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Some Trends in Northern Studies Undergraduate Course Offerings at Canadian Universities, 1972-1997

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Abstract

Northern Studies at Canadian universities is a fairly young field of study. This paper examines lists of northern studies courses of three academic years, $72^{+}73^{-}$ 90/91 and 96/96 and concludes that northern studies courses at the undergraduate level are, in general, expanding both in the number of credits offered and in the number of disciplines represented. Comparisons made to Northern Scientific Training Program figures show an imbalance between the disciplines in which student research in the North is conducted and those of the majority of courses available to them.

Northern Studies, as a distinct area of study at some of Canada's universities, had its beginnings in the early 1960s. Research in the North expanded after World War II, largely as a result of increased government administrative activity. Interest in the North was evidenced by the establishment of the Arctic Institute of North America (AINA) in 1945 and contemporary support of northern research and study by American foundations, particularly the Carnegie Corporation and the Rockefeller Foundation (Lloyd 1988). In 1947 AINA founded its multidisciplinary journal, *Arctic*, and began publishing occasional monographs, which, along with the reports of northern researchers, gradually expanded the literature available to the general public and to academics. In the late 1950s and early 1960s "several university-based northern research institutes, centres, or other more loosely organized groups emerged" (Kupsch and Caillol 1973, ii).

Government expansion, however, required many people with northern research and field experience "to ensure a sufficient flow of competent personnel to meet the government's growing northern administrative responsibilities" (Lloyd 1988, 12). In 1961, the department "reviewed the scope and trend of Canadian research in the North" and concluded that northern research . . . was almost exclusively undertaken by government agencies" (Finkler 1987, 66). To ensure a pool of researchers and graduates with northern field experience, the Department of Northern Affairs and National Resources (created in late 1953) agreed to support students to do research in the North under an arrangement known as the Northern Scientific Training Grant program. To be eligible to receive the funds for their students, the department required the universities to establish formal northern studies committees to disburse them. In 1962, the first grants, totalling \$21,000, were handed to the committees of 6 universities. Funding increased steadily in the years following (DIAND 1994, Table 1).

The establishment of the Northern Scientific Training Program, as it was renamed, marks, perhaps, the formal beginning of Northern Studies in Canada. In October 1967, representatives of the committees held their first annual meeting: the First National Northern Research Conference. The DIAND Minister Arthur Laing told delegates that the universities should consider ways of increasing their northern links (Laing 1967). In the late 1960s, some universities had, indeed, developed correspondence courses for northern residents or had begun to consider ways to make their own programming more relevant and attractive to northern students (Kupsch and Caillol 1973). In 1969, several professors at the University of Western Ontario established an informal working group to discuss the idea of a northern university of some kind, perhaps one taking advantage of new communications technologies (Graham 1994). The activity encouraged the universities to teach more about the North in their classes and to produce more graduates with northern experience and knowledge.

Increased northern research activity, which accompanied the "opening of the Canadian North" to oil, gas and other resource exploration and development, burgeoning territorial governments and increasing northern populations, caused northern residents to consider how they themselves might play a larger role in northern development. A University of the North was one solution. There had been passing interest in the territories since at least the early 1960s in establishing a university in the region. Much had been proposed but little had been accomplished and the idea was much disparaged in southern circles (see Graham 1994). However, initial northern enthusiasm for the idea pointed to the importance of the universities' expanding their services to northerners and increasing their relevant course offerings to students. The time was ripe for a growth in northern studies and the universities began responding.

In 1974, at the Fifth National Northern Research Conference, "the suggestion of a cooperative national body to represent all Canadian universities active in Northern research, surfaced" (Lloyd 1988, 12). Some three years later, the Association of Canadian Universities for Northern Studies (ACUNS) was formed at the Third Session of the Sixth National Northern Research Conference in Churchill, Manitoba, with an initial membership of twenty-five universities. Northern Studies had, in a sense, graduated from a field of scattered institutional interest to become an accepted area study in Canadian universities. In the contemporary economic and political climate, the field offered exciting possibilities.

The purpose of this paper is examine three sets of data on undergraduate Northern Studies courses offered at Canadian universities in 1972/73, 90/91 and 96/97 to determine what trends are evident. The study is not intended to be exhaustive or highly accurate; the data sets are uneven, the likelihood of selection error high, and judgement was required in many cases to classify a course to a particular discipline. What we present here is only a general sense of where Northern Studies has been and where the field is going at the undergraduate level in Canada today.

Despite its many flaws, however, the results of this survey are suggestive. Between the academic years 1972/73 and 1996/97, there is an increase in the average number of northern studies credits per institution of 56.8% between 72/73 and 90/91 and of 77.4% between 90/91 and 96/97. In all years, human sciences and humanities courses substantially outnumber the physical and life science offerings, representing 92.9% of credits in 1972-73, 87.6° o in 1990-91 and 90.4% in 1996-97. This may reflect differences in programming, which often delays specialization in the life and pure sciences until the Master's level. Between 1990 and 1996, we see striking increases in courses offered under other, newer, multidiciplinary rubrics, Native Studies in particular and, to a lesser extent, Canadian Studies, International Studies, Environmental Studies and Women's Studies. This seems to occur at the expense of some of the established disciplines (such as anthropology, biology, sociology and political science). What is particularly interesting is the result of comparing the disciplines in which NSTP-assisted research was conducted to the disciplines of courses offered. In both 1990/91 and 1996/97, the years for which NSTP data are available, the physical and life sciences account for 54.8% and 79.6% of the studies, while the human sciences and humanities account for 85.0% and 88.1% of the undergraduate northern studies credits in those same years.

The three data sets for this study come from two sources. The first set, of northern studies courses offered at Canadian universities in 1972-73, comes from an inventory undertaken by the Association of Universities and Colleges of Canada (AUCC), in 1973 (Kupsh and Caillol 1973). In response to the possibility

that a group of private individuals might establish a university in Canada's territories, and to the discussions that circulated nationally about northern research and education in general, the AUCC commissioned a study "to survey present programmes of Canadian universities in education and research in the North, in order to discover the needs of northern people that are not now being met, and to recommend desirable extensions of the programmes in the future" (Kupsch and Caillol 1973, i). The result was a two-volume report. The first volume (Kupsch and Caillol 1973) contained an inventory of courses, research projects and programmes, while the second (Koenig 1975) contained the results of a survey administered to "discover the needs of northern people that are not now being met." The inventory volume contains lists of courses offered at thirty Canadian universities, classified into 28 disciplines. These provided the data for the academic year 72/73. We have had to assume that the researchers were able to identify all north-focused courses, but given that they were relying on informants at the various universities, it is probable that some courses were missed. It is certain that some of the listed courses were not northern studies courses by any definition: they contained no specifically northern content, but were included in the original inventory because they had been offered in northern centres. Such courses were not included in the present study.

The second data set was prepared by one of us under contract to ACUNS in 1990 and presented to the Association's Northern Colleges Committee in January 1991. The Committee wanted an inventory of courses with northern and substantial northern content as a tool to aid the development of transfer agreements between the northern colleges and the university members of the Association. The present authors had access to the database that was created as a result of this project. The third data set was prepared in the same manner as the second. University calendars were consulted and suitable courses entered into the database. Some universities no longer publish calendars, listing, instead, course information on the Internet. This represents a significant difficulty for assuring that the data set was complete. Different approaches to presenting course information makes it hard to ensure that all suitable courses were included. We can be sure that some current courses were missed.

The analysis of the data has been fairly limited, given the large number of individual courses (2320) and the difficulty in matching courses, institutions and the credit weight of individual courses. However, we are confident that the trends we have observed indicate an overall expansion, with some exceptions, of Northern Studies into more and more fields and an increasing interest on the part of Canadian undergraduates in their North and in the peoples who live there.

First a note about course counting methodology. For the purposes of calculating changes in the course offerings, we have converted all course values into "credit equivalents" (ceq), where a credit is equivalent to one hour of lecture instruction per week for 14 weeks with a one-hour final exam. Canadian universities use a variety of systems to indicate course values, and converting them to ceqs has allowed us to produce a more accurate description of the trends.

In 1972, Kusch and Caillol surveyed 30 Canadian universities (and listed another 13 as non-participants), 28 of which had offered courses with northern or some northern content (those of interest for this survey) to undergraduates in the previous year. In all, these 28 institutions had offered 245 courses (1062 ceq, or 354 3-ceq courses), on average 37.9 ceq/institution or 12.6 3-ceq courses each. Six institutions offered fewer than 10 ceq in northern studies, while only one offered more than 100. On average, each of the 28 institutions offered Northern Studies courses in 4.2 disciplines with a standard deviation of 2.7, a figure that highlights the small number of disciplines represented by these courses. Six institutions had courses in only one discipline (usually anthropology, occasionally history), while the broadest offerings, in nine distinct subject areas, occurred in but two universities.

In 1973, then, we found that Humanities (Art, History, Philosophy, Religion etc.) courses accounted for 15% of total ceq, Social Sciences and Others (Anthropology, Psychology, Planning, etc.) for 77.8%, Life Sciences (Biology, Botany, Zoology) for 3.4%, and Physical Sciences (Physical Geography, Geology) accounted for 3.7% of the credit equivalents. In the academic year 1972/73, the Northern Scientific Training Program funded the activities of students at 12 universities, an increase of two from the previous year (DIAND 1994, Table 1). Data are not available to compare the distribution of course disciplines to the those of the NSTP studies, but data from subsequent years suggest that studies in the life and physical sciences may well have predominated by a small margin.

The years after the academic year highlighted by the AUCC study saw increased interest in the Canadian North and increased funding for northern research, largely due to oil exploration, pipeline proposals and resources evaluation. The regular meetings of the Northern Research Committee representatives continued, culminating, as we have seen, in the creation of ACUNS, which organised conferences and supported publications. Its annual meetings were opportunities for discussion of topics of current interest to its constituents. In 1980, the annual meeting focussed on Native Studies programming, of great interest given that the North is the homeland of the majority of Canada's Aboriginal peoples. In 1982, ACUNS founded the Northern Studies Trust, intended to support student northern scholarship. That year also saw the publication of the *Ethical Principles for the Conduct of Research in the North*, to this day the most often cited document of its kind in Canada. As well, "the continuing advance of the industrial system, the emergence of strong native organizations, national inquiries into major resource projects, and a growing desire on the part of all northerners for a larger say in their own future" (Keith and Wright 1978, xiii) were current topics and focussed Canadian attention north.

In the 1990/91 academic year, the number of universities offering courses with northern foci or content increased to 51. This greater number may be the result of including universities that had not participated in the 1972 study. The 51 universities offered 783 courses (3016 ceq or 1005.3 3-ceq courses)—an increase of 185.6%—in an average of 6.5 disciplines (SD=5), which illustrates both a strengthening and a broadening of interest in the North and represents an increase of 54.7% in the average number of disciplines. Universities offered an average of 59.1 ceq each (an increase of 56.8% from 1972/73). Ten institutions, offered fewer than 10 ceq, while 8 offered more than 100 ceq. Courses in the Humanities accounted for 21% of the total ceq (an increase in its share of courses of 40%); Social Sciences and Others accounted for 66.6% (a decline of 14.4%), Life Sciences 3.5% (a 2.9% increase) and Physical Sciences for 8.9% (an increase of 140.5%).

Conditions were less bright in the years following the academic year 90/91. NSTP support has been capped at declining levels since 1984-85, from a high of \$825,000 in 1986/87 (DIAND 1994, Table 1) to \$673,000 in 1996/97 (DIAND 1997). Government cuts to almost all programs, including post-secondary education has caused great difficulties for many institutions. A 1996 study by ACUNS, commissioned by the Canadian Polar Commission, on human resource trends in Northern Studies points out that funding is a particularly crucial problem: "the amount of funding does not appear to equal the amount of work that needs to be done in both research and training with respect to northern issues and communities" (King *et al.* 1996, 12). The report goes on to point out: "Significant change is also taking place in the educational systems in the South as a consequence of changing economic circumstances and drastic changes in fun-

ding at all levels. This is reflected in decreasing funding for northern projects by the national grant councils and by significant 'downsizing' within the institutions resulting in early retirements and structural changes" (King *et al.* 1996, 87). A large number of universities face difficult decisions, and an interest in the North can often be an expensive proposition for students and faculty. And, given the economic restraints currently in place, the North has, to a considerable degree, slipped off the national agenda. Attention has been turning elsewhere.

In 1996/97, 42 institutions were identified as having courses with northern foci or content. This decline may not be entirely significant, as it was difficult to locate course material on-line in some cases. Despite the fewer number of institutions, they offered 1292 courses with a range of northern content, which represents 4407 ceq, or 1469 3-ceq courses, an increase of 65% over 1990/91. On average, each institution offered 105.0 northern studies courses (up 77.4% from 1990) in 10.6 disciplines (SD=6.3), the latter an increase of 63.1% from 1990/91 and up 152.4% from 1972/73. Five institutions offered fewer than 10 ceq, while 20 offered more than 100 ceq (an increase of 66.6%).

In the broad academic areas, courses in the Humanities accounted for 23.5% of total ceqs (up 11.9% from 1990), Social Sciences and Other human disciplines accounted for 66.9% (up 0.5%), Life Sciences accounted for 4.1% (up 17.1%) and Physical Sciences accounted for 5.5% (down 38.2%) of total ceqs. What we see from these data is that the Humanities and Social Sciences dominate the northern studies course offerings at the undergraduate level. Life Sciences and Physical Sciences remain between about 3-8% each of the total northern studies offerings at this level. As we speculated earlier, this may be due to delayed specialisation in these areas.

The largest single discipline in the Humanities is history, accounting for 66% of humanities ceqs (105 ceq) in 1972, 58.7% (366 ceq) in 1990, and 54% in

1996 (556 ceq). In the Social Sciences, Anthropology and archaeology represented the largest ceq in all years: 39.8% in 72, 25.6% in 90, and 12.5% in 96, suffering a decline of 51.2% between 1990 and 1996, while Native Studies ceq increased 282.8% between 1990 and 1996 (the field represented 2.9% of social science ceq in 1972, 8.5% in 1990, and 30.2% in 1996. Native Languages (teaching students to speak, read and write them) increased dramatically between the second and third study years. Those courses amounted to 7.1% of social sciences in 1972 (51 ceq), 21% (331 ceq) in 1990 and 20.39% (347 ceq) in 1996.

In the Life Sciences, Forestry had the largest ceq in 1972 (12 ceq), representing a third of the Life Science offerings. In subsequent years, Biology offered the largest number of ceq: 88 ceq in 1990 (83% of Life Sciences) and 80 ceq (44%) in 1996. In the Physical Sciences, Physical Geography and Geology were by far the largest contributors: 92.3% (36 ceq) in 1972, 98.8% (266 ceq) in 1990 and 90.1% (218 ceq) in 1996.

Courses that focus entirely on northern topics were also examined separately. We found that, on average, disciplinary north-focused courses did increase over the study period. From 14.3 courses per institution in 1972, to 28 in 1990, the average rises to 31.7 in 1996. Interdisciplinary courses that introduce or discuss the study of the North or its issues also increased, from none in 1972 to an average of 0.82 per institution in 1990 to 1.2 per institution in 1996.

NSTP figures for 1980-86 show that a third of the funded studies were conducted in the Humanities and Social Sciences, 37.9% in the Life Sciences and 29.1% in the Physical Sciences (Finkler 1987, Table 4). A similar study, compiled from NSTP statistics for 1987-95 (King *et al.* 1996, Table 2), show that Human Sciences and Other (i.e., Humanities, Planning, etc.) had declined to 21.4% of total studies, while Life Science studies had increased to 45.3% and Physical Sciences had increased to a third. Thus, while Humanities, Social Sciences and Other represent about 90% of the northern courses offered at the undergraduate level, students in those areas are severely underrepresented in actual research in the North.

This study has shown that Canadian universities are increasing the northern content of their undergraduate courses in a remarkable way. From a very modest start (245 separate courses at 28 institutions) we have seen a real expansion of northern studies into many different disciplines and slowly into its own field of study. Northern Studies are less intended to prepare people for work in the North and more to explain the region's importance to all Canadians. Few institutions yet allow students to specialise completely in Northern Studies but some have diplomas, majors, minors, or some other special designation to show a student has focused academic attention on the North. Space limitations prevent a more detailed picture of the changes we have seen in Northern Studies course offerings, but we believe that the analysis presented here shows that Northern Studies is an academic area in which Canada has developed considerable expertise, and not only at the graduate and doctoral levels. In the years to come, we hope that the universities continue the good work they have begun and maintain and expand their obvious committment to research in and teaching about the North of Canada and of the polar regions of the globe.

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