

# DATA PROBE

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### FUNDING OPTIONS FOR NUNAVUT SCHOOLS

### DISCUSSION PAPER

Submitted to: Policy & Planning Division  
Nunavut Department of Education

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## EXECUTIVE SUMMARY

The current funding formula for K-12 schools in Nunavut is essentially the NWT formula, that was in effect prior to the creation of Nunavut. The NWT funding formula is still employed in Nunavut as an interim step. However, there is a need for assessing the formula in light of the specific needs of Nunavut.

This document proposes funding options for Nunavut schools for school year 2003-04. The proposed options are designed to deal with the following pressing issues: (a) high pupil/teacher ratios in earlier grades; (b) low student outcomes; (c) high non-attendance among higher grades; (d) teacher recruitment and retention difficulties; and (e) insufficient funding for students with special needs.

### Recommendation Summary

Number	Description	Cost Impact (\$Mil.)
1 (a)	Regional Administration – option 1	\$0.5
1 (b)	School Support Consultants	\$0.08
1 (c)	School Technology	\$0.5
1 (d)	Principal meetings	\$0.45
2 (a)	Increase DEA Administration	\$0.4
2 (b)	DEA Administration (surplus)	\$0.3
2 (c)	DEA meetings	\$0.45
3 (a)	Pupil Teacher Ratio – option 1	\$2.2
3 (b)	Pupil Teacher Ratio – option 2	\$5.2
4 (a)	Schools - Materials & Supplies	\$0.57
4 (b)	Schools - Casual Wages	\$0.185
4 (c)	School Counsellors	\$1.5
4 (d)	Inclusive Schooling – Group Homes	\$0.8
4 (e)	Inclusive Schooling – Support Assistants	\$0.8
4 (f)	Student Tutors	\$0.4
5 (a)	Teaching & Learning Centres & School Cultural funding	\$0.8
5 (b)	Elders in Schools	\$0.67
6	Infrastructure – Utility costs	\$0.0

The main part of the report discusses each component of the funding formula; the issues that we identified; the options we are proposing in response to these issues; and the cost of implementing these options.

<b>Recommendations</b>		<b>Cost impact (\$mil.)</b>								
<b>1 Regional Offices</b>										
(a)	Remove the administration costs of regional offices from the school funding formula and fund them through the Department of Education. Increase for current need to fund over the 3000 FTE ceiling.	\$0.5								
(b)	Funding for School Support Consultants be moved from the Nunavut School section of the funding to the Regional Office section. These positions need to be allocated based on the number of schools and communities served by the Regional Offices. Increase the salary base to \$100K to account for increases to salary and benefits costs	\$0.08								
(c)	Funding should be specifically provided to support the technology in Nunavut's schools At the rate of one Technology coordinator for every 10 schools within the Region.	\$0.5								
(d)	Funding should be specifically provided to support regional meetings of Principals.	\$0.45								
<b>2 District Education Authorities (DEAs)</b>										
(a)	Increase the flat component of the DEA funding from \$15, 000 to \$30,000 to make it possible for all DEAs to have part time staff.	\$0.4								
(b)	Allow DEAs to carry over surpluses, to encourage good management; alternatively, surpluses could be used to fund additional school needs in the community.	\$0.3								
(c)	Funding should be specifically provided to support regional meetings of all DEA across Nunavut.	\$0.45								
<b>3 Pupil/Teacher Ratios</b>										
(a)	<p><u>Option 1:</u> Maintain the current PTR formula for K-9 and 10-12 grades, but introduce a PY for principals in schools with early grades (K-6) as follows:</p> <table border="0" style="margin-left: 20px;"> <tr> <td style="padding-right: 40px;">K-6 FTE enrolment</td> <td>PY increase</td> </tr> <tr> <td>0-19</td> <td>0</td> </tr> <tr> <td>20-99</td> <td>1/2</td> </tr> <tr> <td>100+</td> <td>1</td> </tr> </table> <p style="color: blue;">Alternatively, keep the principals within the formula and add 25.5 teachers across the K-6 system.</p>	K-6 FTE enrolment	PY increase	0-19	0	20-99	1/2	100+	1	\$2.2
K-6 FTE enrolment	PY increase									
0-19	0									
20-99	1/2									
100+	1									
(b)	<u>Option 2:</u> Ignore the distinction between grades K-9 and 10-12 and apply the current PTR scale for high schools to the total FTE of each school, subject to the modification that the maximum PTR per school should not exceed 18.	\$5.2								
<b>Cost Impact depending on options</b>		<b>(\$4.88M – \$7.88 M)</b>								

## Recommendations (Continued)

**Cost  
impact  
(\$mil.)**

<b>4 Other Nunavut School Costs</b>		
(a)	Materials and Supplies base increased from \$425 to \$475 per FTE	\$0.57
(b)	Casual wages base increased from \$98 to \$120 per FTE	\$0.19
(c)	Student Counsellors using 1 counsellor per 500 students.	\$1.5
<b>Inclusive Schooling</b>		
(d)	Add 10 Pys to the current 38 Pys for <u>Student Support Teachers</u> : to work in schools servicing group homes where there are large numbers of students with high needs, and in the Young Offenders Facility.	\$0.8
(e)	Add 25 Pys to the current 53 Pys for <u>Student Support Assistants</u> : to support students with high needs, based on the assumption that 1% of student population need high support care.	\$0.8
(f)	Budget \$380,000 for <u>Student Tutors</u> , to assist primarily students with low level need (12% of student population); the budgeted amount is based on the assumption of one hour per week per student in low	\$0.4
<hr/>		
<b>5 Aboriginal Languages and Cultural Program</b>		
(a)	Remove the funding for the Teaching and Learning Centres from the school funding formula and fund them directly through the Department of Education, in line with our earlier recommendation regarding the funding of the administration of regional offices. Increase the community base to \$15K per community and FTE factor to \$200. Separate this funding between TLC and Schools.	\$0.8
(b)	Elders in schools to support school programs.	\$0.67
<b>Cost impact</b>		<b>\$1.47</b>
<b>6 Infrastructure</b>		
(a)	Remove infrastructure utility costs from the formula. By its nature, utility and staffing costs should be a central function and be funded directly by the Department, rather than be part of the formula.	No cost impact
<b>Cost impact</b>		<b>\$4.26</b>

# SCHOOL ENROLLMENT

## Background

- Most funding components are directly linked to previous years FTE enrolment (as of September 30). The full-time equivalent enrolment (FTE) across all Nunavut schools as of September 30, 2000 was 8,402. FTE is calculated as follows:

Kindergarten:	0.5 FTE
Grades 1 to 9:	1 FTE
Grades 10-12:	15+credits=1 FTE; <15 credits=0.5 FTE
Home schooling:	0.5 FTE
Young offenders:	50%+ attendance=1 FTE; <50% attendance=0.5 FTE

- Non-attendees are excluded from the enrolment numbers. Students are considered as non-attendees if they were absent for more than 60% of the possible consecutive sessional days during the month of September, without parent/guardian or school permission.

## Issues

- Enrolment is a key driver of the funding formula. Given the small size of communities, there can be significant variation in enrolments from year to year. Therefore using last year's enrolment as the basis of funding for the current year could lead to inappropriate levels of funding.
- Non-attendance is a problem in all grades and tends to worsen as the school year progresses.
- It would appear that the logic behind the exclusion of non-attendees is that staffing of classroom should reflect the normal student load -- i.e. be appropriate for the number of students that attend on a regular basis.
- Intermittent attendance still imposes demands on teaching resources. The issue remains that schools and DEAs need incentives that encourage school attendance.

# DETAILED ANALYSIS OF FORMULA COMPONENTS

## A. ADMINISTRATION AND SCHOOL SERVICES (\$4.5 MILLION)

### 1. REGIONAL OFFICES (\$3.3 MILLION)

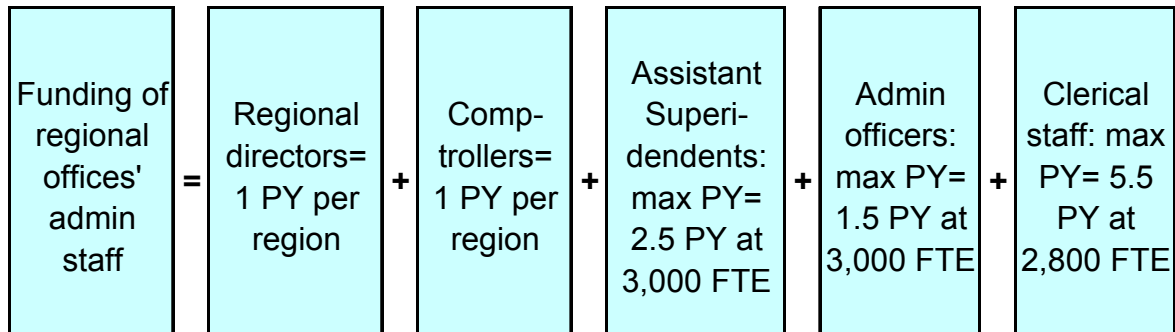
#### Background

There are 27 DEA funded communities in Nunavut (Apex is funded separately from Iqaluit), with 43 schools in total, and a full-time equivalent enrolment (FTE) of 8,402 as of September 30, 2001. Schools are organized under three Regional School Operations Offices:

- Qikiqtani (Regional Office in Iqaluit; scheduled to move to Pond Inlet)
- Kivalliq (Regional Office in Baker Lake)
- Kitikmeot (Regional Office in Kugluktuk).

The Regional Offices replaced the previous three Divisional Educational Councils (which were equivalent to school boards) and are administered directly by the Department of Education. The three regional offices are currently funded under the school formula as follows:

- (a) Administrative staffing: Salaries of the: (a) executive directors; (b) comptrollers; (c) assistant superintendents; (d) administrative officers; and (e) clerical staff of the regional offices. The formula is based on the number of communities (maximum 12 per region) and full-time enrolment (maximum 3,000 FTE per region).



- (b) Administration O&M: Travel and other operating expenses. The formula allocates \$9,755 per administration person and school consultant, and is adjusted by the local cost of living index.

## **Issues**

- (a) The regional offices operate as an extension of the Department of Education and there is no justification any longer for funding them under the school funding formula. Removing their funding from the formula will simplify the formula and will link it more directly to education needs at the school level.
- (b) Moreover, the formula assumes the maximum enrolment in any of the three regions is 3000. In fact, the FTE enrolment in Qikiqtani has already exceeded significantly this ceiling (the September 30, 2001 FTE was 4,426).

## **Recommendations**

**(a) Option 1: Remove the administration costs of regional offices from the school funding formula and fund them directly through the Department of Education. Funding needs to be adjusted to account for operations over the existing 3000 FTE ceiling. Estimated cost is \$500K**

Three further recommendations, suggested by the three Regional Executive Directors, are as follows:

- (b) Funding for School Support Consultants be moved from the Nunavut School section of the funding to the Regional Office section. These positions need to be allocated based on the number of schools and communities served by the Regional Offices. Increase salary base to \$100K to reflect recent salary and benefit increases. Estimated cost \$80K**
- (c) Funding should be specifically provided to support the technology in Nunavut's schools. Funding for current staff is available occurs from within existing budgets. The first step would be the funding of at least one Technology Coordinator per Regional Office. Estimated cost \$500K (\$95K + \$30K X 4)**
- (d) Funding should be specifically provided for Regional Principal meetings. The meetings would allow for increased communication between the Department of Education and District Education Authorities. Estimated cost \$475K**



### **Cost Implications**

- Recommendation (a) simply involves the transfer of funding out of the school formula and into the general funding of the Department of Education. The transfer would be based on current formula with staff increase to reflect current needs. The estimated impact of introducing into the current formula FTE increments above the 3,000 ceiling would be approximately 5PY's at an estimated value of \$500K Cost implication is \$500K
- Recommendation (b) at this stage only involves the transfer of School Support Consultants to the Regional Offices and increasing salary base from \$80K to \$100K to reflect current costs.
- Recommendation (c) estimated cost of \$500K for four PYs and related O&M.
- Recommendation (d) estimated cost of \$475K for travel and related expenses.

## 2. DISTRICT EDUCATION AUTHORITIES ADMINISTRATION-- DEAs (\$1.1 MILLION)

### Background

Each community has its own District Education Authority (DEA), consisting of local community representatives. Individual DEAs negotiate with Regional Offices the allocation of the funding for the schools in their community. For example, they may negotiate replacing a teacher person year with two class assistant person years.

DEAs receive funding for administration salaries and benefits, honoraria for attending meetings, and O&M relate expenses. Under the current formula DEAs receive:

$$\begin{array}{|c|} \hline \text{Funding of District} \\ \text{Educational Authorities} \\ \text{in each community} \\ \hline \end{array} = \begin{array}{|c|} \hline \$15,000 \text{ per} \\ \text{community} \\ \hline \end{array} + \begin{array}{|c|} \hline \$86 \text{ per FTE} \\ \hline \end{array}$$

This funding supports the direct costs to each DEA to operate the offices and support administration staff in each community and is not related to programming funding, which is found in other areas of the current formula.

### Issues

- (a) A basic issue reported by several DEA members is that because "schools operate with bare-bones budgets" there is "not enough leeway in the funding formula" for DEAs to make decisions. Under current funding levels, for example, principals and DEAs must make hard choices -- such as between class size and hiring specialists.
- (b) Some communities expressed concern that DEA surpluses are clawed back. They feel that DEA funding should be unconditional (as in the case of municipalities) and that good management should not be penalized.
- (c) Finally, based on our interviews, it would appear that, for some communities the current funding of DEAs is not enough to cover meeting costs and the use of a part-time staff.

### Note

Another issue, not related to the funding formula, that was identified during our interviews is that, because DEAs are new, their role in the education system is still evolving. Moreover, because school boards have been abandoned, DEAs feel isolated. There is a desire for a regional gathering of DEAs. It is estimated that costs for this would be approximately \$450K annually. The Department could consider ways of improving communications among DEAs -- e.g. organize an

annual conference of all DEAs to discuss issues and explore solutions; develop a virtual network of DEAs using the internet to help DEAs share experiences.

### **Recommendations**

- (a) Increase the flat component of the DEA funding from \$15,000 to \$30,000 to make it easier for all DEAs to have a part time staff.**
- (b) Allow DEAs to carry over surpluses, to encourage good management and could be used to fund additional school projects in the community.**
- (c) Provide funding for regional DEA meetings in Nunavut.**

### **Cost Implications:**

Increasing the flat component of the DEA funding formula from \$15,000 to \$30,000 per community (plus \$86 per FTE) will cost approximately \$405,000 (27 communities, times \$15,000).

However, the proposed flat rate of \$30,000 per DEA will likely be inadequate if DEAs continue to take on more responsibilities in the community. As additional duties are assumed, additional funding will be required.

Current DEA surpluses if returned to the Government would account for approximately \$300K. While not directly affecting the Department of Education, these dollars are returned to the Government of Nunavut.

An annual DEA meeting is estimated to \$450K. \$340K travel + \$60K accommodations + \$50K for staff travel, O&M and other conference related expenses.

## B. NUNAVUT SCHOOLS (\$59.5 MILLION)

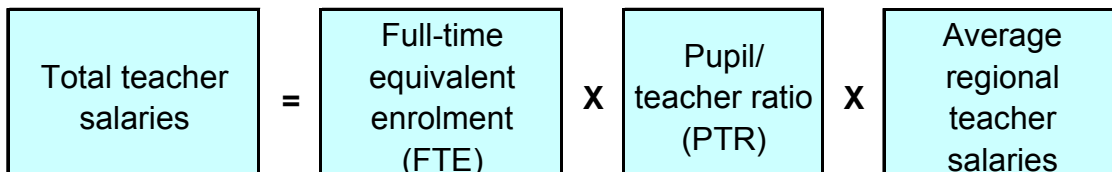
### 3. TEACHER SALARIES (\$37.6 MILLION)

*Note: As pointed out in the executive summary, the formula used in this report is based on enrolment statistics as of September 30, 2001, and teacher salaries as of September 2001. Possible adjustment in teacher salaries or benefits that may be in effect in school year 2002-03 have not been incorporated in our formula.*

#### **Background**

This part of the formula includes funding required to operate the school system, such as: staffing for teachers, language specialists/ classroom assistants, consultants, school counsellors, secretaries, custodians; as well as materials and supplies for the classrooms.

The single most significant component of the funding formula is teacher salaries. The size of this component depends on the following three factors. Of these three factors, PTRs are the most important policy lever. This section focuses exclusively on PTRs.



Under the current formula, the teaching PYs include teachers and principals, but not classroom assistants. The level of PTR is determined on the basis of FTE. Two separate PTR tables are currently used: (a) one PTR table for K-9 schools; and (b) a separate PTR table for 10-12 schools.

Exhibit 3 compares PYs and PTRs between K-9 and 10-12 schools at the same level of FTE.<sup>1</sup>

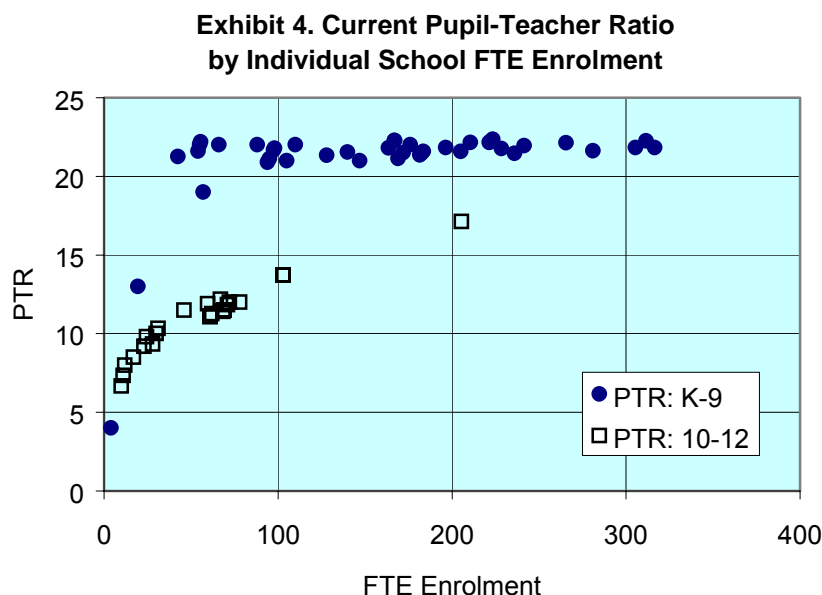
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<sup>1</sup> The PTR tables for K-9 and 10-12 grades use different FTE increments. This makes it difficult to compare K-9 PYs to 10-12 PYs at the same FTE level. To facilitate comparisons, in Exhibit 3 we modified the K-9 PTR table by using the high school enrolment increments, as follows: (a) we started with the current PTR table for high schools; (b) then we estimated the K-9 PYs that correspond to the FTE increments used by the high school PTR table, by using the minimum enrolment level within each enrolment range. For example, a high school with FTE between 107 and 117 is allocated 8 PYs, while a K-9 school with a 107 FTE is allocated 5 PYs. The PY estimates for K-9 schools could be off by at most 1/2 PY, because of the modification of the K-9 school enrolment brackets.

**Exhibit 3: Current Teaching PYs and PTRs by FTE**

FTE		Teacher PYs		PTRs	
from	to	K-9	10-12	K-9	10-12
1	9	1.0	1.0	1.0	1.0
10	14	1.0	1.5	10.0	6.7
15	20	1.0	2.0	15.0	7.5
21	27	1.5	2.5	14.0	8.4
28	33	2.0	3.0	14.0	9.3
34	40	2.0	3.5	17.0	9.7
41	46	2.0	4.0	20.5	10.3
47	53	2.5	4.5	18.8	10.4
54	60	2.5	5.0	21.6	10.8
61	67	3.0	5.5	20.3	11.1
68	76	3.5	6.0	19.4	11.3
77	85	3.5	6.5	22.0	11.8
86	95	4.0	7.0	21.5	12.3
96	106	4.5	7.5	21.3	12.8
107	117	5.0	8.0	21.4	13.4
118	128	5.5	8.5	21.5	13.9
129	140	6.0	9.0	21.5	14.3
141	151	6.5	9.5	21.7	14.8
152	162	7.0	10.0	21.7	15.2
163	173	7.5	10.5	21.7	15.5
174	184	8.0	11.0	21.8	15.8
185	195	8.5	11.5	21.8	16.1
196	205	9.0	12.0	21.8	16.3
206	216	9.5	12.5	21.7	16.5
217	226	10.0	13.0	21.7	16.7
227	237	10.5	13.5	21.6	16.8
238	247	11.0	14.0	21.6	17.0
248	258	11.5	14.5	21.6	17.1
259	268	12.0	15.0	21.6	17.3
269	279	12.0	15.5	22.4	17.4
280	289	12.5	16.0	22.4	17.5
290	300	13.0	16.5	22.3	17.6
301	310	13.5	17.0	22.3	17.7
311	321	14.0	17.5	22.2	17.8
322	331	14.5	18.0	22.2	17.9
332	342	15.0	18.5	22.1	17.9
343	352	15.5	19.0	22.1	18.1
353	363	16.0	19.5	22.1	18.1
364	373	16.5	20.0	22.1	18.2
374	384	17.0	20.5	22.0	18.2
385	394	17.5	21.0	22.0	18.3
395	404	18.0	21.5	21.9	18.4

Exhibit 4 shows graphically the current distribution of K-9 and 10-12 schools by FTE and corresponding PTR.



The following observations can be made about the current PTRs:

- Smaller schools have lower PTRs than larger schools:  
In the case of both K-9 and 10-12 schools, the PTRs are lower at lower FTEs. The formula reflects the reality that smaller schools need a lower PTR than larger schools to accommodate the same number of grades. For example, smaller schools rely more on split classes that require a smaller classroom size than straight classes; smaller high schools still require a minimum teaching PY to be able to provide subject experts in key areas.
- K-9 schools have higher PTRs than high schools:  
PTRs are significantly higher for K-9 schools than high schools:
  - the average PTR for K-9 schools is 21.7 (virtually all of K-9 schools have a PTR above 20); while
  - the average PTR for high schools is 12.8 (virtually all high schools have a PTR at or below 12).

Underlying the above difference in PTRs are two factors:

- the 10-12 PTR table is more generous than the K-9 PTR table; in particular, at the same level of FTE, high schools receive 2-3 teaching PYs more than K-9 schools.
- in general high school enrolment are much smaller than K-9 enrolments; this further reduces their PTR (since smaller schools get a lower PTR than larger schools).

## Issues

In our opinion, there are two main issues with the current PTRs:

(a) PTRs are too high, particularly in earlier grades:

There is overwhelming evidence that small classrooms are particularly important in earlier grades. However, by all indications, Nunavut PTRs are too high.

- The average PTR is higher for K-9 grades (21.7) than high schools (12.8), despite the fact that lower PTRs are particularly important among earlier grades.
- Finally, the above comparisons are even more unfavourable if, in addition, one factors in the multitude of challenges that Nunavut schools face: dealing with two cultures and two languages; high prevalence of social problems; high teacher turnover; and low student outcomes.

Therefore, a key priority for Nunavut's school system should be reducing PTRs, particularly in earlier grades. Lower PTRs will go a long way toward helping students improve their scholastic performance and increasing teacher retention (by reducing stress and providing more time for training).

(b) The 10-12 school classification is too narrow:

High schools need a minimum staffing of subject experts to be able to deliver core subjects. They also need additional resources to support special programs like fine arts, or industrial arts. It is for these reasons that the current PTR formula for high schools is more generous than that for K-9 grades.

The fundamental question here is whether high schools have the necessary resources to develop the programming that is required to:

- make schools relevant to students and reduce the drop-out problem; and
- prepare graduates adequately for post-secondary education or for a trade if they are not interested in further formal education.

However, the issue with high schools is not with PTRs per se. In fact the PTRs for high schools are considerably lower than for K-9 schools.

Rather, the issue is that the 10-12 enrolment base is too narrow.

Under the current funding formula, enrolments are split into two: K-9 and 10-12. The problem with the above split in enrolments is that the number of students in 10-12 grades is often too small to make it feasible to have enough subject experts for teaching all core subjects, even with low PTRs.

The most obvious solution to this problem is broadening the number of grades over which subject experts are used. At the present, most K-9 students are taught all subjects by the same classroom teacher, and subject experts are mostly restricted to grades 10-12.

An even limited use of subject experts in grades 6 to 9 will increase the opportunities for using current PYs to hire more subject experts. This approach will help high school to have access to more subject experts, without necessitating a further lowering of their PTRs.

### **Recommendations**

#### **(a) Lower pupil/teacher ratios (PTR) in earlier grades.**

A main issue identified above is that the PTR for earlier grades is too high. Two alternative options are presented here to deal with this issue:

<b>Option 1: Maintain the current PTR formula for K-9 and 10-12 grades, but introduce a PY for principals in schools with early grades (K-6) as follows:</b>	
K-6 FTE enrolment	PY increase
0-19	0
20-99	0.5
100+	1

Principals are currently treated as part of the total teaching PY. During our interviews many felt that allowing for an extra PY for principals will go a long way towards making the current pupil/teacher ratio (PTR) more appropriate. Given that high PTRs are primarily an issue with earlier grades, we propose that the increase is restricted to schools with K-6 grades. Option 1 will add 25.5 new PYs.

As a variation, leaving the Principal within the formula but add the 25.5 new PY's to the existing K-6 allotment of teachers. This would have the same effect and would effectively lower the pupil teacher ratio in those schools with the greatest need.

<b>Option 2: Ignore the distinction between grades K-9 and 10-12 and apply the current PTR scale for high schools to the total FTE of each school, subject to the modification that the maximum PTR per school should not exceed 18.</b>
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Option 2 is more generous than option 1. It will add 60.5 new PYs. The increase will benefit grades K-9, but will have no effect on grades 10-12. In terms of its impact on individual schools:



- schools with grades up to 9 will be clear winners;
- schools with 10-12 grades will typically receive more PYs for earlier grades (all high schools included at least junior high school grades), but they may receive less for 10-12 grades because the PTRs will be based now on a broader enrolment basis.<sup>2</sup>

*Appendix A* provides detailed comparisons of the PY allocation by individual school under the current formula and the two options presented above.<sup>3</sup>

**(b) Extend the use of subject experts to junior high school through team teaching.**

Another issue identified above is the difficulty of small high schools to have enough subject experts. The current formula has responded to this need by introducing lower PTRs for high schools. However, even with lower PTRs, the issue has not adequately been addressed, especially in small schools.

A more cost effective alternative to further reductions in the high school PTRs will be the following one:

*Make a wider use of subject experts in junior high school grades, through team teaching, thus making it possible for high schools grades to have access to a wider range of subject experts.*

For example, two teachers can split the teaching load of a junior high class, while both of them spend the other half of their time teaching high school courses within the area of their subject expertise. This option can be easily implemented since all Nunavut high schools include junior high grades.

**Cost Implications: \$2.2 - \$5.2 million**

- Option 1: 25.5 new PYs (5.8% increase), at a cost of: \$2.2 million
- Option 2: 60.5 new PYs (13.7% increase), at a cost of: \$5.2 million

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<sup>2</sup> As explained above, PTR increase with enrolment levels.

<sup>3</sup> Under Option 2 only one school (Simon Alaittuq Ford in Rankin Inlet) lost 1/2 PY. We added half a PY to the table to address this situation.

## 4. OTHER NUNAVUT SCHOOL COSTS (\$21.9 MILLION)

### Background

Section 4 of the funding formula (*Exhibit 1*) lists additional items related to the funding of Nunavut schools. For the most part, funding for these items is based on FTE enrolment. Following now are some issues identified during our interviews with parent and school officials. The identified bussing item should be moved to Section E of the new formula as it reflects infrastructure and support costs. This area will require additional discussion and costing.

### Issues

- Materials and Supplies

The current formula identifies O&M funding for schools based on \$425 per student times a weighted freight factor. This amount needs to be increased to reflect the greater need for teaching resources and materials and supplies for schools.

- Casual Wages

Wages for substitute teachers and other casual staff replacement has not kept pace with increased requirements and costs. Schools are currently funded at the rate of \$98 per FTE.

- School Counsellors

There is a need for counsellors in each community to work directly with students on a variety of issues not addressed by the school community counsellor. Currently, any school wishing to employ a student counsellor must use one of its existing teaching positions in this capacity.

### **Recommendation**

- |   |
|---|
| <p><b>(a) Increase Materials and Supplies costs to \$475 per FTE with an additional 2% freight factor increase.</b></p> <p><b>(b) Increase Casual wages base for substitute teachers to \$120 per FTE</b></p> <p><b>(c) Create a separate school counsellor based on one (1) counsellor at \$90K for each 500 students within a community. This would require an additional 17 PY's at a cost of \$1.5 Million.</b></p> |
|---|

### Cost Implications:

Materials and Supplies should be increased to \$475 per FTE for schools. This will add \$557K to school budgets with a 2% overall freight increase cost factored in.

Casual wages for substitute teachers will require an additional \$188K per year.

Using the base of 1 counselor for each 500 students, assuming a base cost of \$90K per position, 17 counselors would be required. Expected cost would be \$1.53 Million.

With respect to busing, which could potential have more significant cost implications, it needs to be examined as a separate project. There is a base cost regardless of the community size.

## C. INCLUSIVE SCHOOLING (\$6.3 MILLION)

### Background

The Department of Education has an inclusive schooling philosophy that directs schools to educate all students in the mainstream. The aim is that students attend regular classes wherever possible and that mainstream programming is supplemented with appropriate educational programs geared to the capabilities and needs of students with special needs.

Approximately 20% of the students may have special needs. These needs can be distinguished in three levels:

- (a) Level 1 (highest need -- about 1% of all students): this level includes students with high needs, severe visual, hearing or developmental disability.
- (b) Level 2 (about 7% of all students): this level includes students with minor to moderate physical and social/emotional needs.
- (c) Level 3 (about 12% of all students): this level includes students that may require extra help at times to be able to keep up with mainstream programming.

Under the existing formula, \$6.3 million is allocated for inclusive schooling for school year 2002-03. The major share of this funding (85%) is accounted for by the following three components:

- (a) 4 Student Support Consultants -- allocated as follows:
  - regional FTE <3,000: 1 PY
  - regional FTE >3,000: 2 PYs
- (b) 38 Student Support Teachers -- allocated as follows:
  - school FTE 0 - 50: 0.0 PY
  - school FTE 51 - 150: 0.5 PY
  - school FTE 151 - 300: 1.0 PY
  - school FTE 301 - 450: 1.5 PYs
  - school FTE 451 - 600: 2.0 PYs
  - school FTE 600+: 2.5 PYs
- (c) 53 Student Support Assistants -- allocated as follows:  
6.5 PYs per 1,000 FTE in each of the three regions

## **Issues**

- Not all of Nunavut's schools have been allocated or have chosen to use their PY allocation for Student Support Teachers.
- There are no counseling services funded from within the Inclusive Schooling budget. School community counselors (originally deemed as positions to help develop strong networks between the home, school and DEA) have in some schools assumed this role, rather than using qualified counselors.
- The level of current funding does not appear to be in line with the level of need. For example:
  - many children have hearing problems; also fetal alcohol syndrome (FAS) affects a significant number of children; and suicide prevention is a serious issue;
  - because of language and other issues many students perform below their grade level; there is a need for an expanded tutoring system

## **Recommendations**

### **(a) Student Support Teachers**

Under the current allocation formula there are 38 PYs for General Student Support Teachers for Inclusive Schooling programs and services in schools. Based on interviews with staff, there is a need for additional PYs for students with high needs. A modest option will be to:

**Add 10 PYs to the current 38 PYs for Student Support Teachers, to work in schools servicing group homes where there is a large number of students with high needs and in the Young Offenders Facility.**

### **(b) Student Support Assistants**

Based on the assumption that 1% of the student population has a need for high support care and assuming a one-on-one for basis support, the current enrolment levels will justify at least 80 PYs for student support assistants. Therefore, one option is to:

**Add 25 PYs to the current 53 PYs for Student Support Assistants, to support students with high needs, based on the assumption that 1% of student population need high support care.**

### **(c) Student Tutors**

Many students will require some short term, limited assistance at some point during their school years. It was suggested during our interviews that the use of Student Tutors to assist students who have minor disability or who need additional assistance to achieve their potential would be beneficial. A budget option will be :<sup>4</sup>

**Budget \$380,000 for Student Tutors, to assist students with low level of need (12% of student population); the budgeted amount is based on the assumption of one hour per week per student in low need.**

The Department of Education recognizes that these are initial steps to provide supports to students. The above recommendations are a start towards change and additional measures will be added to provide the necessary supports to students.

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<sup>4</sup> The \$380,000 budget was calculated by taking 12% of the FTE (i.e. the estimated number of students with low level needs), times 1 hour per week of the school year, times \$12 per hour.

**Cost Implications:**

Implementation of the three above options will increase the funding allocation for Inclusive Schooling from its current level of \$6.3 million to \$8.3 million (a \$2.0 million increase). Exhibit 6 provides a detailed comparison of the cost of the proposed options relative to the status quo.<sup>5</sup>

**Exhibit 6: Inclusive Schooling Funding 2002-03  
Current vs. Recommended Funding**

	Current Formula			Proposed Formula		
	Pys	Salary	Amount	Pys	Salary	Amount
<b>Revised Components</b>						
5.1 Consultants at regional Offices	4	\$80,000	\$320,000	4	\$100,000	\$400,000
5.2 Program Support Teachers	38	\$84,120	\$3,196,569	48	\$84,120	\$4,037,771
5.3 Support Assistants (53PYs)	53	\$31,715	\$1,744,320	80	\$31,715	\$2,537,193
<b>New Component</b>						
Tutors (1)	N/A	N/A	N/A	N/A	\$12/hour	\$380,000
<b>Unchanged Components</b>						
5.4 Magnet Facilities - Teacher salaries			\$172,604			\$172,604
5.5 Magnet Facilities - O&M			\$27,000			\$27,000
5.6 Staff Development (Training)			\$384,201			\$384,201
5.7 Administration (O&M)			\$321,301			\$321,301
5.8 Transportation (\$3,735 per eligible student)			\$111,204			\$111,204
<b>Total</b>			<b>\$6,277,199</b>			<b>\$8,371,274</b>

<sup>5</sup> The above cost estimates are based on the existing salary levels.

## D. ABORIGINAL LANGUAGES AND CULTURAL PROGRAM (\$1.5 MILLION)

### Background

The aboriginal language and culture-based program supports the establishment and maintenance of Teaching and Learning Centres. TLCs may be regionally or community based. Their goals are to:

- encourage and support the development of culture-based education;
- help communities and schools develop resources and materials to teach Inuktitut; and
- provide co-ordination and training to staff to enable them to develop the knowledge, skills and attitudes required to implement culture-based education.

Under the current formula, funds are allocated per region as follows:

$$\begin{array}{|c|} \hline \text{Regional} \\ \text{allocation of} \\ \text{funding for} \\ \text{aboriginal} \\ \text{languages and} \\ \text{cultural programs} \\ \hline \end{array} = \begin{array}{|c|} \hline \$100,000 \\ \text{per region} \\ \hline \end{array} + \begin{array}{|c|} \hline \$10,000 \times \\ \text{(number of} \\ \text{communities} \\ \text{minus one)} \\ \hline \end{array} \times \begin{array}{|c|} \hline \$120 \times \\ \text{regional} \\ \text{FTE} \\ \hline \end{array}$$

### Issues

Since the regional offices run the TLCs, it would make sense to remove them from the formula and fund them as part of the Department's overhead. The need for increased resources for curriculum indicates a need to increase the community factor to \$15K per school and increase the FTE factor to \$200.

Schools require funding to offer culturally appropriate programs delivered by DEAs across Nunavut. Funding for schools should be identified separately.

### Recommendation

**Increase the community factor to \$15K per school and the FTE factor to \$200. Remove the funding for the Teaching and Learning Centres from the school funding formula and fund them directly through the Department of Education. Provide identified funding for culturally appropriate programs at the school level. Cost impact is \$794K**



**Recommendation**

**Provide funding for Elders to work within the education system as resource, developmental and instructors. Funded at \$80 x FTE, cost would be approximately \$672K per year.**

**Cost Implications:**

Increasing the community factor to \$15K per community will increase the overall cost by \$120K per year.

Increasing the FTE factor to \$200 per FTE will increase the overall cost by \$670K per year.

Elders working within the TLC and schools provide a valuable resource and promote the use of Inuktitut, Inuit values and customs. Based on an \$80 / FTE ratio, costs can be identified at approximately \$672K per year. This reflects the minimum amount required to institute this area across all schools.

## E. INFRASTRUCTURE (\$11.1 million)

### **Background**

The main items included under infrastructure are utilities, and staffing and personnel services. Of the total \$11.0 million, \$6.0 million has been budgeted for utilities. The budget is based on historical costs.

### **Issues**

- Utility costs are a central function that should be removed from the formula and administered by the Department of Education.

**Remove infrastructure costs for utilities and staffing costs from the new school formula. By its nature, infrastructure should be a central function and be funded directly by the Department, rather than be part of the formula.**

## CONCLUSION

This report has proposed a number of options or recommendations that could go a long way toward many of the concerns identified during our interviews with departmental officials, school staff, and parents.

For the most part the recommendations are meant as improvements to the current formula, as opposed to a radical redesign. However, over the longer term it may be desirable to explore more radical alternatives.

The separation of the overall budget into Department activities and School activities will help to clarify for all concerned the levels of funding available for each section. This was not always clear in earlier days when the three Divisional Councils received all the funding and then allocated it out based on different needs of the three Councils.

The restructuring of the overall budget has a further advantage; it will now be possible to identify those areas that can be easily identified as school related costs. This will aid the Department in further refining school funding in the future.

There may well be other ways to restructure school funding in order to make the process easier to administer from all perspectives. The process of simplifying the formula will require additional work in the future. It is recommended that the Department initiate a process by which all financial officers involved with school funding examine funding issues further and refine the formula.

This process is the first step in restructuring the school funding available. The formula itself will not address the issue of the overall government budgets. Hard decisions will be needed in future years as increased pressure from all other areas of government activity could limit the government's ability to provide all the funding needed for schools. Departmental competition for scarce fiscal resources over the next several years is an issue beyond the scope of this project.