# Short Papers and Notes

## Northern Teaching: Incentives and Motivations

Shortage of skilled labour has been one of the foremost problems of the remote and sparselysettled regions of the circumpolar North, and incentives have had to be employed to attract people away from established and comfortable roles in the South for the complex tasks associated with the development of northern regions. In the U.S.S.R. increments to basic pay, regional coefficients in areas of high living costs, pension benefits, retention of southern living quarters, extra holidays, and paid vacations in the South have been employed.1 Despite a paucity of literature on the subject, it is clear that similar incentives have been used in Canada, but in more piecemeal fashion. Hamelin<sup>2, 3, 4</sup> has accordingly proposed a uniform system of incentives relative to the "nordicity" of a settlement or region (based on 10 physical and human factors) which could be widely and fairly applied in northern regions.

The incentives now used are mainly financial and appear to be based on the principle that southern people expect to experience physical discomfort, cultural and social deprivation and perhaps psychological stress in northern environments, and will therefore require substantial financial advantages and opportunities for periodic escape to the South. Yet, despite such incentives, the problem of high labour turnover has often been mentioned.<sup>1, 5, 6, 7, 8</sup>

The purpose of this short paper is to suggest that other, less tangible considerations may also be effective in attracting and retaining immigrant workers, especially in those tertiary sectors of the economy oriented towards development of northern regions and peoples, such as teaching. Opportunities for human involvement in the North appear to be very

important and should be taken into consideration by employers.

The school system of the Northwest Territories relies almost entirely on teachers from southern Canada (mainly the Western provinces) and offers them moving expenses, higher salary, a settlement allowance (which, for a married teacher on Baffin Island, could exceed \$3000), subsidized annual vacation transportation to the South, and a bonus for capability in a native language. How effective are these incentives? Do other incentives exist? We decided to ask northern teachers.

A questionnaire was designed to obtain information on teachers' age, origin, marital status, qualifications, experience, reasons for going North, time spent in the North, reasons for staying there, future intentions, and attitudes towards incentives. In January 1972, 485 copies of the questionnaire were sent to the principals of all the schools of the Northwest Territories, with the request that they be made available to teachers. The 84 responses from 27 schools represented about 17 per cent of the total number of teachers (1971-72) and half of the schools.

The results did not support the common impression that teachers are attracted North mainly by financial incentives. Respondents were asked to rank 7 factors according to importance in their own decision to go North. Fifty-five (65 per cent) gave as the most important factor either "interest in the North" or "desire to travel", whereas "additional salary, financial benefits" was the first reason for only 12 (14 per cent). The relative importance of the 7 factors cited as the leading reason for going North is shown in column A of Table 1.

Taking the total number of responses for each of the seven reasons regardless of rank (column B) financial benefits again placed

TABLE I.	Reasons for go	ing North
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	A First Choice		B All Choices		C All Choices (weighted)	
	Respons	es %	Response	es %	Response	s %
Interest in the North	41	48.8	71	21.4	446	26.7
Desire to travel	14	16.6	59	17.8	307	18.4
Additional salary, financial benefits	12	14.2	51	15.4	262	15.7
Desire to teach in a remote community	6	7.1	47	14.1	216	11.7
Desire to contribute to						
northern development	5	5.9	59	17.8	252	15.1
Recommendations of others	2	2.4	35	10.6	135	8.1
Other	4	4.8	9	2.9	52	3.1
Totals	84	99.8	331	100.0	1,670	98.8

Average length of stay to date (years)	Will Stay Next Year (%) Yes Undecided No		Considering Permanent Residence (% Yes Undecided N			
A. 3.4	83	0	17	 33	33	33
B. 5.0	87	7	6	52	18	30

TABLE 2. Duration of Stay

A. Those citing financial benefits as first reason for going North: (14% of all respondents) B. All others,

behind the same two reasons and behind "desire to contribute to northern development". Weighting the total responses on a numerical scale (7 points for the first reason, 1 point for the seventh), the results are similar (column C).

It is clear that, in the main, teachers do not regard financial benefits as the principal factor in their decision to go North. Interest in the region and its peoples, the desire to travel to a new and different environment, and the opportunity to participate in the challenging task of northern development, rank as highly, or more so. Furthermore, the survey showed that the general nature of life and work in the North (less pollution and haste; more significant personal relationships within the community; a stronger sense of purpose in teaching Eskimo and Indian children; more room for innovation on the job) far exceeded financial considerations in the decision to remain there for more than one year. These observations agree with those of Parsons<sup>10</sup> among the professional classes in Inuvik.

Existing financial benefits are designed to offset the disadvantages of isolation, heavy moving expenses and high cost of living so that a teacher's real income is not less than that in the South. Some individuals, of course, have been attracted primarily by the apparently generous salary scales and fringe benefits, but the returns indicated that, as a group, these teachers have spent less time in the North than those motivated by other reasons and are less likely to remain for another year or to consider permanent residence (Table 2). Interest, involvement and commitment therefore appear to be more effective bases for prolonged residence than financial considerations.

The survey also indicated that the annual rate of turnover among teachers may have declined. In the past, it has exceeded 30 per cent<sup>11, 12</sup> and the average length of stay in the North has been reported as 2 years<sup>13</sup> or 3 years<sup>14</sup>. But 87 per cent of our respondents had served more than 1 years, 71 per cent more than 3 years, and 12 per cent more than 10 years. Their average length of stay was 4 years.

Reflecting what appears to be an increasing stability within the northern teaching force, almost half (48 per cent) stated they would "consider remaining permanently in the North".

While the above remarks are based on a reasonable sample of all northern teachers (17 per cent), the possibility of a bias in the responses exists. Financially-motivated, dissatisfied, non-involved, or transient teachers may have been less willing to fill out the questionnaire than those with deeper interest in the North. Be that as it may, the number of responses from the latter group is in itself encouraging, revealing a corps of teachers seriously concerned about the problems of northern education, actively involved in their solution, and enthusiastic about their work.

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## Polar Bear Predation on Beluga in the Canadian Arctic

During May 1970, while conducting field work at Grise Fiord in the Canadian Arctic Archipelago, a local hunter reported that a polar bear (*Ursus maritimus*) had successfully caught 3 beluga (*Delphinapterus leucas*) during March near King Edward VII Point (76°08'N., 81°08' W.), the extreme southeast cape of

Ellesmere Island, Northwest Territories. As none of the fifteen local hunters had ever witnessed such an event, and only one had ever heard of it before, I assumed bear predation on whales to be very rare, and consequently recorded whatever information I could obtain at the time.

According to the hunter's narrative, movement of a partially grounded iceberg about 200 metres offshore had prevented freezing of a small area of water surrounding the berg. Winter trapment of whales is known to occur during unusual conditions of sea-ice formation1, and as the open sea was at least 30 kilometres distant from this locality in March it seems probable that a small number of beluga had endeavoured to pass the winter in the open water alongside this berg. At some time in March a medium-sized female bear had caught and removed an adult female beluga together with another adult and a grey-coloured subadult beluga both of unspecified sex; the adult female beluga was dragged about 7 metres from the edge of the water, the other two a shorter distance only.

On 25 May an attempt was made to visit this location, but when within about 15 kilometres the tracks of a large male bear were seen, and hunting this animal took up the remainder of the day. The stomach of this 400-kilogram bear contained, in addition to some skin and fat of a newly-killed ringed seal (*Pusa hispida*), several pieces of white beluga skin.

Four days later on reaching the site of the whale kill, only the carcass of the grey beluga remained; apparently movement of the berg had broken up the ice and no trace of the other two carcasses could be found. The remaining carcass was attracting large numbers of glaucous gulls (*Larus hyperboreus*) and some ravens (*Corvus corax*) and earlier that day two male bears had been present. The smaller of the two bears had walked backwards dragging the beluga carcass tail-first in a zig-zag course a distance of about 150 metres from an earlier resting place on the ice.

Inspection of the carcass indicated loss of all skin and fat, and most of the meat from head and trunk; fracture of the occipital bones had occurred, but it is not known if this damage was suffered before or after death. An eyewitness account of a polar bear killing beluga in Novaya Zemblya however, relates how the bear lies with outstretched paws on the ice and delivers a blow to the head when the whale surfaces within range<sup>2</sup>.

In this region of the Canadian Arctic Archipelago, beluga generally change colour from grey to white at around 375 cm. in length.<sup>3</sup> Assuming the two white-coloured