

School-Based Performance Indicators

Prepared by

Gerry Hurton
AFN Secretariat
2009

Introduction

INAC's new proposal program First Nations School Success Plans is an attempt to address the gaps in First Nations education data. This paper will look at the development of First Nation indicators that have been in progress previous to announcement. The paper will provide background that needs to be considered as First Nations move forward in the area of Performance Measurement at the school level.

Background

In 2007, the Director for Miyo Wahkohtowin Community Education Authority (MWCEA) from 1994 to 2004 wrote a paper on school planning. In it he discusses how MWCEA was able to change the perception of the Ermineskin Schools from schools of last resort to schools of choice. The Director states one of the most important initial steps they did in the area of school planning and performance measurement was to commence the identification of critical issues and annual priorities which led to the development of action plans. This progressed into a five-year strategic plan and to the eventual understanding of performance measurements (School Success Planning, unpublished paper, Brian Wildcat, 2007). As he stated, there was a need for the development of performance measures and an identification of how these measures were used in supporting strategic plans. As INAC and First Nations focus on performance measures and developing data there is a need for increased understanding of how to use data in planning and decision making.

In 2001, the National School Board Foundation of the United States published a manual entitled "Improving School Board Decision-Making; the data connection." The guide was designed so local school board members could utilize it to educate themselves.

Users of the manual would learn to

- Understand what data are – the numbers, trends and observations;
- Ask for the appropriate data to inform their decisions;
- Work with the superintendent to understand what data reveals through analysis and interpretation;
- Use data to support board decisions on policy and budgets by removing guess work...
- Inform and involve community members in understanding the strengths and gaps in student performance – where their moral and fiscal support is needed most.

This manual, although eight years old, is still a wealth of information on how schools boards or committees should be using data. While some First Nations and their organizations are quite experienced at using data this is a new area for many First Nations. Understanding the data and the proper use in how it can inform decision making is not as straight forward as many believe. This type of background material and informed support will be critical if First Nations are to use the performance measures and data management frameworks to improve the outcomes of their schools. Readings such as these will also improve INAC's capabilities in the use of data in decision making, especially at the regional level.

A failure to provide supports could leave First Nations vulnerable to the costly establishment of data management systems and the collection of information and data that does not meet the students, parents or schools needs to address outcomes. This is not a condemnation of First Nation school committees, after all many Provincial and Private educational Systems currently find themselves in this situation. It is obvious that many School Board/Committees regardless if they are First Nations or not need these types of supports as well.

Accountability Guidelines

When developing school-based indicators the target should be to improve student results and not to be delivering blame. The following points provide a guideline when designing an accountability model.

- Improvement is based on formative assessment not just summative assessment.
- Based on broad priorities not based on a narrow focus.
- Context- Process-Outcomes are all important factors not just outcomes
- Criterion referenced measures instead of norm-referenced
- Measure progress instead of high stakes measures.
- Take a long term perspective not the short-term perspective.
(taken from D Hoiium presentation to AFN SCA Dec.08)

INAC's Required Indicators

In the INAC guidelines for First Nations Student Success Program INAC identifies that purpose of student learning assessment is to gather information to support the school success planning process. INAC lists the goals of improvement in literacy, numeracy and student retention along with other goals as sent out in the school success plan. INAC's required core indicators include:

- monthly attendance,
- number of teaching days,
- dropout rate,
- literacy standardized test results,
- numeracy standardized test results.

The first three indicators are available from existing sources of data either through the nominal roll and/or school registers. However, it would be informative to try and use surveys or interviews with students that have dropped out to try and understand why and if there are activities that could improve the retention of students. The collection of data in this area is critical if communities are going to build effective programs to address the drop out rate.

For the other indicators schools must use provincial standards testing process or use recognized standardized achievement tests such as the Canadian Achievement Test (CAT -3) or the Canadian Test of Basic Skills (CTBS).
(FNSSP Guidelines)

Context and Process

When developing an education indicators program it is important to remember the context that the education environment is in. The context provides the background which needs to be considered when viewing the indicators presented. The context is often overlooked or missing when looking at First Nations schools. The context of the school indicators should include student, teacher and community demographics; school deployment; program and service overview, opportunities and challenges.

Issues of funding shortfalls and community factors such as socio-economic factors, health issues, cultural practice, language proficiency, fluency and use, isolation and transient population also have an affect on the success of schools and the issues they face. When researchers compare provincial outcome averages with First Nations, rarely do they take such factors into consideration. It was interesting that the latest Saskatchewan Education Indicators (2008) did in fact compare northern high school marks as well as the average of aboriginal students (including First Nation schools) with the provincial average. The results showed both groups were well below the provincial average but close to each other. Many northern schools provincial and First Nation are small, isolated, in low socio-economic settings, have transient populations and high staff turnover. Schools in urban settings with high aboriginal populations have more supports but also face transient populations, low socio-economic settings and high staff turnover as well. While there are many interpretations of this it can demonstrate that schools having the same context and facing similar challenges were having similar results.

Regional Indicators

First Nation Indicators

In the Prince Albert Grand Council 2004 Indicators Report the context included: geographic locations, number of communities, population distribution and birth rates, program information such as length of school year, courses offered and secondary credit attainment. They also included information on student demographics such as student population, attainment and graduation rates. Teacher profiles included data on numbers, distribution, experience, certification and educational background. Much of the information was gathered through surveys.

The Saskatchewan Treaty Four Education Indicators consists of four areas . They are as follow:

- Leadership and Governance to provide the context to their indicator report.
- Schools, Curriculum, and Opportunities to learn describe the education program including the student indicators which are loosely based on the Saskatchewan provincial Assessment for Learning which uses curriculum based assessments.
- Teachers and Teaching which includes demographics on teachers and the teaching process on-reserve.
- Facilities and Access to schools which includes the state of facilities and how the community accesses the school outside of regular school hours. Also, how the

school committee involves parents in educational decisions and planning is included in this section.

Further information in support of the indicators is the gathering of information through surveys that were given to teachers on their voice in local education decision making and parents on their voice in local education decision making. The majority of information was gathered through the use of surveys. (Treaty Four Education Indicators 2009)

The British Columbia First Nations School Association (FNSA) 2007 report also provides a thorough understanding of the context for the schools in the report. Again there are indicators on the type of governance and information on teacher and pupil demographics. As well a substantial list of indicators was developed for the chosen areas of concern. However, it is important to understand the background on which the report was developed. The FNSA 2007 report clearly states the measures were generally created specifically to reflect the unique goals of First Nation communities and parents. A broad set of standards was developed through the consultation process and then a variety of indicators in each of the standards was developed. The majority of the data is gathered through the return of surveys. First Nations indicators have covered the context and processes involved in their education. The report did have student results for both math and reading based on grade level.

With the two new INAC proposal funding programs there is an expectation of the establishment of data management and the development of performance measurement systems. There is no overall long-term strategy to move an educational agenda forward and develop cohesive systems that work together. It is important to understand that the development of this process takes time. Because of the limited time for the development of the proposals many will have to refine what was originally submitted. Finally, the proposals have to balance financial constraints between the development of data management systems and performance measurement and the important area of school-based initiatives and the supports they require to actually improve student outcomes.

Provincial systems have developed over time and reflect areas that are important to the provincial mainstream population. It is a mistake to expect that these mainstream indicators will reflect First Nations views on education. If it was that easy to establish generic performance measurements all provinces and territories would have the same indicators. This is certainly not the case, every province measures learning within their jurisdiction differently, as well all Provinces also report differently on the state of their learning to stakeholders differently. There are certainly some very common learnings and principles and there will be an overlap with First Nations on the need for measures on student success, but how indicators are chosen and how they will be measured will require cooperation, consultation and investment. A heavy handed approach to unilaterally impose performance measures will only put the process of stakeholders taking control of their own learning and empowering their people in jeopardy. As well, to utilize performance measurement and data to further marginalize students (ie: eliminate students from the nominal roll) further perpetuates the Educational gap that currently exists between First Nations and Non-First Nation. INAC has to be clear that

the data gathered has to be used for the intended purpose of the improvement of student outcomes rather than non-supportive punishing motives.

First Nation organizations that have started in the process of developing indicators have done so because they and the communities they serve see a need for information to understand where their students are and what are the strengths and weaknesses of their program. There needs to be the development of a trusting relationship and the establishment of common values and guiding principles such as OCAP (Ownership, Control, Access and Possession) would be a great start in the development of that foundation. Following these principles would give First Nations the comfort they seek in knowing that the data and information they collect for Performance Measurement would be in their control, would be respected and would not be misused, misquoted or used against them for a political agenda. First Nations must collect the data that is important to them as well as information for effective decision making and reporting purposes. As such, First Nation organizations that have started the process often need to carefully establish relationships and that trust before gathering more quantitative data. As a result of the exclusion of First Nations in data management, research and information gathering, many First Nations have had to take the time to establish the principles and assure their own people that the guide lines that protect the people and community are in place and will not be violated. First Nations have had too many negative experiences in providing information and data to researchers and Governments, only to have this information and reported negatively and utilized to take programs, services and resources away from communities and individuals. First Nations who have initiated their own data management and information gathering, begin by collecting the generic contextual information which may include student and teacher demographics. This is safe generic information to begin getting the students, parents, teachers and community used to the idea of collecting and analyzing data. Not many First Nations have begun to collect the more personal information of such as student marks and assessments due to the fact that;

- First Nations are not funded for comprehensive student information management systems, training or technology
- There is no established community, regional or national process to collect information and data
- First Nations are not funded to administer tests, compile scores, analyze and issue reports
- First Nations are not resourced for Professional Development to remain current with education initiatives
- Those who are collecting, compiling, analyzing and issuing reports (even first Nations) must garner the trust, and support of the students, parents, teachers and the community

This work has been slowed by the limited funding for developing indicators and education reports. It is also further hindered by the lack of funding for data management systems. In the past this has been funded through hit and miss proposals funding which can be cutoff without regard as to where First Nations are in the process.

National Indicators

From the discussion at the National Performance Measurement workshop national indicators would include student outcomes in mathematics and literacy, cultural and language indicators, transitions and funding inputs. These would be in addition to attendance rates, teaching days and drop out rate. There still needs to be discussion on the final set of final indicators that would be useful at the national level and how these would form part of the evaluation of INAC's education program.

Culture and Language

Some people have attempted to rely on the use of standardized testing to measure primary indicators. The sole utilization of norm-referenced standardized testing is a major concern for First Nations as this is not a comprehensive or realistic measurement of intelligence, potential or the primary indicators of lifelong learning that are important to First Nations. The two most important areas to First Nations are language and culture. Currently there are no standardized assessments in these areas and provincial education programs are not required to measure them. However, the Provinces do understand the importance and relevance culture and language has on First Nation Learning. At the Council of Ministers of Education of Canada (CMEC) in Saskatoon February 24-26, 2009 the Provincial Ministers acknowledged the importance of First Nations culture and Language in First Nation learning. The development of First Nation Cultural and Linguistic indicators will be important to First Nation students, parents, communities and their schools. Educators know that education is the tool that cultures and societies utilize to transmit one's culture. The transmission of culture has always been an important part of education. This is shown in the development of French School Boards across the nation as well as the continued funding for Catholic School Boards.

Mi'kmaw have developed some useful indicators from their previous work on addressing the loss of language amongst the youth. The following indicators were listed in the "Framework for School Improvements For Mi'kmaw Schools". (2007)

Mi'kmaw language and culture indicators consists of:

1. Fluency in the Mi'kmaw language
 - oral knowledge in social studies
 - knowledge in literacy comprehension
 - speaking fluency
 - reading comprehension
 - writing fluency
2. Mi'kmaw cultural values
 - awareness of cultural protocols
 - respect for elders
3. Indigenous cultural knowledge in various subjects
 - indigenous knowledge in science
 - indigenous knowledge in math

Number 3 would be based on an aggregate on the report card form. MK has not decided how the other indicators will be measured or sampled by their data management system.

However, it is a start for the development of indicators in the area of language and culture which must be supported and adequately resourced so schools and communities can understand what is working and what needs to be changed and what can be shared with other first Nations.

The limited data they are now able to collect through surveys enables them to utilize qualitative and quantitative information to demonstrate the progress in teaching First Nation language to students. Of 24 students who entered kindergarten only one was considered fluent in Mi'kmaq and ten were English only speakers. The rest used a combination of Mi'kmaq and English. At the end of their fourth year in immersion, the instructors indicated that 21 of the 24 students were fluent speakers-so fluent that they could hold conversations in Mi'kmaq with elders, could follow and remain engaged by the oral language of elders, and were considered more pure speakers of the language than most of the students at the high school level. This demonstrates on a small scale the type of useful information that can be gathered. In this school there is measurable progress in reviving the First Nation language.

The establishment of this baseline data on current educational programs can be expanded in future years to look at how these students learn and retain information in English, their capacity to function and learn in Mi'kmaq and English. As well, they will be able to measure the progress of these students in high school and post-secondary. They may be able to answer the question in the future, does an education in one's own culture and language better prepare students for the future.

The First Nation Schools Association in British Columbia has developed several indicators in the area of culture and language. These indicators are as follows:

- percentage of schools that have a First Nation Language and Culture program
- percentage of schools that report having Language and Culture integrated across the curriculum
- amount of time spent in language and culture class
- parent survey results - are you satisfied with your children's learning?
- Student surveys results – are you learning about your language and culture?

(First Nations School Association 4th Annual School Measures and Data Collection 2007-08)

Once again, FNSA will have a strong baseline to expand upon with the gathering of data on the effects of culture and language programs on student outcomes.

Are culture programs impacting students and are students developing a stronger foundation and identity about themselves their history? It is clear that First Nation are under funded for language and culture but are program such as the Mi'kmaq having positive impacts. To adequately measure culture and language programs, we would need to also assess the amount of supports and resources allocated, dedicated and provided for First Nations culture and language program. When gathering data on teachers such as the number of aboriginal teachers, it is also just as important to measure the languages spoken by those teachers, and how often do they speak or teach in their language in the

classroom. A quantitative measure does not give the entire story, nor is it good enough just to be aboriginal in front of the classroom, you can be aboriginal and teach just like any other teacher, but as an aboriginal teacher are you meeting your students' needs by providing support in the student's language or are you supplementing the curriculum with your own cultural knowledge and experience. There are only pockets of work in this area. It may be useful to have experts in measurement work with First Nations personnel in the development of reliable indicators.

Information and Communications Technology (ICT)

The Pan Canadian Education Indicators Program (PCEIP, 2007) speaks to the importance of integrating ICT into teaching and learning. "Considerable effort has been devoted to acquiring hardware and software for elementary and secondary schools, providing Internet connections, taking advantage of new learning tools, and helping educators improve their own ICT-related skills. Many now consider ICT use in schools to be an essential part of a student's education." (PCEIP, 2007 pg 71)

This area is also vitally important for First Nation schools. Although School Net is now conducting a mapping of ICT access that analyzes the data individual schools need to track. The data will need to be rolled up so that regions and national players can set targets to ensure ICT is a viable tool in First Nation schools. Some of the areas that data should be collected include:

students per computer, quality of internet accessibility, status of hardware including servers and replacement cycle, quality of software available, and courses taught at elementary, secondary and post secondary currently using ICT, training of ICT teachers, availability of supports and training both through non profit organizations, provincial education and commercially, programs . It would be interesting to also gather data on availability of computers and access to internet at the homes of students.

Possible sources available: School surveys, ICT service providers,

Discussion with the six School Net Regional Managing Organizations will be required to coordinate available data and understand where the gaps are that require more information. While there should be no limiting the information that schools can collect for their own use many schools would benefit from talking with the RMOs about what data needs to be collected if First Nations schools are going to benefit from the newly announced \$225 million broadband initiative. INAC and AFN both need to see that education and School Net are working together to benefit First Nation schools.

Early Years School Readiness

"Current research has indicated that there is a strong link between brain development and early environmental influence." (Saskatchewan Education Indicators, 2008) The importance of these early years has been recognized by Canadian governments as critical in the development and future well-being of the child, establishing the foundation for competence and cope skills that will affect learning, behaviour and health." (PCEIP,

2007, pg 47) The importance of Early years School Readiness certainly is not lost to first Nations, and they see the vital importance and link to lifelong learning that the early years has on an individual success later in life.

School readiness for children about to enter the school system is a critical piece for planning in the primary grades. However, as pre-school programs often falls outside of the INAC k-12 system and funded through Health Canada, and First Nation and Inuit Health Branch information is not readily available to First Nation schools. Health is responsible for early vision and hearing screening and protocols need to be developed so parents will understand the need to share this information with schools. Many different assessments have been used to screen the pre-school population like the Peabody Picture Vocabulary Test Revised (National Longitudinal Survey of Children and Youth), the Brigance Early Childhood Screenings in some of the Head Starts (PAGC Early Literacy Project, 2006), the Ireton Developmental Screening, the Denver Developmental Screening Tool by nurses on First Nation communities (conversation with Nurse Cathy Miller Mar. 2009), Understanding Early Years projects used the Early Development Instrument (Understanding the Early Years, D Willms, 2005) and the Early Years Evaluation by a mixture of provincial and First Nation organizations (discussion with D. Willms, March 2009). The panel selected for the National Performance Measures (March, 2009,) was impressed with the capabilities of the Early Years Evaluation instrument because it was web-based and results were immediately available. Further research will be needed to better inform First Nation schools on the most efficient early childhood screening tools.

Due to confidentiality concerns and lack of interagency coordination information often does not reach schools. However, that being said it will be necessary for First Nation schools to build the protocols and be adequately resourced and supported to conduct school readiness assessments. Many communities are struggling with HIV, drug and alcohol related births and this will have a huge impact on schools. Not only do schools need data for planning primary programs but funding bodies such as INAC and FNIHB need to also be aware of communities where this issue is growing and its potential impacts on the lifelong learning and poverty of the community. First Nation communities that are block funded for special education (intervention funded) may be especially vulnerable.

Standardized Assessments

The use of standardized testing is controversial not only for First Nations, but also Provincial systems and international education systems (Eric Digest Team, 1995). Standardized testing has many issues and barriers to effective assessment. One of the most common concerns is that the utilization of standardized testing can result in schools and teachers teaching to the test rather than teaching students effective skills and education to function in the new technological age. *“This term is used to denote a narrowing of curriculum, such that an excessive amount of time is spent preparing students to take the test at the expense of subjects such as physical education, music, art, and social studies which are not tested. As Wright (2002) argues the preoccupation with*

teaching to the test also leads to drilling students on basic skills rather than focusing on broader learning and higher order thinking.” (White, Peters, Beavon, 2009 pg 130) In the article “Signposts of Success, Interpreting Ontario’s Elementary School Test Scores”, 2005, the author, David Johnson, commends schools for preparing in advance on the tests, up to three years in advance. A quote from the article clearly states, *“The single most important lesson I learned was that, in a successful school, teachers in the primary division (kindergarten to grade 3) work together as a team to approach the grade 3 test.”* Spending that much time focused on the test will have impact on non-tested subjects and the lifelong learning of the student.

Cultural and language bias in standardized testing is another major issue. *“Boudeaux (1995) argues that standardized tests based on general population norms and using multiple-choice questions are culturally biased. This because standardized, norm-referenced tests are “normed” based on dominant culture student populations and will therefore tend to miss-measure minority and low-income students. Research by Fairtest (1995) indicates that performance on standardized norm-referenced tests is highly correlated with socio-economic status. Very early studies such as McDiarmid (1972) discuss the role that poverty, health, nutrition, social conflict, language, and test motivation play in the interpretation of test data.”* (White, Peters, Beavon, 2009 pg 130) (Studies have shown that as much as 70% of the variation in student test scores is due to factors beyond a school’s control, such as student, family, and community factors (Ungerleider 2006). Others areas of concern cited in Aboriginal Education (2009) include negative psychological effects on students, improper comparisons, assimilation and force integration.

On the positive side many point out identifying strengths and weaknesses involves the using standardized testing as a diagnostic tool. This is a view that many in the educational field would challenge. Colin Kelly former Associate Director of Education for a school division in Alberta and Don Hoium current Director of Education for Regina Public School Division both see the need for more informative data. Large standardized tests may point out weaknesses but do not provide the information to make informed changes in programming.

Clearly there is a need for understanding what is happening in our schools. Just as clearly the research does not back the use for standardized tests in improving our schools or giving a concise picture of student achievement. A northern Alberta retired superintendent of education shared in a conversation with Indian and Northern Affairs Canada and Assembly of First Nations staff the following perspective. The division had done poorly on the Alberta Achievement Tests. They knew the results of the tests but not why. They then applied for provincial grant to used curriculum based assessment at the school to identify weaknesses and allow a useful intervention. The Regina Public School Board is involved in the provincial assessment program. Like the school division in northern Alberta they see the need for the development of curriculum based testing because provincial testing does not give enough information to develop interventions or drive school and student improvement plans. If the improvement of our schools is really the goal it is apparent there are far better ways to invest funding then in norm-referenced standardized tests.

Alternatives

It is important not to test for the sake of testing but to focus on an improvement agenda. Instrumentation beyond norm-referenced standardized tests is required. The goal is to provide better defined data that can actually lead to instructional improvements and enhance student outcomes. This is not to negate the relevance of standardized norm-referenced tests but to place them in the context for which it was intended, which is for normative monitoring purposes.

An enhanced assessment approach utilizes a blend of normative standardized assessment in conjunction with more frequent criterion-referenced performance-based authentic assessments. Criterion referenced performance-based authentic assessments utilize a common set of performance standards or criterion (standards-based) to assess student performance on common assessments that reflect actual knowledge and skill application, that is authentic.

The use of criterion-referenced performance-based testing would allow for pre and post testing supporting an improvement agenda in First Nations education. Classroom teachers would administer the pre-test in early fall to establish a baseline. With the data from these tests administrators and teachers of the school can make intervention plans. Post tests would be given in May and would measure the success of interventions. Scoring of the posttest would be done by teachers that would receive additional training and so would allow for consistency in grading. These results could be compiled regionally or nationally to identify the proportion of students at various grade levels that are meeting or exceeding the identified standards of performance. Every two-three years a national norm referenced standardized achievement test would be undertaken to provide a comparison of First Nation education results in relation to the norms of all Canadian students involved in the norming sample. (discussion with Don Hoium, Director of Education, Regina Public School Division, 2008)

To ensure the development of valid, reliable and practical instruments, it is recommended that regional assessment consortia be established. In the west, consortiums of provincial departments of education, school divisions and First Nations could collaborate in the development of authentic performance-based instruments. The Western and Northern Canadian Protocol have established similar curriculum outcomes. As a result it may be possible for jurisdictions such as Saskatchewan to develop an assessment in writing, with other jurisdictions developing similar instruments in areas such as reading and mathematics. The Atlantic Consortium could work with First Nations in that region. Ontario and Quebec would have sufficient numbers to develop tests to meet their needs. Initially, such a process could be piloted in a jurisdiction where there is sufficient interest to proceed.

The movement to a blended assessment program will allow the best of both approaches as it would support the development of reliable criterion-referenced performance-based assessments to provide data for instructional improvement and standards-based reporting and every three years a national norm referenced picture of the state of First Nation education through a national standardized achievement test.

Work by the Canadian Council on Learning is helping First Nations and others to look at developing education indicators in areas that are important to them. It is a continuation of this work along with curriculum based assessments that will have the best chance for actually making a difference in our schools.

School/Community Based Indicators

The following appendix provides a variety of indicators for First Nation schools to review when looking at the development of indicators. First Nations have started to develop indicators especially ones that cover the areas of context and process. The next step is to develop student outcomes and the selection/development of measures for that. There is clear need for student outcomes in the areas of literacy and numeracy and this paper has looked at some of the issues of using standardized norm-referenced assessments and alternatives to them. Other areas that are of equal importance are culture and language. This area is less well developed and the following appendix provides some of the current indicators being used by First Nations organizations. Two other areas addressed in this paper are Information and Communications Technology and School Readiness. These are two areas that have a significant impact on successful outcomes of students and are also often overlooked. Research shows the need for involvement of the community in setting the priorities for schools. Other areas that communities will decide are their priorities will be based on the needs of that particular community. Gangs, drug and alcohol are some of the issues that communities will place in their priority list. It is next to impossible to develop a meaningful list of possible indicators for all situations. However, it is hoped that this paper will provide First Nations with useful information and questions when developing their indicators. This work needs to take place along with the development of national education program indicators and regional indicators of student success. There is a great deal of work to be done and will require a commitment from INAC and First Nations.

Possible List of School Based Indicators

- Curriculum based assessment in literacy
- Curriculum based assessment in mathematics
- Sample of cultural activities and qualitative outcomes
- Overview of First Nation language program and qualitative data
- School readiness of pre school population measured with a recognized instrument
- ICT program status and needs (surveys)
- Educational financing measured by audits and contribution agreements
- Attendance and graduation rates from school data
- Transition rates from pre-school to primary, primary to middle years, middle years to high school and to post secondary/labour force; measured by school registers and surveys.
- School Community involvement measured through parent, student and teacher surveys
- Student sense of well being measured through surveys
- Teacher and administration retention provided by school data.

- Education facilities – status, renovations required, school life expectancy, costs
- Governance model

The vital point on the school based indicators is they cannot be picked from a list such as the ones in this paper. The development of the school success plan begins with community discussion on the critical areas as seen by the community and school. This process will lead to the establishment of priorities. This will then lead to strategic plans and from there will come the selection of what will be the indicators and how they be measured. As has been mentioned throughout this paper this is a new challenge for First Nation schools and will take time to develop. Work done in previous years has demonstrated the Community Dialogues developed by CCL, AKLC and AFN education as a planning model that appeal to First Nations. This will need to be expanded to allow more First Nations to use this in their community/school planning.

INAC is in the process of establishing national performance objectives and the proposals will be asking schools to provide their school-based indicators. However, the roles and responsibilities of community and region organizations have yet to be established. While aggregates struggle to help schools use data management frameworks and develop performance measures there will be a continual push to use less funds on this and more on trying to offset the underfunding of school programs. The development of performance measure systems means funds will have to be allocated to regional supports and how the data from the regions will roll up to the national level. A further unanswered question is how are the regions or aggregates to be evaluated and how does this fit into Performance Measures.

The Assembly of First Nations have worked at developing several pieces of this puzzle. AFN has developed supports for First Nations such as this paper and a guide to the development of school success plans. First Nations through the AFN have developed a national framework on data management to guide First Nation communities and organizations in the development of their individual and aggregate data frameworks. Further supports can be offered through the list of 100 directors of education on a web-based sight that will not only provide a conduit for outgoing information but a valuable way of gathering grassroots concerns and feedback.

The position taken by AFN education on Performance Measurement remains the same. First Nations require performance measurement to provide the data that can influence decision making in the educational planning. It is the primary purpose of performance measurement to support education and not provide information for negative reactions.

Appendix

First Nations School Association Indicators

(First Nations School Association 4th Annual School Measures and Data Collection 2007-08)

First Nations Language and Culture

- Percentage of schools that have a First Nations Language and Culture program
- Percentage of schools that report having language and Culture Integrated across the curriculum
- Amount of time students spend in language and culture class
- Parent survey results – are you satisfied with your child's learning?
- Student survey results...are you learning about your language and culture?

Meeting the Needs of All Children

- Rely on the significant special education data that is being provided by First Nations schools and collected by FNSEA
- Parent satisfaction surveys – does your child feel like a part of the school?
- Student satisfaction surveys – do you feel respected at school?

Providing a Nurturing Environment for Children

- Attendance data
- Lateness data
- Percentage of schools using various methods of dealing with behaviour
- Parent satisfaction survey – do you feel that your children are safe at school? Do you feel that your children are respected at school?
- Student satisfaction survey – do you feel safe at school? Do your teachers care about and respect you?
- Percentage of schools offering breakfast/lunch programs
- Teacher retentions data

Working Within a Community Context

- Percentage of schools that are governed by a community-based governing agency
- Percentage of schools with each type of school governing agency
- Number of work experiences opportunities provided to students
- Number of meetings held with other community agencies
- Parent and student satisfaction surveys – is the school part of your community?

Promoting Parental and Family Involvement

- Attendance at parent/teacher interviews

- Data on school reporting to parents
- Parent satisfaction survey

School Staffing

- Student:teacher ratios considered along an age/grade continuum
- Percentage of teachers who have taken training/a course on first Nation issues?
- Number of support staff working in the school
- Teacher retention data
- Principal retention data

First Nations children who feel good about who they are...

- Student survey questions
- Parent survey questions
- Attendance rates

Children who have the skills they need to succeed

Literacy Skills

- Testing data, used to show growth
- Student and parent satisfaction survey
- Percentage of communities offering early literacy programs
- Reading programs offered in school

Numeracy Skills

- Testing data, used to show growth

Other

- Graduation rates where relevant
- Student satisfaction survey – preparation for post –secondary education and employment

Significant School Improvement Indicators

(A Framework for School Improvement for Mi'kmaw Schools, 2007)

Indicators	Dadavan Functions
<p><u>Mi'kmaw language and culture</u></p> <p>1. Fluency in the Mi'kmaw language - oral knowledge in social studies - knowledge in literacy comprehension - speaking fluency - reading comprehension - writing fluency</p> <p>2. Mi'kmaw cultural values -awareness of cultural protocols -respect for elders</p> <p>3. Indigenous cultural knowledge in various subjects - indigenous knowledge in science - indigenous knowledge in math</p>	<p>To be developed</p> <p>To be developed</p> <p>Aggregate on the report card form</p>
<p><u>Learning in other academic areas</u></p> <p>4.English language arts - reading level grade equivalency - stage of reading - writing level - spelling grade level</p> <p>5.Science - outcomes reached in program</p> <p>6.Science - outcomes attained</p> <p>7.Social Studies -outcomes reached</p> <p>8. Health and Physical Education - levels of participation available - outcomes attained</p> <p>9. Arts Education</p>	<p>Marks already in format To be added Coding to be added To be added To be added</p> <p>Marks already in format Aggregation needed</p> <p>Marks already in format Aggregation required</p> <p>Marks already in format Aggregation needed</p> <p>Marks in format Available, needs aggregation</p> <p>Marks in format</p>

- outcomes attained	Aggregation required
10. Technology Education/ Family Studies -outcomes reached by subject	Format in place Aggregation form needed
11. Personal development and career education - outcomes attained	Marks in format Aggregation needed
<u>Learning environment and community relations</u>	
12. School attendance - days present per term - retention and drop-out rates	Nominal roll in place Aggregation needed
13. School graduation rates -Age- grade correlations -School leaving statistics and information	Nominal roll in place Requires coding In place
14. Safe and positive learning environment - number and duration of suspensions -number and severity of discipline referrals - student satisfaction with learning environment - parent satisfaction with school environment	Format in place Needs to be coded Needs coding Refer – survey format Survey form
15. School- community relations - parent involvement rates - parent satisfaction with communication and outreach - nature and extent of involvement with community agencies and groups - connections with governance bodies	Needs to be added Survey form Add to survey Anecdotal
16. Staffing - qualifications and preparation assignment form - retention/ duration of service - assignment/ fit - pd and training opportunities - salary and comparative benefits - pupil- teacher ratios by class or subject	Refer – notice of assignment Assignment form Can be added Needs coding Additional coding MK information Nominal roll coding
17. Resources and materials - by subject area	Separate and descriptive

**APPENDIX E: SYSTEMS EDUCATION INDICATORS AND
DATA MANAGEMENT
(AFN Data Management paper, 2009)**

The lists provided below represent potential education indicators which can be measured at a local, regional and national level to provide accurate, clear and contextual reporting of First Nations education. This is certainly not an exhaustive list, but it is a general scan of Education Indicators currently reported upon by First Nations Education Authorities^{1 2}, Provincial Schools Boards, Ministries of Education^{3, 4, 5, 6} and the Council of Ministers of Education Canada (CMEC)^{7, 8, 9, 10}.

- **General Characteristics**
- **Governance**
 - Governance model and effectiveness
 - Local, Regional, National governance models and effectiveness
 - Autonomy of education system model
 - Level of meaningful control
 - Mechanisms for and level of participation – parents, elders, community members

- **Educational Quality**
 - Comparability to Provincial Data
 - Cultural indicators
 - Language indicators
 - Relationship to educational objectives
 - Report Production Quality

¹ Prince Albert Grand Council 2007 Education Indicators, (Prince Albert, SK: 2007).

² First Nations Schools Association Third Annual School Measures and Data Collection Project 2006/07, (BC: 2006/07).

³ Quebec, Ministère de l'Éducation, du Loisir et du Sport, Education Indicators-2007 Edition (Quebec: Ministère de l'Éducation, du Loisir et du Sport, 2007).

⁴ Saskatchewan, Minister of Education, 2008 Saskatchewan Education Indicators Report – Pre-Kindergarten to Grade 12. (Saskatchewan: Minister of Education, 2008).

⁵ Saskatchewan, Minister of Education, 2008 Saskatchewan Education Core Indicators Pre-Kindergarten to Grade 12. (Saskatchewan: Minister of Education, 2008).

⁶ Alberta, Performance Measurement and Reporting Branch, Review Committee on Outcomes: Survey Results 2008. (Edmonton, AB: Performance Measurement and Reporting Branch, 2008).

⁷ Council of Ministers of Education, Canada, Report of the Pan-Canadian Education Indicators Program 2007. (Toronto, ON: Council of Ministers of Education, Canada & Statistics Canada, 2007).

⁸ Council of Ministers of Education, Canada, Education at a Glance 2008 OECD Indicators Country Profile for Canada 2008. (Toronto, ON: Council of Ministers of Education Canada, 2008).

⁹ Council of Ministers of Education, Canada, Education in Canada. (Toronto, ON: Council of Ministers of Education Canada, 2008).

¹⁰ Council of Ministers of Education, Canada, The Development of Education Reports for Canada – Report One: The Education Systems in Canada – Facing the Challenges in the Twenty-First Century – Report Two: Inclusive Education in Canada: The Way of the Future. (Toronto, ON: Council of Ministers of Education, Canada & The Canadian Commission for UNESCO, 2008).

- **Educational Financing**
 - Levels of funding
 - Sustainability and ongoing training funding
 - Special needs funding
 - Control of education finances
 - Post-Secondary funding
 - Tuition Expenses
 - Living Expenses
 - Student Debt or Loans

- **Demographics**
 - Population Size
 - Birth Rates
 - School Population Size
 - First Nations Background (Cree, Dene, ...)
 - Student/Teacher Ratios
 - Average Class Size
 - Staff Compositions (EA's, Janitors, busdrivers...)
 - Number of Day Cares/Pre-Schools/Headstarts
 - Number of Elementary School Programs
 - Number of High School Programs
 - Number of Post-Sec Program Opportunities
 - Enrolment in Elementary
 - Enrolment in Secondary
 - Enrolment in Post-Secondary
 - Dropouts
 - Transfers
 - Graduates
 - High School Completion Rates (3yr, 4 yr & 5yr)
 - Gender breakdown
 - Language of community

- **Education Evaluations**
 - Early Years and School Readiness
 - School Evaluations (number completed)
 - School Success Plans
 - Student Performance
 - Student Retention / Exit
 - Student Graduation
 - Student Attendance

- **Program Evaluations**
 - How Many courses are being offered in Schools?
 - How Many courses are required for an equitably comprehensive education?
 - How Students are doing in Mathematics
 - How Students are doing in Sciences
 - How Students are doing in Language Classes
 - How Students are doing in English Programs (Reading comprehension)

- Literacy
- Number of Days students are in the classroom
- Curricular Updates / Cycle
- School / Teaching Days

- **Culture/Language**
 - Number of Cultural Programs
 - 1. Cultural Activities/Events – Program Allocation
 - Number of Language Programs
 - Language Proficiency
 - 1. Levels of understanding/fluency
 - Number of First Nations Immersion Programs
 - Course evaluations
 - Language retention
 - Relationship to educational objectives

- **Teacher Specialization**
 - What is the subject-area expertise of Teachers?
 - Teacher qualifications
 - Teacher Demographics (First Nations, Aboriginal...)
 - Teacher turnover
 - Professional Development
 - Teacher tracking

- **Post-Secondary Education**
 - Population Size
 - Post-Secondary Enrolment in Colleges/Universities/Trades
 - Enrolment in First Nations Institutes and Programs
 - Post-Secondary completions and Graduation Rates
 - Number of College Diplomas/Certificates and University Degrees
 - Number of Trades Certificates, Registered Apprenticeships
 - University Graduates by Field of Study

- **Transitions/Lifelong Learning**
 - Transitions from Elementary to Secondary
 - Transitions from Secondary to Post-Secondary
 - Transitions from Students to work
 - Special needs students - transitions
 - Number of graduates working full time
 - Labour Market/Unemployment Rates

- **Education Facilities**
 - School Life Expectancy
 - Age of school
 - Renovations
 - Costs

- **Curriculum**
 - Programs offered vs. programs required

- Curriculum relevance and scope
- Curriculum materials and supports
- Special education programs – gaps
- Curriculum development
- Curriculum implementation

- **Technology**
 - Number of computers utilized
 - Number of computers required
 - Courses offered
 - Types of Software
 - Upgrades
 - Expertise of staff
 - Access to Help Desk
 - Connectivity

- **Pedagogical Practices**
 - Teaching methodologies & practices
 - Teacher supports and in-services
 - Types of specialty supports (if needed)
 - Consultant support
 - Teacher supervision and evaluation

- **Human Resources**
 - Teacher experience
 - Staff turnover
 - First Nation staff
 - Pupil Teacher Ratio
 - Teacher tracking

Bibliography

- Alberta. Alberta Education Performance Measurement and Reporting Branch. Review Committee on Outcomes: Survey Results – 2008. (Edmonton, AB: Performance Measurement and Reporting Branch, 2008).
- British Columbia. First Nations Schools Association Fourth Annual School Measures and Data collection Project 2007/08, British Columbia: 2008.
- Ontario. Assembly of First Nations Education Secretariat. Community Dialogues on First Nations Holistic Lifelong Learning (2008). Ottawa, ON: Assembly of First Nations
- Ontario. Council of Ministers of Education, Canada. Report of the Pan-Canadian Education Indicators Program 2007. Toronto, ON: Council of the Ministers of Education, Canada & Statistics Canada, 2008).
- Ontario. Council of Ministers of Education, Canada. Handbook for the Report of the Pan-Canadian Education Indicators Program 2007. Toronto, ON: Council of the Ministers of Education Canada & Statistics Canada, 2008).
- Ontario. First Nations Centre. OCAP: Ownership, Control, Access and Possession. Sanctioned by the First Nations Information Governance Committee, Assembly of First Nations. (Ottawa: National Aboriginal Health Organization, 2007).
- Saskatchewan. Regina Public School Division. Continuous Improvement Plan 2008-2009. Regina, SK Regina Public School Division.
- Saskatchewan. Minister of Education. 2008 Saskatchewan Education Core Indicators Pre Kindergarten to Grade 12. Saskatchewan: Minister of Education, 2008.
- Saskatchewan. Minister of Education. 2008 Saskatchewan Education Indicators Report Pre-Kindergarten to Grade 12. Saskatchewan: Minister of Education, 2008.
- Saskatchewan. Minister of Education. 2001 Opportunities Outcomes, Provincial Learning Assessments In Mathematics (Summary Report). Saskatchewan: Minister of Education, 2002.
- Saskatchewan. Treaty Four Education. Treat Four Indicators 2009. (2009) Fort Qu'Appelle, SK: Treaty Four Education.
- Virginia. National School Boards Foundation. Improving School Board Decision Making The Data Connection (2001). Alexandria, Virginia: National School Boards Foundation
- West Virginia. Educational Resources Information Centre, Digest Team. Assessment For American Indian and Alaska Native Learners (1995). Charleston, West Virginia: ERIC Clearinghouse on Rural Education and Small Schools.
- Gallagher, Chris. Reclaiming Assessment A Better Alternative to the Accountability Agenda, (2007). Portsmouth, New Hampshire: Heinemann
- Johnson, David. Ontario's Best Public Schools: An Update to Signposts of Success (e-brief) (2007). Toronto: C.D. Howe Institute.
- Kober, Nancy. It Takes More Than Testing Closing the Achievement Gap. (2001). Washington, D.C.: Centre on Education Policy
- Orr, Jeff, and Coralie Cameron. We are Mi'kmaw Kina'matnewey: An Assessment of the Impact of the Mi'kmaw Kina'matnewey Self Government Agreement on the Improvement of Education for Participating Mi'kmaw Communities (2004). Antigonish, NS: Mi'kmaw Kina'matnewey.

Orr, Jeff, and Frank MacCormick. A Framework for School Improvement for Mi'kmaw Schools. (2007) Membertou, NS: Mi'kmaw Kina'matnewey.

Wildcat, Brian. School Success Planning: An Opinion Paper (2007). Edmonton, AB Unpublished paper, (2007)

White, Jerry, et al. Enhancing Educational Attainment for First Nations Children. In J. White, D. Beavon, J Peters, N. Spence (Eds) "Aboriginal Education Current Crisis and Future Alternatives". Toronto, ON. Thompson Educational Publishing, Inc.