

**The Kokum Connection:**  
**A Metaphor for Educational Accountability Frameworks**

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## **The Kokum Connection: Educational Accountability Frameworks from a First Nations Perspective**

### **Abstract**

Within the fields of education administration and education policy a substantial body of literature has accumulated on the issue of accountability, most of which has focused on a relatively narrow literacy and numeracy assessment approach to accountability that fails to account for the important role of family and community, focusing instead on the role of the classroom and school. The authors argue for a broader more inclusive approach to accountability.

A useful framework from which to assess this issue is provided by First Nations cultural traditions, which give primacy to the role of extended family and community within education.

Within the Cree community, for example, the grandmother, or Kokum, has historically provided important guidance and wisdom to grandchildren as they face life learning. Some have characterized the important role of family and community within the metaphor of the “Kokum connection”. This perspective is supported within research concerning educational accountability and student learning which suggests the schools provide an approximate 15% of the explained variance related to student achievement while family and community contribute an additional 35% (Chell, Steeves, & Sackney, 2009). The authors examine the current use of accountability framework models as they relate to publicly funded education and compare them to more complex models developed in the field of public administration and public policy.

### **Educational Accountability: The Need for a Broader Perspective**

“Accountability is at the heart of governance within democratic societies” (Thomas, in Peters & Savoie, 1998, p.348). Few would disagree with this statement; Peach (2004) indicated that,

“The public and the politicians they elect to govern are increasingly seeking ways to improve, simultaneously, the effectiveness, efficiency, equity, responsiveness, and accountability of government” (p.1). Marshall and Steeves (2008) supported these comments, indicating that “citizens increasingly both expect and demand action that ensures appropriate accountability mechanisms are in place” (p. 1). While most would support the need for increased accountability in our institutions, whether private or public, there is less agreement as regards the definition of accountability. As Marshall and Steeves (2008) suggested, there is a need for greater clarity on the goals of accountability and how they are to be achieved within the public sector.

Too often a narrow perspective is taken when discussing the notion of accountability. The results are not always helpful. For example, within the context of American public education, Darling-Hammond (2004) commented that “The standards-based reform movement has led to increased emphasis on tests, coupled with rewards and sanction, as the basis for “accountability” systems. These strategies have often had unintended consequences ...for low-achieving students...testing is information for an accountability system: it is not the system itself” (p. 1047). Darling-Hammond argued for broader notions of accountability that support a more inclusive approach to improved student learning. Kearns (1996, pp. 35-36), an American public policy academic, supported Darling-Hammond’s assertions. While referring to “narrow” definitions of accountability, he suggested instead a “broad” definition, which “encourages us to consider a more diverse set of performance criteria - something beyond mere compliance and reporting. Also, these definitions help us pose additional questions to help clarify those criteria” (p.39). Thomas (in Peters & Savoie, 1998) supported this perspective, arguing for broader notions of accountability from which to assess the current situation and the need for change.

While Kearns (1996, p.63) proposed a management approach that incorporated a strategic plan for accountability, indicating that this type of alignment with organizational strategic goals is critical for success. Frequently, organizational accountability has not paid close attention to strategic goals, resulting in failure to account for long term organizational objectives. Within this context, Kearns (1996, p.169) suggested that a strategic approach requires anticipation of legal trends, the ability to work successfully with stakeholders, and the sustained commitment of resources to develop accountability systems that are objective, valid, and reliable. Within public sector organizations, the failure to clearly articulate long term objectives, and the means by which these will be accomplished may lead to accountability frameworks, which are poorly aligned or related to social, economic, and political goals.

Darling-Hammond (2004) suggested the demand for public sector accountability applies equally to publicly-funded Kindergarten to Grade 12 education. They call for an educational accountability model that does not produce dysfunctional results and/or is does not place undue focus upon assessment and school based student achievement and less attention to a broader range of factors that impact student achievement. For example, Levesque (2004), while discussing American public education, commented that accountability concerns in public education led to the passage of the No Child Left Behind (NCLB) Act, which mandated a major student assessment initiative. Yet concern regarding NCLB's narrow approach to accountability has become a major issue within American education. Volante (2007) proposed a broader approach to educational accountability that incorporates a more comprehensive approach to system improvement.

Such concerns also apply to educational accountability discussions within the Canadian context. Volante (2007) suggested that Canadian public education, while avoiding many of the problems characteristic of American education, nevertheless prioritized large-scale assessment programs with less attention given to broader social determinants, such as the family and the community. Volante, in a paper reviewing the Ontario situation, suggested a heavy emphasis upon student assessment as the primary determinate of educational accountability:

Currently, every province and territory, with the exception of Prince Edward Island, administers some form of large-scale assessment. The approach of individual provinces...varies according to the grades tested, sample size, test format, frequency of administration, and, most importantly, stakes attached to student performance. (p. 2)

Volante (2007) added:

The ultimate objective is to move notions of accountability from the realm of simple number crunching to a comprehensive view focused on authentic system improvement. The latter has been sorely lacking in the current mind-set that dominates accountability and assessment-led reform. (p. 2)

While few would argue with the need for assessment information, the context in which this information is used remains critical to effective accountability frameworks in public education. Too narrow a focus upon student achievement assessment results, with little attention to the broader role of family and community and impairs the important priority of improved student learning. The broader context in which student learning occurs is vital.

### **Redefining Accountability Models in Public Education**

The assessment based approach to accountability that has characterized much of the accountability reform in the United States and Canada. Typically accountability reform efforts have focused upon the student's learning experiences within the school setting. Yet research suggests that student achievement is much more complex.

Marzano (2003), and others (Lytton & Pyryt, 1998; Scheerens & Bosker, 1997; Stringfield & Teddlie, 1989) argued that school effects explain approximately 15-20% of the variance in student achievement.

Of the remaining 80-85%, an exhaustive literature review by Nechyba, McEwan, & Older-Aguilar (2007) suggested that genetic predisposition explains approximately 50% of the variance related to cognitive ability. This leaves approximately 30-35% of the remaining variance that will be accounted for by other variables. While Chell, Steeves, and Sackney (as cited in Steeves, 2009) suggested that the remaining 30-35% of the unexplained variance related to student achievement must be accounted for by other factors. Similarly, Lytton and Pyryt (1998) indicated that socio-economic status explained between 35-50% of the variance among elementary students.

A body of research (Sirin, 2005; Israel, Beaulieu, & Hartless, 2001; Ryan & Adams, 1999; Roscigno & Ainsworth-Darnell, 1999; Ma, 2001; Fege, 2006; Pong, Dronkers, & Hampden-Thompson, 2003; Edgerton, Peter, & Roberts, (2008) corroborated this conclusion, suggesting that this unexplained variance included a variety of variables including socio-economic status, family, community, race and gender. Other studies highlighted the corrosive effects of poverty (McLoyd, 1998; Payne & Biddle, 1999; Lemstra & Neudorf, 2008). As many educators have suggested, the tendency to lay problems related to low levels of student achievement at the school's – and by extension, teachers – doorstep is overly simplistic. Improving student achievement requires a broader coalition that focuses on a range of personal, social, and economic issues. As Volante (2007), Darling-Hammond (2004), Thomas (in Peters & Savoie, 1998), and Kearns (1996) suggested, a broader, more inclusive approach to accountability in

public education is necessary.

Darling-Hammond (2004) provided a useful starting point for this discussion, indicating that “there are many different conceptions of accountability that have influenced U.S. education policy and interact with one another in today’s systems” (p. 1050). Furthermore, she outlined the following accountability mechanisms: political, legal, bureaucratic, professional, and market and commented that:

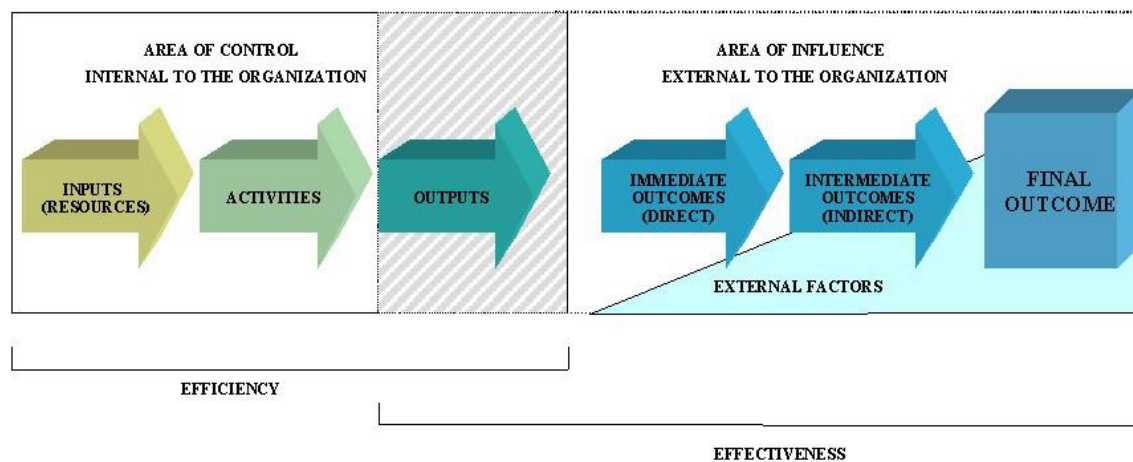
The choices of accountability tools – and the balance among different forms of accountability – are constantly shifting as problems emerge, as social goals change, and new circumstances arise. In most urban public school systems, legal and bureaucratic accountability strategies have predominated over the last 20 or more years. These have especially focused on attempts to manage schooling through standardized educational procedures, prescribed curriculum and texts, and test-based accountability strategies. (p. 1051)

Darling-Hammond’s comments regarding the limitations of traditional bureaucratic models of accountability are echoed by Robert Behn (1998) who, in reference to the advocates of New Public Management (NPM) and the drive for responsive, accountable governance, stated that:

Their argument is simple: The traditional method for organizing the executive branch of government is too cumbersome, too bureaucratic, too inefficient, too unresponsive, and too unproductive. It does not give us the results we want from government. And today, citizens expect government to produce results. (p.131)

Marshall and Steeves (2008) indicated that broader accountability frameworks more characteristic of public administration can provide a useful conceptual lens from which to consider accountability issues within publicly funded education. They further argued that the logic model approach as described by Allen (1996) could serve as a useful means of conceptualizing educational accountability models. More specifically, they proposed applying the logic model, utilized by the Treasury Board of Canada (2005), to the topic of educational accountability. Figure 1 provides a visual representation of the model.

**Figure 1: Treasury Board of Canada Logic Model**



Source: Treasury Board of Canada, 2005, p.1.

A logic model, such as the one utilized by the Treasury Board of Canada, is thoroughly described by the University of Wisconsin Extension Division, in a discussion of program development and evaluation. It describes the logic model, distinguishing among performance measures related to inputs, outputs, and outcomes (2005, p. 1). Marshall and Steeves (2008), drawing from the work of the University of Wisconsin Extension Division, indicated that:

Inputs are described as “resources, contributions, (and) investments that go into the program” (1) and identified by examples such as staff time, money, equipment, and other indicators of production inputs. Outputs are described as “activities, services, events or products that reach people” (1) and include measurements of activity levels and services provided. Outcomes are described as “results or changes for individuals, groups, communities, organizations...or systems” (1) and are categorized as short-term outcomes, such as changes in attitudes, awareness, knowledge, and skills; medium-term outcomes, which include changes in behaviour, policies and social action; and long-term outcomes, such as changes in social, economic, and environmental conditions. (p. 8)

Both Darling-Hammond’s (2004) reference to a broader range of accountability mechanisms and the logic model suggest the broader view of accountability referenced by Volante (2007), Thomas (in Peters & Savoie, 1998), and Kearns (1996). In particular, Darling Hammond’s



comments regarding professional accountability seems relevant. Even though schools only account for 10-15 % of the variance related to student achievement, the current focus on the school appears to hold schools unduly responsible for student success. The fact that other variables such as the family, socio-economic status, and the community are equally, if not more important, is seldom referenced. This would suggest that the broader range of accountability mechanisms referred to by Darling-Hammond need closer attention. For example, what is the responsibility of political and bureaucratic forms of accountability in addressing these larger issues related to student achievement? Do elected leaders and senior public officials not have a responsibility to attend to these issues?

The comments above reinforce the logic model as a heuristic framework for a broader discussion of accountability, at least as it relates to public education. Rather than focusing solely upon the input, activity, and output discussion that currently characterizes much of the discussion surrounding accountability and student achievement, the logic model helps clarify the need to include discussion on long term social outcomes. The logic model also recognizes how critical variables vital to improved student achievement, such as family socio-economic status, ethnicity, gender, or community, will be addressed, or how improved student achievement can support long term social and economic goals.

In Canada, First Nations culture and belief systems as well as Indigenous beliefs across North America support the notion of a broader, more inclusive approach to student achievement. Their beliefs reinforce the role of extended family and the community in child rearing and learning. Don Pinay (personal communication, May 5, 2010), the Director of Education for the Yorkton Tribal Council, while discussing the importance of improved student literacy and numeracy in the First Nations community, emphasized the role of the extended family and community in the

child`s education, suggesting that there “has to be that strength coming from the community...from the extended family”. He called this relationship the “Kokum connection” identifying the important role of the grandmother in teaching and values transmission as a metaphor for the critical connection between family, community, and learning. Lori Whiteman (personal communication, May 5, 2010), Program Manager of the Treaty Four School Success Program, which received funding from Indian and Northern Affairs Canada (INAC), commented that learning gains in literacy and numeracy did not occur in isolation – strong ties to the family and community were vital. In fact, the reinforcement of these ties is a critical objective of the Treaty Four School Success Program.

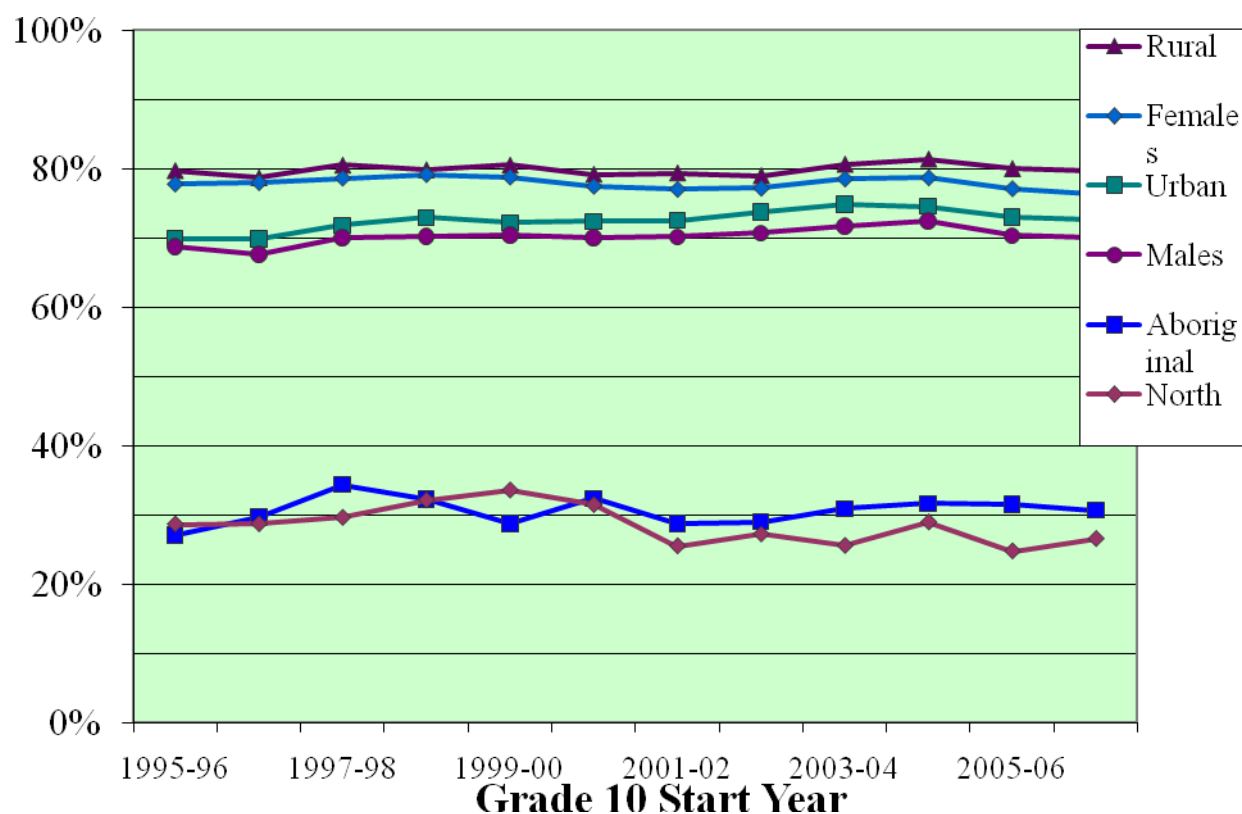
Indigenous philosophy and culture implicitly confirms what research related to student achievement suggests; that student achievement will be enhanced if a broader, more inclusive approach that recognizes the impact of variables such as family, socio-economic status, and community is adopted. Thus First Nations culture recognises that a narrow focus upon teaching and school related variables are insufficient – the additional 30-35% of the variance related to student achievement that the broader family and community encompasses must also be accounted for. Or from the perspective of an accountability framework, there must be a broader approach to student achievement than a narrow input, activity, and output focus that is characteristic of many current accountability frameworks. Instead approaches such as the logic model, which provided a conceptual framework for a broader view of student learning and the long term benefits of a more inclusive family and community based approach, are required.

### **The Kokum Connection – The Treaty Four Chief’s Student Success Plan (TFCSSP)**

Research findings documenting differential rates of student achievement for Indigenous and non-Indigenous students are all too familiar. The Saskatchewan context is consistent with these

results; Aboriginal students in the province consistently demonstrate an achievement disparity relative to non-Indigenous children. Results from the *2009 Saskatchewan Education Indicators Report* provided an example of this trend. Figure 3, illustrated below indicated completion rates for students completing Grade 12 in 3 years or less after beginning Grade 10. The difference between Northern and Aboriginal students compared to other student cohorts is show: An approximate 30% completion rate exists for Northern and Aboriginal students as compared to 70-80% completion rates for other students.

**Figure 3. Percentage of Saskatchewan Students Completing Grade 12 in Three Years or Less After Beginning Grade 10, by Student Category, 1995-96 to 2006-07 Grade 10 Cohorts**



Source: Ministry of Education. (2009). *Saskatchewan Education Indicators: Prekindergarten to Grade 12*. Regina, SK.

The impacts of these differential rates of achievement manifest themselves in a variety of ways. Steeves, Carr-Stewart, and Marshall (2010) illustrated a number of these impacts with the comment that “Saskatchewan Aboriginal residents consistently demonstrate lower levels of educational attainment, labour force engagement, and income. While one cannot claim a direct relationship between the Pre K-12 student achievement levels outlined below and these measures, the relationship provides food for thought” (p. 12). Within this context, the Treaty Four Chiefs’ initiated action to help address this situation. Working with financial support and guidance from INAC, they established the *Treaty Four Chief’s Student Success Plan* (TFCSSP) whose stated objectives were to address the “existence of significant achievement gaps in education for First Nations children and emphasize that, in addition to affirming culture and traditional values, there is an imperative to build strengths and outcomes in literacy and numeracy” (Whiteman, 2010).

Similar to the provincial educational system, the TFCSSP recognised the importance of improved student achievement in literacy and numeracy skills and considered such to be “fundamental elements in achieving successful transitions in learning, employment and life (Whiteman, 2010). However, the project also recognized that an overly narrow approach would not achieve the intended outcomes. Rather the TFCSSP project “focused on the development of processes that place the child and community at the centre” (Whiteman, 2010).

Lori Whiteman (personal communication, May 5, 2010)<sup>1</sup>, project manager, commented that while improvements in literacy and numeracy levels were core to the initiative, this could not be accomplished without a sustained commitment to the role of community in the child’s learning. Her staff talked of the mental, spiritual, and emotional needs of the child, referring to the need to

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<sup>1</sup> The following work refers to information that has not previously been documented. As such, it relies heavily upon personal information provided by key stakeholders closely involved in these events.

build strong community if this was to successfully occur. Discussions also focussed on the historical connection of the extended family and community to a child's learning and referred to the profoundly negative impact of residential schooling on the communities' culture, language and on Indigenous education. Bryan McNabb (personal communication, May 5, 2010), a consultant with the program, stated that, "I see in our children, that the balance is all out of whack".

TFCSSP, by focusing upon indigenous values within the First Nations community, effectively captured the essence of educational research related to student achievement. Schools, as referenced earlier, contribute 15% of the explained variance to student achievement, while variables such as family and community comprise a further 30-35%. With respect to the contribution of family and community, the TFCSSP initiated community literacy programs in recognition of the contribution that parents and Elders make in supporting children's literacy. The TFCSSP, by focusing upon traditional knowledge and values, emphasized the necessity of ensuring effective student learning and achievement. A broader, more inclusive approach to educational accountability is required if students are to reach their full potential.

### **Saskatchewan: The Continuous Improvement Framework and the Provincial Experience**

The issue of accountability, at least from a narrower No Child Left Behind (NCLB) has long been a controversial issue within the United States and the wider community. In Saskatchewan key stakeholders, ranging from a Minister of Education to the Saskatchewan Teacher's Federation, were concerned that a commitment to increased accountability would result in an assessment based approach. Most organizations within the public education sector in

Saskatchewan were reluctant to see this occur; the result was inaction. (Don Hoium, personal communication, May 10, 2010)<sup>2</sup>

These conditions began to change during the last decade. This gradual shift in attitudes occurred for a number of reasons, including Saskatchewan's decision to participate in international and national assessment programs such as the *Programme for International Student Assessment* (PISA) and the *Pan-Canadian Assessment Program* (PCAP). The results of Saskatchewan student in such assessment programs gave cause for concern, suggesting that achievement test results were lower than anticipated, relative to comparable Canadian provincial jurisdictions. This prompted a sometimes painful dialogue that ranged from questions regarding the validity of the assessment results, to a variety of opinions concerning the most appropriate response, if any, to the results. A series of provincial government responses, commencing with the *Reversing the Trend* report and, most recently, culminating in a two year review of student achievement issues by provincial stakeholders have attempted to address this issue. The most recent effort, the Minister's *Panel on Student Achievement*, has recommended a broader approach to student achievement that takes into account issues as disparate as the value of international and national assessments, as well as the need for more community based approaches to support disadvantaged families and a more aggressive approach to the development of Early Learning and Child Care initiatives. (Saskatchewan Ministry of Education, 2010)

A second important development in the Saskatchewan educational sector was the increasing priority given to the development of a public sector accountability framework within the provincial government. Although little noticed by Saskatchewan educators at the time, the Provincial Auditor raised the issue as a matter of ongoing concern.

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<sup>2</sup> The following work refers to information that has not previously been documented. As such, it relies heavily upon personal information provided by key stakeholders closely involved in these events.

For example, in the *2001 Spring Report*, the Provincial Auditor (2001) commented that,

In 1999, the Government initiated a “comprehensive government accountability project.” The Government announced that it wanted to establish a public accountability system that would change the focus of public agencies from the resources used and the activities completed to a focus on the outcomes achieved” (p. 3).

This message continued—in 2005, the Provincial Auditor’s Annual Report (2005) commented that “Public plans and annual reports of government agencies are key accountability documents. These reports, prepared in accordance with Finance’s guidelines, should help the Legislative Assembly and the public to better assess the performance of government agencies” (p. 257). These comments had a significant effect upon the planning processes within the provincial civil service. For example the Ministry of Finance made the development of an accountability initiative a key part of their planning and budgeting process. Their Ministry web site indicates that:

The Ministry of Finance leads Saskatchewan's accountability system for the Government of Saskatchewan. Every year, research is done on best practices and guidelines are provided to assist Ministries and agencies as they improve planning, measuring and reporting practices. Ministries follow a systematic approach of releasing plans with the budget and reporting on results achieved at the end of the year. Finance ensures ministries meet government's expectations for thorough and accurate reporting on stated commitments, increasing transparency and accountability across government.

Most educators were unaware of this initiative by the Provincial Auditor. However, concern by Key educational stakeholders that the Provincial Auditor might move unilaterally to implement an educational accountability framework, helped build support for a “made in education” solution. (Don Hoium, personal communication, May 10, 2010) The result was the *Continuous Improvement Framework* (CIF) developed with extensive involvement from the educational sector. The foreword of the school division planning guide (Saskatchewan Ministry of Education, 2008) indicated that. “The ultimate goals of the CIF are to improve student learning by providing Saskatchewan’s Pre-K-12 education

system with a common strategic planning process, and to align system priorities with strategies, operational supports, and outcome measures” (p. 5).

The CIF was intended to adopt a broad based, inclusive approach to accountability. The following statement from the school division planning guide (Saskatchewan Ministry of Education, 2008) indicated that:

The CIF is anchored by *four provincial priorities*. Each priority is supported by outcomes linked to the Goals of Education for Saskatchewan ([www.learning.gov.sk.ca](http://www.learning.gov.sk.ca)) and to the Saskatchewan Education Indicators Program. The intent is for students, families, communities, teachers, administrators, school community councils, boards of education, and the province to collaborate and attain:

1. Higher Literacy and Achievement
2. Equitable Opportunities
3. Smooth Transitions
4. System Accountability and Governance (p. 6)

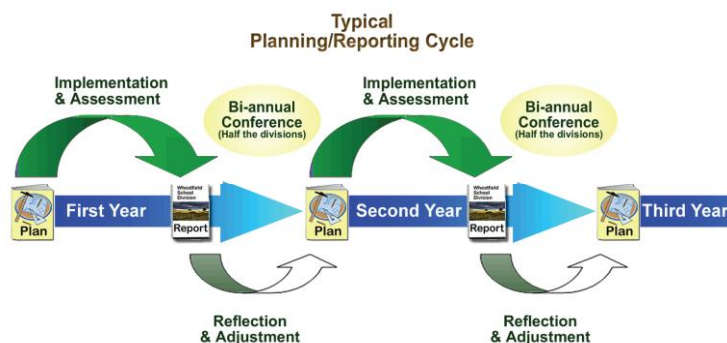
These provincial priorities indicated a more inclusive approach to accountability. The CIF was not intended to focus narrowly on the usual activity and output measures, such as numeracy and literacy, but rather to address broader social outcomes, such as socio-economic status, ethnicity, family, and community; issues external to the traditional school activity base.

The planning process adopts a relatively standard approach to planning and reporting. The CIF includes a system-wide planning, reporting and conferencing cycle that was designed to advance priorities and improve student outcomes. School divisions and schools align their priorities with the provincial priorities and support must be provided for them. School divisions work with their schools to prepare multi-year plans. (Saskatchewan Ministry of Education, 2008)

Figure 2 illustrates the planning and reporting cycle.



**Figure 2. Continuous Improvement Framework Planning/Report Cycle.**



Source: Saskatchewan Ministry of Education, 2008, p. 12

In order to support the *Continuous Improvement* planning process, the Provincial Core Indicators align with the four provincial priorities. The Indicators provided additional information, which has been requested by school divisions. School divisions use these performance indicators in their strategic planning and reporting to create a comprehensive view of student achievement. These comments help explain both the operation of the provincial educational accountability framework, as well as the commitment to a broader set of provincial indicators. Yet, despite the deliberate attempt to adopt a broader, more inclusive approach to accountability, challenges remained. The demand for assessment data related to literacy and numeracy meant that this issue has been a very visible and, often, controversial aspect of the CIF. Similarly, the difficulties in the identification of measures that can assess broader performance indicators in areas such as student perceptions of their learning have been challenging. Equally challenging has been the need to encourage key stakeholders and public groups to consider the issue of accountability and student achievement within the broader context of socio-economic status, ethnicity, family and community. Pressures to focus more narrowly upon student achievement rates with minimal attention to the broader social and economic issues continue.

One excellent example of this pressure was the recent publication of a study by Audas and O’Keefe (2010) for the Frontier Centre, a Canadian public policy advocacy group, of results from the Saskatchewan Assessment for Learning (AFL) program and other indicator data provided by the Ministry of Education. Their study used provincial data to rank order provincial high schools based on their measure of academic success. It should be noted that the AFL measures were originally intended to support classroom teachers and schools in attempts to improve classroom and school planning for instructional improvement, not rank order schools. In addition, Audus and O’Keefe (2010) failed to consider a number of other important issues. For example, the study references the issues of socio-economic status, indicating that this is a variable to be considered in future research. A failure to at least consider the role of socio-economic status and its impact upon student achievement is an excellent example of a narrow, assessment oriented approach to accountability.

Despite these types of pressures, the need for a more inclusive approach, including the role of family, community, and diversity of cultures needs to be considered. Ralph Pilz (personal communication, April 20, 2010), Director of Education for the Northern Lights School Division operating in Saskatchewan’s Northern Administrative District, indicated that although their system has actively pursued improved literacy and numeracy objectives for the last ten years, there is increasingly a need to supplement a relatively focussed academic, school based approach with a broader attention to student engagement initiatives. A similar perspective is shared by officials of the Prairie Valley School Division, a culturally diverse rural system operating in the Regina area, serving suburban, farming, and First Nations communities, As in the Northern Lights School Division, Prairie Valley is committed to improved literacy and numeracy outcomes. However, the school division believes that this cannot be accomplished in the absence

of a broader focus upon social, cultural, and economic factors. Michelle Belisle (personal communication, May 6, 2010), Superintendent for Assessment, indicates that they are attempting to incorporate this perspective in their accountability and reporting framework. Information regarding attendance, attitude, and behaviour is being systematically collected in an effort to determine the impact of these variables on student achievement and how improvement might occur. This represents one example, in this case by attempting to consider a broader range of input variables for their accountability framework, of Prairie Valley's focus on a broader approach to improved student achievement.

The Regina Public School Division offers a similar perspective. Don Hoium, Director of Education (personal communication, May 10, 2010) indicates that while Regina Public is committed to improved literacy and numeracy goals, it has also undertaken a number of broader initiatives to improve student achievement. These include measures to improve classroom and school effectiveness— for example their structural innovation initiative. They have also attempted to conceptualise the delivery of educational programming in a broader community based format. A number of examples exist – their Elders in Residence program, the development of the Adult Campus to re-claim at risk high school students, the re-development of an inner city high school, Scott Collegiate within a joint use community based model, and the Trades and Skills Centre which also adopts a community based partnership model to provide practical skills to at-risk youth and adults.

Provincial school systems such as Northern Lights, Prairie Valley, or the Regina Public School Divisions recognize that a broader approach incorporating the vital role of other variables such as social, cultural, and economic disadvantage, family, and community is necessary. In effect, thoughtful attempts are being made by provincial school systems to recognize the importance of

the “Kokum connection”. Yet they are not alone in their efforts – these objectives are currently being pursued within First Nations systems. One excellent example is the School Success project currently underway in Treaty Four schools which is also attempting to improve student achievement and, in effect future life success, by focusing upon a broader approach to student learning success.

### **The Way Forward – The Kokum Connection**

The message conveyed by the confluence of education research related to student achievement and an approach to accountability based on broader models drawn from public policy, combined with traditional knowledge drawn from First Nations belief systems seems clear. Too narrow an approach to student learning will not produce the desired outcomes.

What is needed is the “Kokum connection” (Don Pinay, personal communication, May 5, 2010), a more inclusive approach to student achievement that incorporates an approach to educational accountability based upon current educational research and the logic model. The “Kokum connection” raises two issues. The important role of family and community must be recognized, as must the desired long term outcomes of healthy, well adjusted citizens that led productive lives. Too narrow a focus upon improving test scores will not achieve these goals, and may in fact produce negative effects. The current tendency to treat student achievement test scores as student outcomes when they are effectively thinly disguised output measures is not helpful. The second issue relates to the fact that the important relationship between student achievement and the contribution of variables such as socio-economic status, family, and community. As one considers these two issues, it is interesting to note that the findings of traditional First Nations knowledge and Western research reach the same conclusions. Literacy and numeracy goals will

not be maximized unless the impact of the “Kokum connection”, the vital link between the school, the family, and the community, is recognized.

Current efforts to draw clear linkages between school based activities such as instructional and assessment initiatives and agreed upon long term social, cultural, and economic outcomes will assist in the application of accountability models. Utilization of the logic model as a part of educational planning, identifying the relationship between school activities to long term desired outcomes, and efforts extend the usefulness of the logic model in a “downstream direction” has the potential for improving educational programming.

Similar potential exists to utilize logic models to develop the critical relationship between school related variables and broader social, cultural, and economic variables as they relate to the improvement of overall student achievement – in effect by moving in a lateral connection as compared to a downstream direction. The combination of shared accountability for student learning, long term planning, focusing upon the broader relationship including the effects of family and community involvement in education, augers well for long term planning and accountability in education. These initiatives enable the 30-35% of the variance related to student achievement to be systematically addressed. Thus the “Kokum connection” will have been systematically addressed in a meaningful planning and accountability framework. A failure to systematically address issues such as student achievement using accountability models based on the “Kokum connection” means that current efforts, whether in will not result in all students regardless of school system achieving their First Nations or provincial systems of education, will not achieve their full potential.

## References

- Allen, John R. (1996). "The Uses of Performance Management in Government". *Government Finance Review*. (August, 1996), 11-15.
- Audas, R. & O'Keefe, B. (2010). Behind the classroom door: A Guide to the high school report card. Retrieved May 3, 2010 from <http://www.fcpp.org/files/1/10-02-01-Western%20Canada%20Interim%20Report%20Card%20FINAL.pdf>
- Behn, R.D. (1998). *The new public management paradigm and the search for democratic accountability*. *International Public Management Journal*, 1(2), 131-164.
- Chell, J., Steeves, L. & Sackney, L. (2009). Community and within-school influences that interrelate with student achievement: A review of the literature. In Steeves, L. (Ed.), *Improving Student achievement: A literature review*. A paper prepared for the Saskatchewan Ministry of Education. Regina, SK.
- Darling-Hammond, L. (2004). Standards, accountability, and school reform. *Teachers College Record*. 107(6), 1047-1085.
- Edgerton, J., Peter, T. & Roberts, L. (2008). Back to the basics: Socio-economic, gender, and regional disparities in Canada's educational system. *Canadian Journal of Education*, 31(4), 862-888.
- Fege, A. (2006). Getting Ruby a quality public education: Forty-two years of building the demand for quality public schools through parental and public involvement. *Harvard Educational Review*, 76(4), 570-586.
- Israel, G., Beaulieu, & L., Hartless, G. (2001). The influence of family and community social capital on educational achievement. *Rural Sociology*, 66(1), 43-68.
- Kearns, K.P. (1996). *Managing for accountability*. San Francisco: Jossey-Bass publishers.
- Lemstra, M., & Neudorf, C. (2008). *Health disparity in Saskatoon: Analysis to intervention*. Saskatoon, SK: Saskatoon Health Region.
- Levesque, K.A. (2004). *Motivating improvement: the theory and practice of school accountability*. Unpublished doctoral dissertation, University of California, Berkeley.
- Lytton, H. & Pyryt, M. (1998). Predictors of achievement in basic skills: A Canadian effective schools study. *Canadian Journal of Education*, 23(3), 281-301.
- Ma, X. (2001). Stability of socio-economic gaps in mathematics and science achievement among Canadian schools. *Canadian Journal of Education*, 26(1), 97-118.

- Marshall, J., & Steeves, L. (2008). *Improving accountability models in public education: Applying logic models of performance management* [Public Policy Paper #55]. Regina, SK: Saskatchewan Institute of Public Policy.
- Marzano, R. J. (2003). *What works in schools: Translating research into action*. Alexandria, VA: Association for Supervision and Curriculum Development.
- McLoyd, V. (1998). Socioeconomic disadvantage and child development. *American Psychologist*, 53(2), 185-204.
- Ministry of Finance (2010). Government planning and reporting. Retrieved May 4, 2010 from <http://www.finance.gov.sk.ca/PlanningAndReporting>.
- Nechyba, T., McEwan, P., & Older-Aguilar, D. (2007). The impact of family and community resources on student outcomes: An assessment of the international literature with implications for New Zealand. *Stanford University*.
- Payne, K. & Biddle, B. (1999). Poor school funding, child poverty and mathematics achievement. *Educational Researcher*, 28(6), 4-13.
- Peach, Ian. (2004). *Managing complexity: the lessons of horizontal policy-making in the provinces*. Regina, SK: Saskatchewan Institute of Public Policy.
- Pong, S., Dronkers, J., & Hampden-Thompson, G. (2003). Family policies and children's school achievement in single-versus two-parent families. *Journal of Marriage and Family*, 65, 681-699.
- Provincial Auditor's Report (2005). Public plans and annual report assessments. Retrieved May 3, 2010 from [http://www.auditor.sk.ca/saskrepnew.nsf/html/2005vol3ch11.html/\\$FILE/ch11.pdf](http://www.auditor.sk.ca/saskrepnew.nsf/html/2005vol3ch11.html/$FILE/ch11.pdf)
- Provincial Auditor's Report. (2001). 2001 spring report. Retrieved May 3, 2010 from [http://www.auditor.sk.ca/saskrepnew.nsf/html/2001spring.html/\\$FILE/2001Spring.pdf](http://www.auditor.sk.ca/saskrepnew.nsf/html/2001spring.html/$FILE/2001Spring.pdf)
- Roscigno, V., & Ainsworth-Darnell, J. (1999). Race, cultural capital, and educational Resources: Persistent inequalities and achievement returns. *Sociology of Education*, 72, 158-178.
- Ryan, B. & Adams, G. (1999). How do families affect children's success in school? *Education Quarterly Review*, Statistics Canada catalogue no. 81-003, Vol.6, no. 1.
- Saskatchewan Ministry of Education. (2008). *Pre-K-12 continuous improvement framework: A guide for school division strategic planning*. Regina, SK: Ministry of Education.
- Saskatchewan Ministry of Education (2009). *Saskatchewan Education Indicators: Prekindergarten to Grade 12*. Regina: SK.

- Saskatchewan Ministry of Education (2010). *Provincial panel on student achievement: Final report*. Regina: SK.
- Scheerens, J., & Bosker, R. (1997). *The foundations of educational effectiveness*. New York: Elsevier.
- Sirin, S. (2005). Socioeconomic status and academic achievement: A meta-analytic review of research. *Review of Educational Research*, 75(3), 417-453.
- Steeves, L. Carr-Stewart, S. & Marshall, J. (2009). Aboriginal education in Canada: A Saskatchewan perspective. A paper presented at the Canadian Economists Association meeting in Toronto: ON on May 1, 2009
- Stringfield, S., & Teddlie, C. (1989). The first three phases of the Louisiana school effectiveness study. In B. P. M. Creemers, T. Peters, & D. Reynolds (Eds.), *School effectiveness and school improvement: Proceedings of the Second International Congress, Rotterdam* (pp. 281-294). Lisse: Swets & Zeitlinger.
- Thomas, P.G. (1998). The changing nature of accountability. In B.G. Peters and D.J. Savoie (Eds.), *Taking stock: assessing public sector reforms*. (pp.348-393). Montreal: McGill-Queen's University Press.
- Treasury Board of Canada Secretariat. (2004). *Results-based management lexicon*. Ottawa. Retrieved November 9, 2007 from [http://www.tbs-sct.gc.ca/rma/lex-lex\\_e.asp](http://www.tbs-sct.gc.ca/rma/lex-lex_e.asp)
- Treasury Board of Canada Secretariat (2005). *Preparing and Using Results-based Management and Accountability Frameworks*. Ottawa. Retrieved November 9, 2007 from [http://www.tbs-sct.gc.ca/eval/pubs/RMAF-CGRR/guide/guide\\_e.asp](http://www.tbs-sct.gc.ca/eval/pubs/RMAF-CGRR/guide/guide_e.asp)
- Volante, L. (2007). Educational quality and accountability in Ontario: past, present, and future. *Canadian Journal of Educational Administration and Policy*, Issue# 58.
- Whiteman, L. (March 18, 2010). Treaty 4 Student Success Program: a power point. Conference presentation in Ottawa: ON at an Indian and Northern Affairs Canada (INAC) meeting of First Nations Student Success Program Recipients' (FNSSPP) Gathering.







