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The impact of a new university in a developing region: the case of the University of Northern British Columbia

Geoffrey R. Weller*

*University of Northern British Columbia, 3333 University Way, Prince George,
British Columbia, Canada*

Abstract

This article analyses the impact of a new university, the University of Northern British Columbia (UNBC), on a developing region. The educational, population, social, cultural, and economic effects of the coming of UNBC are assessed. The article compares the expected impacts with the actual, or likely, impacts. In doing so it makes comparisons with the impact of other universities previously built in other parts of the circumpolar north. The article concludes by arguing that impact of UNBC will not be as great as it might have been largely because it is not seen as part of a general regional development plan, but also because of a starting size that is too small in terms of programme range, a government focus on access issues, and intra-regional rivalry. © 1998 International Association of Universities. Published by Elsevier Science Ltd. All rights reserved.

Resumé

Cette étude cherche à analyser l'impact d'une université nouvelle, ici l'Université de la Colombie Britannique du Nord, sur une région en voie de développement. On discute les conséquences éducationnelles, socio-économiques, culturelles et démographiques. La discussion juxtapose les résultats attendus avec les résultats actuels ou vraisemblables et en ci-faisant met en parallèle l'impact sur leurs régions d'autres universités déjà construites au nord circonfolaire. L'article se termine en affirmant que l'importance de l'UNBC ne sera pas aussi grande qu'il aurait pu être parce qu'elle n'était pas vue comme partie intégrale d'un plan régional de développement, mais aussi parce que l'université, dès l'inception, était trop étroitement limitée en termes de programmes offerts; parce que le gouvernement était fixé sur l'idée d'accès pour la population et que le total était affaibli par la rivalité entre les régions qui constituent le réseau de ramassage de l'université. © 1998 International Association of Universities. Published by Elsevier Science Ltd. All rights reserved.

* Tel: 001 250 960-6488; fax: 001 250 962-9583; e-mail: weller@unbc.ca

1. Introduction

Most universities have measured their impact on their regions largely in terms of spending and employment. This article will analyse the impact of the new University of Northern British Columbia (UNBC) in broader terms by also discussing the impact of the university on educational development, population, society, and culture. In doing so a distinction will be made between the impacts that were expected and the likely actual impact of the university in the light of developments to date.

UNBC was created as the fourth publicly funded university in the province of British Columbia in June 1990 with the passage of the UNBC Act. It was the first university to be built in the northern part of the province and the first completely new university to be established in Canada in 25 years. It was mandated to serve the entire province of British Columbia but to give special emphasis to the needs of the northern two-thirds of the province. The university was officially opened by the Queen in August of 1994 and enrolled 1400 students in the Fall of that same year.

UNBC came into being as the result of much local pressure by the citizens of the region and by a few key people from Prince George, the largest city in the region. The idea of the university was sold on the basis of it having an impact on virtually every aspect of the society and the economy of the north as well as every community in the region. This promotion of the idea of a university gained support for the concept but it caused a crisis of expectations later on when it became realised that the impact would not be as extensive or, more particularly, as generally diffused throughout the region as quickly as expected. It was anticipated that the impact of the university would be to increase the participation rate in university education, increase the population of the region, help diversify the economy, and induce a cultural and social flowering within the region. In short the university was expected to be a panacea for all the regions perceived problems and the source of much of its hope for the future. While a university in a peripheral region can have all these impacts this article argues that it is unlikely to have them all very quickly, especially if there is no overall regional development plan.

2. The regional setting

The region in which UNBC is located is typical of Canada's northern frontier developing regions. It is much like the northern parts of many other provinces including Ontario, Manitoba, Alberta, Saskatchewan, and Quebec (Weller, 1984). These regions, in turn, are much like the northern regions of many other countries such as Sweden, Norway, Finland, the U.S.A. (Alaska), and Russia (Weller, 1987). The greatest distinction possessed by northern British Columbia among this grouping is that it is the last part to be developed. The vast majority of the development that has occurred in northern British Columbia took place after the Second World War. This recent development is reflected in the fact that it the most recent part of the circumpolar north to acquire a university.

Northern British Columbia constitutes two-thirds of the land mass of the province. It has a very varied geography and topography and is a place of great scenic beauty. It is also a place of abundant natural resources. However, most of the region has a harsh climate and only limited parts of it are suitable for agriculture. Only 301,000 people live in northern British Columbia. This constitutes less than 9% of the provincial total. The population is widely scattered with there being few population nodes. By far the largest city is Prince George with 75,000 people. The population is highly variegated. The First Nations population amounts to about 10% of the regional total. The non First Nations peoples are very mixed ethnically.

The economy of the region is resource industry based and many communities are dependent upon a single resource. This is even true of the largest centre, Prince George. The forest industry is important throughout the region as is the mining industry. Fisheries are important on the west coast and oil and natural gas are significant in the northeast. There are scattered small pockets of agriculture throughout the region but especially in the northeast and the central interior. Overall, the resource based northern economy is not doing very well. It constitutes a declining proportion of total provincial economic activity and many sectors, such as mining, are in very serious trouble. All of them are becoming increasingly capital intensive thus slowing or limiting job creation. The northern economy stands in marked contrast to the much more diversified and vibrant southern one. So much so that it has led some observers to say that the province has two distinct economies and societies (Davis & Hutton, 1989).

As is to be expected with a northern natural resource hinterland region northern British Columbia has a relatively poor communications infrastructure, as well as poor health status, and educational achievement levels. Road, rail and air communications are all essentially structured for the extraction of raw materials. In terms of telecommunications the region is well behind most of the rest of the country. As the recent report of the Provincial Medical Officer of Health revealed (Millar, 1994), health status indicators for northern residents are very significantly poorer than for residents of places like Richmond (a suburb of Vancouver). In addition, educational achievement indicators are poorer for the north than for the south despite the coming of colleges in the late 1960's and their offering of the first two years of university level courses.

3. Impact on education and knowledge

One of the major reasons for wanting a university in northern British Columbia was that it was thought that it would markedly enhance access to university education by northern students (Sadler, 1988). The 'participation rate', as the number of High School graduates going on to university is called, was only 8% in northern British Columbia as compared with 24% in the Vancouver area. By removing the financial barrier to access it was hoped that the construction of a university in the north would rapidly improve the participation rate. This was, indeed, what happened. The participation rate for northerners doubled to just short of 16% at the beginning of

UNBC's first year of full operation, the academic year 1994–1995. This is clearly a considerable success and one regarded most positively by all concerned.

Many UNBC faculty members have begun to conduct and publish research on northern British Columbia. Others have been appointed to provincial and national boards, commissions and other similar bodies. In this way UNBC will be fulfilling another role hoped of it, namely the taking of knowledge about the region to the rest of the world and placing it 'on the map'. In this very neutral sense these activities will be seen positively. The university will also be likely to produce specific knowledge as well as graduates that will help regional firms and services become more competitive. In this regard the university will become something of a catalyst for development, especially if it has appropriate programs, appropriate research capacity and consciously tries to link with regional business (as indeed UNBC hopes to do) via joint research and development, research parks and the like. However, the research conducted by UNBC will mean that there will be a kind of 'inspection effect' where the region will be looked at more closely than before. Inevitably some of the university faculty will produce material that will be highly critical. Regrettably, the experience of other universities is that much of the positive work of the university tends to get forgotten when a high profile 'critical' work by a university faculty member is produced.

UNBC was intended not only to take the knowledge of the region to the world but to also bring greater knowledge about the rest of the world to the region. This will be done via instruction on a wider range of topics than previously existed. It will also be done via research on topics that may be of no direct relevance to the region. The university will also bring knowledge of the wider world to the region via the conferences and other events that it organises that will bring people from many other places. This type of work will constitute the beginnings of the metropolitanisation of the region. However, some regional residents clearly do not like this effect of the coming of the university. It challenges their previously comfortable parochialism. Some do not like to think that others may have done things first or better. For example, the first international conference sponsored by UNBC was the fourth meeting of the Association of Circumpolar Universities and it clearly illustrated that northern universities were not a new nor a British Columbia idea, as many had previously thought, but something many jurisdictions had built, and sometimes on a much larger and more comprehensive scale.

4. Impact on population

Many of those who initially pushed for the creation of UNBC wanted the university to not only stem the outflow of population from the region but to create a highly educated inflow. To some degree this was an end in itself, that is a desire to reverse existing population trends and induce population growth once again. However, it was also a means to an end, namely the creation of a more educated workforce that would promote industrial diversification and growth by changing business locational

decisions. In short, the university was seen as a major device for enhancing the level of human capital in northern British Columbia.

Not every university would have these desired effects. Some might actually worsen the situation by training local people largely for out-migration to jobs that do not exist within the region and/or attract residents from outside the region who will simply move back to where they came from upon graduation. As has been remarked of a university in a peripheral region “its regional development effect will be marginalised if it functions as an ‘entrepot’ or stepping stone for students (and staff) ultimately headed for metropolitan locations” (Felsenstein, 1993).

Those involved in the creation of UNBC consciously tried to avoid creating this entrepot effect so the university should markedly improve the educational level of the northern British Columbia labour force over the next decade or two by improving the participation rate, by creating more educational opportunities for regional residents, and by attracting skilled migrants from elsewhere. It has already been noted that UNBC had a marked and immediate effect on the northern participation rate. Over a decade or two this will mean that the educational achievement levels of the local population will be considerably enhanced, thereby increasing the attractiveness of the region in locational terms for business and industry which, in turn, will likely increase population levels in the region.

UNBC has also had the effect of inducing migration to the region from elsewhere. In its first full year of operation UNBC employed some 280 people full time and another 120 people part time. Of these 120 were faculty members. Most of the faculty and other senior employees were hired from outside the region. In addition about half of the students were attracted to UNBC from outside the region. These induced migrants brought with them skills and training from elsewhere much of which was not previously located in the region. As Felsenstein has remarked “one of the main contributions of the university in a frontier area is its ability to induce migrants to the area that would not have been attracted otherwise” (Felsenstein, 1993).

However, frontier or less developed regions always have a great deal of inflow and outflow of people, more so than metropolitan centres. This will not immediately change with the coming of UNBC and the faculty, staff, and students will initially be as affected by this phenomenon as other groups. The skilled labour attracted to, or trained in, northern British Columbia, can easily be driven or attracted away. While northern living may have much to commend it many of the induced migrants may only be willing to stay for a while in an area with a harsh climate, a restricted range of services, where it is difficult to find spousal employment, and where there is a higher cost of living. The effect of these factors is compounded by the distance from family connections, the extra travelling needed for almost all purposes, and the fact that singles of both sexes, but especially females, have fewer likely partners available. The faculty especially operate in a job market that is national or international in scope and where they might be expected to work at two or three, or even more universities, in the course of a career. Thus when they leave they may not be expressing any ‘disloyalty’ as many regional residents are likely to think they are doing.

Experience at other northern universities, such as Oulu in Finland and Lakehead in northern Ontario, indicates that a significant portion, though a minority, of those

attracted to the north stay in the north. They add to the educational level of the regional population and, thereby, the attractiveness of the region in locational terms for business and industry. One of the other circumpolar universities even claims that it has reversed the pattern of flow of educated people. Trond Eskeland has stated that “In fact, the University of Tromsø delivers more educated people (at all levels) to the south of Norway than it receives. In that sense the University of Tromsø also plays a national role” (Eskeland, 1991).

The coming of a university is likely to exaggerate the population flow changes and industrial location changes within the region. This will not be regarded as a positive effect by all for it will undoubtedly enhance the tendency that is already becoming noticeable for population and industry to concentrate on a few nodal points within the region, especially Prince George. The fear of this effect was undoubtedly behind the initial strong desire for a ‘distributed’ university as reflected in the Dahllof (1988) report. The fact that such a distributed notion was rejected as unworkable educationally has meant that the university has been and will continue to be an object of much debate in the often bitter rivalries between the various northern communities.

5. The economic impact

The economic impact of a university in a frontier region is both direct and indirect. The building of the main campus of UNBC in Prince George, which involved the expenditure of \$137.5 million for construction and equipment purchases as well as an additional \$8 million from other sources for access roads, was one of the direct impacts. Initially there was considerable worry that northern enterprises would not benefit from the project because it was too large for them to handle. However, those in charge of the project took great care to break down the construction and other parts of the work into pieces of a size upon which regional firms would at least have a chance to bid.

The ongoing operating funds required by the university represent another direct impact. The regular operating funds received from the provincial government reached \$24.85 million in the fiscal year 1995–1996 and will steadily increase as student numbers expand. Some 80% of the funds go to cover salaries most of which are spent in the region. The student fees, and other expenditures made by students while at the university, also represent a direct impact of significance. This is partly because they involve the slowing down of the outflow of such monies spent by northerners in the south and it is partly because they involve an inflow of resources to the region from the 50% of the students who come from outside the region. Also representing a direct impact is the vast majority of the money raised for scholarships and bursaries, some \$7 million by the end of the 1994–1995 academic year, which is in large part new money brought to the region that will be spent within the region. Such monies are expected to reach \$20 million in a few years. Monies brought in for research purposes also represent a significant source of new funds for the region. In the first year of the university’s operation this only amounted to \$1.5 million but the total should expand

rapidly. In addition, various other university activities such as conferences and convocations will bring people and their expenditures to the region.

Because of the nature of a peripheral area such as northern British Columbia there is a great deal of 'leakage' of the spending and strong reverse migration flows. Both of these phenomena are not well understood and are resented by many regional residents. Because Prince George and the other northern communities are not very large and diversified more spending is undertaken outside the region than would be the case for a university located in a larger more diversified community. For example, much of the scientific equipment needed will be purchased from outside the region as will even more basic supplies and services. Also higher portions of the salaries paid will be expended outside the region as individuals will also purchase some goods and services from outside. Thus the 'multiplier effect' of the coming of UNBC has been calculated to be somewhat lower than for a university in a more populous and diversified region. They have been placed at 1.508 for salaries and 1.206 for buildings (Reid, Enemark & Rawbhotham, 1992).

Over the longer term UNBC may help to diversify the economy of the region. The university itself, of course, is a part of that diversification as it is already one of the bigger employers in the region even though it is only in the first year of its operation. In addition the university will 'seed' the local economy both through human capital formation and by enhancing the social and cultural attractiveness of the area. The degree of success that UNBC has will partially depend on how the university has structured itself and operates in the future. It will also partially depend upon the ability of the region to absorb the products of the university. While having any form of university will be better than having none northern British Columbia will benefit more because UNBC has been deliberately designed to have maximum impact within the confines of its resources. This means that it has appropriate degree offerings (although by no means all of those needed) at both the undergraduate and graduate level, research that is regionally relevant, and close ties with regional business and groups. However, it has begun as a relatively small university with a narrow range of programs (22 undergraduate and 12 graduate) compared with other circumpolar universities, many of which have medical, law, engineering and a wide range of other professional Faculties. Moreover, while industry incubator and research park areas have been set aside there is little activity as yet. However, UNBC has begun the process of enhancing the use of the human and physical resources of the region, of generating knowledge about the region, of developing technology relevant to the area, of assessing regional potential, fostering scientific and professional links with other regional organisations, and diffusing know-how and information about the experience of other similar regions elsewhere in the world. All of these actions will be of benefit to the regional economy and are likely to become steadily more extensive.

While the university has to put its best foot forward so too do regional organisations and the provincial government. This is because the region has to be able to absorb the products of the university so that they can be utilised to best effect. Regional groups and business have to reach out to the university as much as it has to reach out to them. Also they and the government have to recognise that the university is not mainly a direct tool of development. Thus the university will have its greatest effect if

it is incorporated as part of an overall development strategy for the region. Regrettably no such strategy exists and both regional groups and the government tend to regard the university as a panacea for all that ails the region. Of course, it is not. As Felsenstein has remarked “it should be recognised that most university impacts have the effect of entrenching growth processes that have already started rather than acting as an initial catalyst for them” (Felsenstein, 1993). Thus the government and others have to get these growth processes started for UNBC to have maximum effect.

6. Social and cultural impact

Although it is impossible to quantify, those who have observed the effects of the coming of northern universities elsewhere indicate that some of the major effects are psychological ones that, although without market value, are indirectly of great assistance to regional cultural, social and economic development. One of the main effects is to increase the level of self-confidence among the residents of the region. The coming of a university indicates that the region is developing away from being a frontier region and that it has ‘made it’. A university in the mind of the public is the very antithesis of a short term investment in, say, a mine. A university represents permanence, stability, and longevity. That same message or impression is conveyed to people outside the region as well and this, in turn, is likely to induce people, business and industry to make new, bigger and longer term commitments to the region. These psychological phenomena have been observed in other northern jurisdictions where universities have been built in recent decades. The Rector of the University of Lapland has indicated this when discussing the coming of his university, “more important (than economic factors) has been the psychological impact on the institutions of the region: self confidence and a strengthening of regional identity” (Riepula, 1991).

That the coming of UNBC will change the way the region regards itself is already evident in a greater consciousness in the north that there is a single northern region. Until recently there was very little discussion of there being a northern region in British Columbia as there was in many other provinces. There was the central interior, the northeast and the northwest but not a strong consciousness that the three had common circumstances and interests. In fact there was, and there still is, strong rivalry between them. Reflecting this is the lack of region-wide organisations.

The coming of a university to a region not only has an effect within that region but also outside it. Those living elsewhere see it as a mark of the development of the region. Southerners will come to the north for the first time simply because a university exists. Many may go back with their prejudices about the north confirmed but many others will go back with positive impressions. Either way knowledge of the north will spread more rapidly and more widely than would have been the case without a university. As the former mayor of Prince George frequently remarked the coming of UNBC has generally changed Prince George’s image from that of a pulp mill town to a university city. The image factor is partly why so many of those involved with the creation of the university from among the community wanted its buildings to

constitute what they called ‘real architecture’ and not just the normal northern utilitarian buildings. In this regard they should be well pleased for UNBC’s architecture is striking and is positively commented upon by virtually all visitors.

The coming of UNBC will strengthen the cultural infrastructure of northern British Columbia steadily over time. Prior to the coming of the university many good cultural activities and facilities existed. The arrival of the university will assist them and add an extra quality and range to them. Since the university is coming to a peripheral area with a limited range of activities and facilities it is likely that as the university grows it will add significantly to both the range of activities and the number and type of facilities. The same can be said of UNBC’s likely effect on sports activities and facilities. Regrettably, neither effect will happen as speedily as some might have wished because no monies were made available by the provincial government at the start of the university for either fine and performing arts facilities or sports and athletic facilities.

7. Conclusions

UNBC will have a marked beneficial effect on northern British Columbia. However, the impact will not be as great as it might have been for several reasons. The first, and far and away the major reason, is that the university is not seen as part of a general regional development plan or initiative. Nearly all of the most successful northern universities, such as Oulu, have been part and parcel of comprehensive designs for northern regional development. Thus the government of the province of British Columbia has not taken care to see that the region is ready to receive the products of the university, be that in the form of educated professionals or of research.

The second is that in British Columbia the main driving force in post-secondary education has been to increase ‘access’ to university undergraduate education. Thus UNBC was and is regarded largely as a northern access point to undergraduate education. This, along with the absence of a northern regional development plan, has meant that the importance of graduate education and research to regional development tends to be understated by those outside the university. In fact, there is very little clarity of understanding as to why UNBC should be a research university on the part of many, including many in government. Thus there is nothing like the acceptance of and emphasis on research at UNBC that there is at the more successful circumpolar universities such as Oulu, Umea, and Tromsø.

The third is that because UNBC is largely regarded as an access point to general university undergraduate education it was not given the wherewithal to start up the range of professional schools that are necessary to have maximum impact on a region such as northern British Columbia. These range from Medicine and Engineering to Law and the Fine Arts. It is significant that the most successful circumpolar universities in terms of their impact upon their own regions have been those that started with such major professional schools instituted as the result of extensive and detailed prior study of regional needs in general.

The fourth is that the intra-regional rivalry issue was not dealt with definitively by government or the other major players involved before the university was begun. This will mean the continuation of much internicene warfare among the communities in the north about who should get what benefits of the university and in what proportion. This will impede the development of the university, make it an object of criticism, and result in the withdrawal of support by some and provide others with the opportunity to say that the north did not deserve a university in the first place if all it can do is fight over it. The university has to serve the entire region but this cannot and should not be done, for academic reasons, by distributing its component parts across a huge region as some would seem to still wish to do.

While UNBC has not been placed in a situation where it will have as dramatic effect on its region as some of the other circumpolar universities it will have a significant and beneficial effect on northern British Columbia over the course of the next few decades. Moreover, there is always hope that one day a government will emerge that will think about regional development in a comprehensive and serious manner, and there is always hope that northerners may one day rise above their sub-regional rivalries.

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