded by U.S. community colleges is a two-year degree, such as the Associate of Arts or Associate of Science degree. American community colleges also award a great variety of certificates, but the duration of more than 98% of these is two years or less (National Center for Education Statistics, 2013).

Some institutions in other countries that are comparable to Ontario's colleges do offer three-year programs, but "in most parts of the world, students who take a three-year program earn a degree" (Strategy Corp Institute of Public Policy, 2020, p. 39). This is the case, for example, in New Zealand, where graduates of three-year programs in the institutes of technology and polytechnics earn a bachelor's degree (New Zealand Qualifications Authority, 2022). Three-year programs that lead to degrees are offered also by colleges in several European countries including Belgium, the Czech Republic, Norway, and Switzerland (Kyvik & Lepori, 2010). Some three-year post-secondary programs that do not yield a degree are offered by technical colleges in China (Fleishman & Luo, 2013), Japan (Tsunoda & Iida, 2015), Korea (Grubb et al., 2009), and Singapore (Pong, 2019). In addition, TVET (Technical and Vocational Education and Training) colleges in South Africa offer three-year programs leading to the National Certificate (Vocational)

1 The comments in this section on the search for programs comparable to the Ontario College Advanced Diploma draw upon Skolnik (2020).

(Gaffoor & van der Bijl, 2019). Ontario may not be the only jurisdiction in the world where colleges offer a three-year program that does not lead to a bachelor's degree, but it stands out among the jurisdictions in closest geographic proximity.

Tracing the Origin of the Ontario College Advanced Diploma

The establishment of the Colleges of Applied Arts and Technology (hereinafter referred to as colleges) in Ontario in the mid-60s did not so much represent the creation of a new system of technical and vocational education as the "culmination of all previous work in this area" (Davis, 1965, p. 8). That previous work, which had begun in the 1940s, had by 1965 resulted in the establishment of seven institutes of technology, three institutes for trades training, three vocational centres in operation (and two more in the development stage), and an extensive network of adult training centres that operated under the auspices of local school boards; and besides offering academic upgrading for skill development, also offered training in such skills as typing, bookkeeping, business mathematics, electronic data processing, and upholstery. While all these providers of technical and vocational education were absorbed into the new colleges, the precursor institution that was most relevant to the origin of the advanced diploma was the institute of technology.[2]

The Institutes of Technology

The institutes of technology that preceded the colleges were developed in two phases, the first during the 1940s, the second between the late 1950s and early 1960s. In developing the institutes of technology, the government was guided by a vision that had been supplied by C.R. Young, Dean of the Faculty of Applied Science and Engineering at the University of Toronto, and president of the Engineering Institute of Canada. Young maintained that there was a gap in technical education in Canada between the secondary schools and university engineering schools (Young, 1944). He recommended filling this gap by establishing technical institutes that would offer programs of one to four years' duration for training in middle-level technical occupations. The 1944 Report of the Minister of Education indicated the government's intention to develop a number of institutes of technology for providing training in such fields as "textiles, plastics, electronics, tool-and-die making, radiography, a variety of synthetics, industrial chemistry, printing and lithography, and other scientific and engineering studies which are bound to come into considerable prominence in post-war world trade and commerce" (Government of Ontario, 1944, p. 29).

Four provincial institutes of technology were established in the 1940s: the Provincial Institute of Mining, the roots of which dated back to the pre-World War I silver mining boom around the town of Cobalt (Baldwin, 2015), and which later became part of Northern College; the Provincial Institute of Textiles in Hamilton, which became the Hamilton Institute of Technology in 1957, and subsequently became part of Mohawk College (Filer, 1985); Lakehead Technical Institute, which eventually evolved into Lakehead University (Braun, 1987); and Ryerson Institute of Technology, the predecessor of Toronto Metropolitan University (Fleming, 1971). The last institution had a particularly important influence on the development of the Ontario College Advanced Diploma.

The Development of Three-Year Programs

Initially, several technology programs and a wide range of trades programs were offered on the premises of Ryerson Institute of Technology (RIT). In its first year Ryerson's Technology Division offered 14 two-year programs and three one-year programs (Thompson, 1961). Within a few years, the president of the institution, Howard Kerr, set out to deepen the theoretical and scientific base of the courses and add more breadth to the curriculum (Zaharchuk, 1971). Kerr concluded that the necessary improvements could not be incorporated into the curriculum unless the duration of programs was increased to three years (Zaharchuk, 1971). During the early 1950s, while the technology programs were being re-designed, the trades programs were transferred to a new institution, the Provincial Institute of Trades. By 1955, RIT was offering only three-year programs (Fleming, 1971). Some of the fields were: Electrical Technology; Fashion; Furniture Design; Graphic Design Management; Hotel, Resort and Restaurant Administration; Industrial Chemistry; and Journalism. Within the field of Engineering Technology, the institution offered only three-year technologist pro-

2 More information on the influence of their predecessor institutions on the CAATs is provided in an unpublished paper by the author (Skolnik, 2021b).

grams, and no two-year technician programs.

The programs of the Toronto institution proved so popular that other communities sought to have them, and the government undertook to extend these programs to other parts of the province through the creation of new institutes of technology in Ottawa (1957), Windsor (1958), and Kirkland Lake (1962). For example, Western Ontario Institute of Technology in Windsor offered three-year diploma programs in Business and in Chemical, Electronic, and Mechanical Technology that were largely identical to the corresponding RIT programs (Smyth, 1996). In some fields there was a common first-year course at RIT and some of the other institutes, after which students from the other institutes might have to move to Toronto to complete the second and third, or just the third, year(s) of their program (Smyth, 1996).

By the early 1960s, the predominant credential awarded by the institutes of technology—and for some the only credential—was the three-year diploma. From the time that RIT decided to concentrate on three-year programs there were no two-year programs offered in Toronto for about a decade—until the Provincial Institute of Trades added a two-year Construction Technician program in 1964–65 (Provincial Institute of Trades, 1964). The following year the Provincial Institute of Trades and Occupations, which had been split off from the Provincial Institute of Trades in 1961, added a two-year Toolmaking Technician Program (Provincial Institute of Trades and Occupations, 1965). Both institutes subsequently introduced other two-year technician programs before becoming part of George Brown College in 1968.

Impact of the Establishment of the Colleges of Applied Arts and Technology

The concentration of the institutes of technology on three-year programs did not carry over into the new colleges of applied arts and technology (CAATs). The major reason for this had to do with the way that the CAATs were constituted. A single decision about the design of the CAATs dominated public discussion about the shape of the colleges. That was whether they should offer both career education and university-equivalent arts & sciences courses or, as was ultimately decided, concentrate only on the former (Fleming, 1971; Dennison & Gallagher, 1986; Skolnik, 2010).

However, there was another important design decision, one that largely flew under the radar: whether the colleges should concentrate on the types of programs then offered by the institutes of technology, or also absorb the programs then offered by the trades institutes and vocational centres. The Committee of Presidents of the Provincially Assisted Universities of Ontario had recommended that the new colleges be extended and adapted versions of the institutes of technology, and that the trades institutes and vocational centres remain a separate system (Committee of Presidents of the Provincially Assisted Universities and Colleges of Ontario, 1965). The Committee's rationale, which was shared by the Select Committee of the Legislature on Manpower Training (Ontario Legislative Assembly, 1963), was that the trades/vocational programs were so different from the technology programs that each type of program would best be provided by a different type of institution. This was the approach that had been taken in Alberta, where the responsibility for adult vocational education was given to provincial vocational centres that were separate from the community colleges (Andrews et al., 1997). The Ontario government took the opposite approach, combining all forms of non-university post-secondary education, vocational education, and adult education into a single type of comprehensive institution, the CAAT.

Combining the institutes of technology, trades institutes, and vocational centres into a single institution meant that in addition to the kind of three-year programs that the institutes of technology had offered, the new colleges would also offer programs of two years, one year, and shorter durations. Moreover, the Minister of Education was of the view that the most rapidly growing area of demand in post-secondary education was for two-year technician training programs, and accordingly that the colleges should be providing an increasing number of such programs (Davis, 1966).

The first colleges were established in 1966, and by April 1969, the colleges were offering a total of 175 programs that were of at least one year's duration. Three-year programs comprised about one-third of the total, while two-year programs accounted for 57% (Fleming, 1971). Reflecting their institutional origins, three-year programs were most prominent in technology, where they comprised over 40% of the total; and the largest numbers of three-year technology programs were found in two colleges that had taken over institutes of technology: Algonquin College in Ottawa, and Mohawk College in Hamilton (Fleming, 1971).

Trends in Enrolment in Three-Year Programs

There does not appear to be a single source of data on college enrolment by credential from the beginning of the college system. Instead, three sources of data for different periods were identified. The earliest data that the author was able to find were on full-time enrolment by program duration from 1976 to 1984 (Quazi & Selinger, 1985). These data show that the three-year diploma share of enrolment increased from 27.8% in 1976 to 41.5% in 1984, while the two-year diploma share decreased from 57.7% to 47.9% over the same period.

Following the heavy emphasis on creating two-year programs in the early years of the colleges, the three-year diploma was the fastest growing credential between 1976 and 1984. Full-time enrolment in three-year programs increased from 16,176 to 40,012, a 247% increase. During this period the ratio of enrolment in two-year programs to enrolment in three-year programs decreased from 2.1 to 1.2.

The second set of data consists of the HEQCO data on FTE enrolment between 1997–98 and 2017–18. This data set allows us to view the trend in enrolment from five years before students were able to enroll in college bachelor's degree programs. Table 1 shows FTE enrolment by credential for selected years from 1997–98 to 2017–18, and the percentage distribution of enrolment by credential. Over this 20-year period, total enrolment increased by about 40%, and there were substantial increases in enrolment for every credential except the advanced diploma. The advanced diploma's share of total FTE enrolment decreased from 40.0% in 1997–98 to 26.6% in 2017–18—ironically, almost the reverse of the increase in the three-year diploma share of full-time enrolment between 1976 and 1984.

Part of the decline in the advanced diploma share of enrolment was due to the increases for two newer, and fastest growing, credentials: the bachelor's degree and the graduate certificate. Ontario's colleges were given the authority to award degrees in 2000, and by 2017–18, FTE enrolment in bachelor's programs was more than 12,000. Graduate certificate programs, which are normally one year in duration, are designed to provide workplace knowledge and skills for those who have already attained a bachelor's degree or a diploma (Thorsell, 2015; Toor, 2020). More than three-quarters of those enrolled in the Ontario College Graduate Certificate have a university bachelor's degree (Wheelahan et al., 2017). However, not all of the decrease in the advanced diploma share of enrolment can be explained by increases

Table 1

Distribution of FTE Enrolment by Credential, Ontario CAATs Selected Years, 1997–98 to 2017–18

Year	Total Enrolment	Bachelor's Degree	Advanced Diploma	Diploma	Certificate	Graduate Certificate
1997–98	141,312	0	56,526	71,808	10,335	2,643
	100.0%	0	40.0	50.8	7.3	1.9
2001–02	142,959	0	58,125	67,754	12,904	4,175
	100.0%	0	40.7	47.4	9.0	2.9
2006–07	157,838	3,633	50,390	80,697	18,102	5,015
	100.0%	2.3	31.9	51.1	11.5	3.2
2011–12	190,621	7,314	54,102	96,976	25,377	6,853
	100.0%	3.8	28.4	50.9	13.3	3.6
2016–17	199,689	12,150	53,338	98,005	27,218	8,978
	100.0%	6.1	26.7	49.1	13.6	4.5
2017–18	198,522	12,702	52,722	96,763	27,222	9,113
	100.0%	6.4	26.6	48.7	13.7	4.6

Source: Higher Education Quality Council of Ontario (2022)

in bachelor's degree and graduate certificate enrolment, as the ratio of diploma to advanced diploma enrolment increased from 1.3 to 1.8 during the 1997–98 to 2017–18 period. Although its share of enrolment declined over this period, enrolment in the advanced diploma was stable in absolute numbers, remaining in the 50,000s for the whole period. Moreover, enrolment in the advanced diploma was higher at the end of the period than in 2006–07, five years after students were first admitted to bachelor's degree programs.

The Persistence of the Ontario College Advanced Diploma

The persistence of enrolment in the advanced diploma is further supported by the third set of data, the Ontario Government source. Between 2017–18 and 2019–20, the last year before college enrolment was affected by Covid-19, advanced diploma enrolment measured by the fall headcount increased by 0.4% (Government of Ontario, 2022a). This was well below the 7.5% increase in total enrolment, but still an increase. The headcount data also show that there was considerable variation in enrolment among the colleges. Perhaps not surprisingly after so many years, the effect of colleges taking over three-year diploma programs from institutes of technology had largely worn off. Of the colleges that absorbed institutes of technology, all except one had percentages of enrolment in the advanced diploma that were below the provincial average.

It would appear that overall, there was sufficient demand for places in advanced diploma programs for enrolment in this credential to have been stable over the past two decades in absolute numbers, still account for about a quarter of college enrolment, and have the second largest percentage of college enrolment, after the diploma. The stability of enrolment in the advanced diploma is perhaps surprising, given that earning a bachelor's degree from a college takes only one year longer than completing an advanced diploma.

There are probably many reasons why the entry of colleges into degree granting has not had more of an impact on enrolment in the advanced diploma. The college system offers many more advanced diplomas than bachelor's degree programs, so the advanced diploma provides greater choice of field of study than the degree, particularly in communities where few, if any, degree programs are offered. There may be differences in admission requirements between the two credentials, for example in high school GPA or types of high school courses taken. And even if the degree requires only one more year than the advanced diploma, that is still one more year of additional expense and delay before getting a full-time job. Also, the advanced diploma has been around for a long time, whereas the college bachelor's degree is a relatively new credential.

Another factor could be that the starting salaries for advanced diploma graduates have been comparable to those for bachelor's degree graduates. Table 2 shows median earnings by credential, six months after graduation for those who graduated in 2012–13 through 2016–17 (Ministry of Colleges and Universities, 2022). The table shows that, on average, advanced diploma graduates have earned about the same as bachelor's degree graduates and substantially more than diploma graduates shortly after graduation. Frenette (2019) reported that college degree graduates in Alberta, British Columbia, and Ontario combined earned substantially more than college diploma graduates two years after graduation, but his study did not provide separate figures for the Ontario College Advanced Diploma.

Discussion and Conclusions

The colleges inherited the three-year diploma, which became the Ontario College Advanced Diploma in the early 2000s, from the former institutes of technology. There was no comparable history of three-year vocational education programs in other provinces, and only one other province made the decision to include three-year programs in its colleges. After experiencing substantial growth in the earlier years of the colleges, the advanced diploma share of total enrolment has been declining for the past two decades. However, in absolute numbers enrolment for the advanced diploma has been stable. The stability of a relatively rare credential like Ontario's advanced diploma may be illustrative of how markets for the kinds of skills that colleges produce have remained largely local, even as colleges in many countries, including Canada, have become global actors (Levin, 2001; Colleges and Institutes Canada, 2022). The configurations of credentials awarded by colleges in different countries have been developed to meet local and national needs and reflect local and national histories and traditions. There is little evidence of an international movement toward convergence of sub-baccalaureate credentials that could threaten a rare credential like the Ontario College Advanced Diploma.

Table 2

Median Annual Salary of CAAT Graduates Six Months after Graduation, Bachelor's Degree, Advanced Diploma, and Diploma Graduates in Full-Time Related or Partially Related Jobs

Year of Graduation and Credential	Median Salary	Index (Adv. Diploma = 100)
2012–13		
Bachelor's Degree	36,828	98.1
Advanced Diploma	37,543	100.0
Diploma	32,000	85.2
2013–14		
Bachelor's Degree	38,000	100.0
Advanced Diploma	38,000	100.0
Diploma	33,241	87.5
2014–15		
Bachelor's Degree	40,000	100.3
Advanced Diploma	39,900	100.0
Diploma	33,372	83.6
2015–16		
Bachelor's Degree	40,000	100.0
Advanced Diploma	40,000	100.0
Diploma	33,372	83.4
2016–17		
Bachelor's Degree	40,222	100.6
Advanced Diploma	40,000	100.0
Diploma	35,000	87.5

Source: Ministry of Colleges and Universities (2022a)

Nations, and in some countries, sub-national jurisdictions, enjoy great freedom to shape the configuration of credentials that their colleges award as they see fit. This freedom does not extend to just peripheral credentials. In terms of enrolment, the advanced diploma is the second most prominent credential awarded by Ontario colleges. The analogous situation in the university sector would be if Ontario universities awarded some other credential that

rivalled the bachelor's, master's, and doctorate in scale and stature and was not offered in the United States or in most of Canada.

The principal limit to freedom in configuring credentials for colleges is encountered when colleges seek to award bachelor's degrees. At the time the colleges were established the majority of undergraduate students in Ontario universities did a three-year baccalaureate (Harris, 1976). That the colleges' three-year diploma was seen by some education leaders as comparable to the predominant university baccalaureate is evidenced by the fact that in 1972 a government-appointed commission on post-secondary education recommended that the colleges be allowed to award a bachelor's degree for completion of their three-year programs (Commission on Postsecondary Education in Ontario, 1972). The commission was of the view that the three-year diploma represented a comparable level of achievement as the three-year baccalaureate and therefore should receive the same recognition. Adopting the commission's recommendation would have supported a principle to which the government "apparently subscribe[d]," parity of esteem between the two post-secondary sectors (Campbell, 1975, p. 65). However, the government's longstanding aversion to extending the authority to award degrees beyond the existing universities (Buckner & Gong, 2022; Ontario Council on University Affairs, 1990) trumped its longing for parity of esteem between sectors. Consequently, it was not until 30 years later that the colleges were given limited authority to award bachelor's degrees.

It would make for a great story if, when the colleges finally got limited authority to award degrees in 2000, this decision of the government could be traced back to the three-year diplomas offered by the institutes of technology. However, there is no evidence of such a connection. There was no mention of the colleges' three-year diploma in the brief from the colleges that advocated for college degrees (Association of Colleges of Applied Arts and Technology of Ontario, 1998), nor in the public consultation paper on college degrees (Ministry of Training, Colleges and Universities, 2000), nor in the statement of the Minister when the legislation was introduced (Cunningham, 2000). Moreover, unlike Alberta and many American states, the approach to creating college baccalaureate programs in Ontario did not involve adding new third- and fourth-year (or just fourth-year) courses onto existing diploma (or advanced diploma) programs. Instead, whole new four-year baccalaureate programs had to be created.

Yet in another respect, the three-year diploma that dates back to the institutes of technology might turn out to have a major influence on the development of the college baccalaureate in Ontario. Although enrolment in the college bachelor's degree grew rapidly—from a small base—in its early years, enrolment "has remained relatively flat since 2014" (Colyar et al., 2022, p. 17). After nearly two decades of development, the college baccalaureate accounted for 6.4% of FTE enrolment in Ontario colleges in 2017–18 (Higher Education Quality Council of Ontario, 2022).

There are probably many reasons why the Ontario college baccalaureate has not reached a larger scale. Despite caps on the number of baccalaureate programs a college may offer and an onerous approval process for new programs, the number of programs has been increasing. Nearly 70 of the existing 177 baccalaureate programs offered by the colleges have been launched in the past six years (Colyar et al., 2022). This would suggest that the chief factors limiting enrolment are on the demand side: lack of awareness and understanding of the college baccalaureate by the public, particularly employers and prospective students; and potential students' concern about the public perceptions of a college degree (Wheelahan et al., 2017, as cited in Colyar et al., 2022).

While perceptions of the college baccalaureate may change through experience as more and more graduates enter the workforce and advance in their careers, it is probably unrealistic to expect anything but slow growth in the recent trajectory of enrolment in the college baccalaureate to originate solely from the demand side. Any significant shift in that trajectory would more likely come from changes on the supply side (i.e., changing the nature of the baccalaureate programs that the colleges offer or the conditions under which they are offered, and/or introducing a new type of baccalaureate program).

Adding three-year bachelor's degree programs to the repertoire of the colleges would be a major supply side change. It seems a reasonable assumption that at least some of the students who have been enrolling in the advanced diploma would be no less likely to enroll in a similar program for which they would receive a bachelor's degree. In addition, there may be other students who would be attracted to this type of program if they could earn a bachelor's degree, but who did not view earning a non-degree credential as an attractive option. In 2017–18, the advanced diploma accounted for 26.6% of college enrolment compared to 6.4% for the baccalaureate. If three-year degree programs were eventually to account for the equivalent proportion of total enrolment, as advanced diploma programs do now,

degree programs would comprise one third of college enrolment. If the three-year bachelor's degree acquires half the present advanced diploma share of enrolment, then degree programs would account for almost 20% of college enrolment. Either figure might be sufficient to meet the threshold for the college baccalaureate to be perceived as a normal part of the Ontario higher education landscape.

Just as it is unlikely that Ontario colleges would have offered three-year diploma programs if they hadn't inherited them from the institutes of technology, it is also unlikely that the colleges would have been given the authority to award the three-year bachelor's degree if they hadn't already been offering three-year diploma programs. The colleges gained the authority to award four-year degrees without any reference to the advanced diploma, but in making their case for awarding three-year degrees the colleges made considerable reference to the anomalous status of the advanced diploma. If the three-year bachelor's degree provides the impetus toward a higher education system in which the colleges are widely perceived as a robust and taken-for-granted alternative to the universities for the pursuit of the bachelor's—and perhaps eventually the master's—degree, the three-year diploma that started in the institutes of technology some 70 years ago will have played an important role in achieving that result.

It is not clear what the introduction of the three-year bachelor's degree will mean for the future of the advanced diploma. It seems likely that now that colleges can develop new three-year degree programs, they will be less keen to develop new three-year diploma programs. However, the advanced diploma is a long-standing credential that is well established with students and employers. So long as students are willing to enroll in existing advanced diploma programs, and so long as employers are willing to hire graduates of those programs, the advanced diploma will remain a feature of the college sector. While ministerial consent for the first three-year college baccalaureate was granted only 10 months after the announcement of the new degrees (Cambrian College, 2023), it may be a while before there is a sufficient number and range of three-year degree programs to provide an alternative to the advanced diploma. At that point we may learn whether students will still be willing to enroll in a diploma program when in the same amount of time they could earn a degree, albeit a new type of degree. Given this anomalous academic credential's demonstrated capacity for survival, predictions of its demise may be premature.

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