



MEW Implementation Report

proactive
INFORMATION SERVICES INC.



**Making
Education
Work**

**Published in 2011 by
Proactive Information Services Inc.**
101-478 River Avenue
Suite 732
Winnipeg, Manitoba
R3L 0B3

Tel: 204-943-2370
Web: www.proactive.mb.ca

Graphic Design: Kellett Copy Centres Ltd.

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Introduction

Context

Much evidence exists that staying in school has many benefits. The Canadian Council on Learning reports that staying in school makes people healthier and less likely to rely on a variety of public services and subsidies, while high school leavers are disproportionately represented among prison populations (2009). "Higher unemployment and lower incomes result in an estimated loss to individual dropouts of over \$3,000 per year, compared to individuals with a high school diploma (and no post-secondary education" (Canadian Council on Learning, 2009). Income discrepancies increase with the acquisition of a post-secondary degree or diploma.

While the educational outcomes for Aboriginal peoples have improved over the last decade, they still lag behind Canadian norms. "For example, in 2006 nearly 40% of Aboriginal people in Canada had not completed secondary school, compared to just over 20% of the total population" (Levin, 2009). In Manitoba, improving high school graduation rates, particularly for Aboriginal students, is a provincial priority. Furthermore, a great deal has been learned about how to improve the success rates of Aboriginal learners. "It's primarily a matter of high-quality teaching, good awareness, respect for Aboriginal history and culture, and strong outreach to parents" (Levin 2009).

Making Education Work (MEW) was designed in response to the context of lower educational outcomes for Aboriginal students, both in terms of high school graduation and post-secondary participation. The project built upon what has been learned about conditions that support the educational success of Aboriginal youth.

Making Education Work

Making Education Work (MEW) was a five year research project jointly funded by the Province of Manitoba and the Canada Millennium Scholarship Foundation¹. The project involved high school students in six sites across Manitoba, consisting of three First Nations high schools and three provincial high schools.

The overall aim of the project was to evaluate whether the provision of additional in-school supports and services would assist Grade 10 to 12 students in staying in school, meeting graduation requirements and entering a post-secondary program. Program implementation began in the 2006-2007 school year with students scheduled to graduate in 2009.

In partnership with their school divisions and/or local Aboriginal communities, MEW was developed with a set of common components.

- a MEW curriculum, with Aboriginal content for grades 10 to 12,
- career development and guidance,
- tutoring and mentoring,
- cultural development,
- community service activities,
- parental involvement.

A caring and dedicated MEW teacher oversaw the program at each site, acting as a mediator, mentor, liaison, and advocate for students and parents. The MEW teacher was the key support for the academic/career development component of MEW. MEW teachers monitored student attendance, progress and activities in all core subjects and other areas. Each student was to have a personalized education plan, tailored to his/her needs and aspirations. Visits were made to post-secondary institutions.

The MEW teacher also played a strong mentorship role, although others in the school and community would also act as mentors and role models (e.g., community leaders, Elders, parents, university students).



A MEW classroom was designated in each site specifically to give MEW program students a place to meet, receive academic support, do homework, and study as well as for the delivery of the MEW curriculum. The program was to operate out of this classroom for the full three years. In addition, up to 15 laptops were provided for MEW student use.

MEW program students were to register in all core subject courses and electives of their choice. One of their electives was to be the MEW curriculum which was to run for three years with students obtaining three full credits (six independent courses worth half a credit per semester). The curriculum was developed by the MEW teachers along with the Provincial Coordinator and a curriculum writer, in consultation with community leaders, school personnel, Elders, and First Nations organizations. The curriculum was taught by the MEW teacher at each site.

¹ The Canadian Millennium Scholarship Foundation closed at the end of its 10 year mandate in June 2010.

Tutoring was a major focus and was provided, as required, to individual students. The MEW teacher would assist with course work, homework assignments, and/or independent study courses. MEW teachers would also attend classes with students, when necessary. In addition, peer tutoring and peer support was delivered individually and/or through homework clubs.

MEW students were also encouraged by the MEW teacher to participate in extra-curricular activities, field trips and other activities to support their individual development, build life skills and enhance self-esteem. Additional monies were provided to support such activities, as well as annual MEW gatherings.

The cultural development aspect of MEW was another key component. Students' Aboriginal identity was to be strengthened through participation in a variety of activities and opportunities, as well as through their involvement with the MEW curriculum. Participation in cultural activities (e.g., sweat lodges, teepee teachings, music and dance) was encouraged, but was strictly voluntary.

The community service component was intended to assist students in developing leadership skills, a sense of community belonging and citizenship, as well as knowledge of Aboriginal communities in a global society. The intent was to incorporate high school programming into the local community through strategies, such as work experience, volunteering, and job shadowing, in order to bridge the gap between the school and work environment, as well as to support preparation for post-secondary studies.

Parental and family involvement was viewed as a crucial component for supporting student success. A variety of strategies (e.g. workshops, meetings, personal contact) were used with the goal of sustaining parental involvement for the duration of the project.

Local Advisory Groups (LAG) were to oversee the project at the local level, making recommendations and providing advice over the course of the project. The volunteers who formed the LAGs included the MEW teacher, school administration, school board trustees, school division/education authority personnel, First Nations/Aboriginal representatives, Elders, program parents and youth. Each site determined its own LAG membership.

Evaluation of MEW

From the outset, MEW was intended as a research project to determine whether participation in MEW would:

- increase Aboriginal students' high school retention rates,
- increase Aboriginal students' high school graduation rates,
- Increase enrollment of Aboriginal students in post-secondary study.

The Canada Millennium Scholarship Foundation was responsible for selecting and contracting the original research firm. The research/evaluation design, agreed upon by the Foundation, Manitoba Education and the original research firm, called for eligible Aboriginal volunteer students to be divided into two groups: pilot students who would participate in MEW and comparison students who were not intended to benefit from the suite of interventions available. The original research firm randomly divided the students, conducted initial data collection, and tracked students over the first few years. Their contract was ended in 2009, when a new firm was sought to complete the evaluation.

Proactive Information Services Inc.², a Manitoba-based social research company specializing in educational evaluation, was awarded the contract. Proactive began work on the MEW evaluation in spring of 2009. In 2010, with the closing of the Foundation, the Province of Manitoba assumed responsibility for managing the evaluation, in collaboration with Proactive.

Three areas of study and related questions were identified for the evaluation.

Process Evaluation

- 1a) How was the program model implemented in various sites?
- 1b) Did the program model and implementation evolve over time and, if so, how and why?
- 1c) How did the school's characteristics and culture influence the pilot project?

² Proactive was established in 1984 to provide social research and evaluation services to clients in the public and not-for-profit sectors. Proactive's clients include ministries of education, school divisions/ districts, foundations, and other NGOs in Canada and internationally. For more information about Proactive, please visit www.proactive.mb.ca.

- 1d) What was the role of resources in limiting or enhancing the ability of sites to implement the model?
- 1e) What changes, if any, occurred in the attitudes and behaviours/practices of MEW students, parents/families, as well as MEW teachers and principals?

- 3c) What has been learned about evaluating education programs in diverse contexts?

In terms of the evaluation, it should be noted that, in total, 146 MEW students participated in the pilot program at some point in time. However, in the final year of the pilot project (2008/09), 112 MEW students were still in the schools at the time of final data collection.

Student Outcomes

- 2a) How successful in high school were MEW students as compared to comparison students (credits acquired, marks, attendance, retention and graduation rates, school engagement)?
- 2b) To what extent did involvement in MEW influence MEW students' post high school planning and decision-making?
- 2c) Did involvement in MEW increase MEW students' enrolment in post-secondary education?
- 2d) Did involvement in MEW increase MEW students' success in post-secondary education?

Table 1 illustrates the total number of students by site and the number of students for whom Proactive was able to collect or retrieve some information.

Over the years, 34 MEW students were known to have either moved (11) or otherwise left the school (23). (For example, Swan Valley lost students when Sapotawayak First Nation moved all their students to a new First Nations school in September 2007.) It was not possible to determine whether students who moved away stayed in school or not. Out of the 112 remaining MEW students, data were available on 99. There were no school records for the other 13 students nor were they at the participating schools at the time of the interviews. The same holds true for the 27 missing comparison students.

The methodology section of this report provides more detail on the evaluation process and activities, including instrument development, data collection, and analysis.

Lessons Learned

- 3a) What has been learned about supporting Aboriginal students' educational success?
- 3b) What has been learned about implementing education programs in diverse contexts?

Table 1: Overview of MEW Student Participation

Site	Number of MEW and Comparison Students			
	Total # MEW	# MEW with Data	Total # Comp.	# Comp. with Data
Cross Lake	27	24	14	9
Norway House	28	16	16	10
Peguis	19	13	15	4
Selkirk	27	21	25	25
Swan River	15	7	11	6
Thompson	30	18	29	29
Total	146	99	110	83

Reporting Process

While this implementation report addresses initial findings related to student outcomes (with the exception of 2d), it focuses on answering the process questions. The report was shared with people who participated in MEW (educators, students, families, and community members). Their input will help to shape the lessons learned that will be included in the final outcomes report. The final outcomes report will focus on addressing the outcome questions and on documenting the lessons learned.

This report presents information on the implementation and initial outcomes for the MEW program overall.

This document is supported by individual reports for the six participating sites:

- Otter Nelson River School, Cross Lake,
- Lord Selkirk Regional Secondary School, Selkirk,
- Helen Betty Osborne Ininiw Education Resource Centre, Norway House,
- Peguis Central School, Peguis,
- R.D. Parker Collegiate, Thompson,
- Swan Valley Regional Secondary School, Swan River.

These reports were presented and made available to the school and community people at each particular site at the time Proactive did community consultations in the fall of 2010.



Methodology

Approach

The evaluation built on the original research framework. However, the methodology had to be revised in order to complete the evaluation in an appropriate and timely manner, as the data collected by the previous research firm never became available for inclusion in this report.

Proactive was contracted in March 2009. Given the students were scheduled to graduate in June 2009, only a short time was available for data collection before students left their schools. The process had to include obtaining consent from students and their families, as the initial consent documents were in the hands of the previous research firm.

Relationship building, obtaining consent, making the initial arrangements for the site visits, and developing a workplan were the foci of the first phase of Proactive's involvement. These activities were closely followed by instrument development and site visits.

The second project phase occurred between July 2009 and April 2010. Administrative data were collected from schools and additional interviews were conducted with other key informants (i.e., superintendents/education directors, the MEW Provincial Coordinator).

The development of this report and the consultation with communities represents Phase 3 of the MEW evaluation process. Consultation, in various forms, was conducted on this report and the site specific reports in October/November 2010.

Phase 4 is the follow-up of MEW and comparison students to determine their post-secondary status and success. The last phase will be drafting the final outcomes report and making it available for community feedback prior to finalization.

Instrument Development

Proactive developed primary data collection instruments:

- Student Questionnaire (MEW and Comparison Students),
- MEW Student Interview Instrument,
- Comparison Student Focus Group Moderator's Guide,
- MEW Parent/Family Focus Group Moderator's Guide,
- MEW Teacher Interview Instrument,
- Principal Interview Instrument,
- Community Partner Interview Instrument,
- Superintendent/Director of Education Interview Instrument.

Various consent forms were also developed to ensure parental and student consent for evaluation activities, as well as release of school administrative information, use of photographs, and use of previously collected data should they become available. A place on the form for follow-up contact information was included.

Data Collection

The majority of data collection occurred in May and June 2009. At the final MEW gathering, attending students were asked to complete questionnaires. Then professionals from Proactive visited each of the sites to undertake the remainder of data collection, with the exception of Cross Lake. Due to an H1N1 outbreak, interviews with educators were conducted by telephone. No interviews were possible with students. The MEW teacher in Cross Lake facilitated the completion of questionnaires by the MEW and comparison students.

On-Site Data Collection

Interviews were undertaken with the MEW teachers, school administrators, and selected community partners, primarily Local Advisory Group (LAG) members. MEW and comparison students were interviewed individually or in small groups, depending upon what could be scheduled. Interviews ranged from 20 minutes to an hour and a half.

At the time of the interviews, students were also asked to complete a questionnaire (if they had not already done so), as well as a consent and contact form to facilitate further research.

Focus groups were also held with MEW parents³ and, in one site, the MEW teacher also invited parents of comparison students to attend a focus group. Discussions with parents ranged from 45 minutes to an hour and a half, depending on the situation and size of the group.

Other Key Informants

In addition to the school/community data collection that occurred in May and June 2009, other key informants were interviewed. They included Superintendents and Directors of Education, as well as the MEW Provincial Coordinator. Four of the six Superintendents/ Directors of Education made themselves available for an interview. Interviews

were in-person or by telephone depending on the preference of the person being interviewed. These interviews occurred in autumn 2009.

Administrative Data

Schools were asked to provide information from the students' school records. Information requested on MEW and comparison students was: credits acquired, marks, attendance, and graduation status.

Data were received from schools over a number of months, with the final data received from schools in April 2010.

Summary of Data Collection

The interviews/focus groups (which included 142 individuals) provided qualitative information that deepens or further explains the quantitative data collected through the surveys and administrative data. The qualitative information is primarily used to answer the process questions.

In total, 107 questionnaires (surveys) were completed, representing:

- 83 MEW students
- 24 comparison students

Table 2: Overview of Interview/Focus Group Participation (Total = 142)

Sites	MEW Teacher	Administrator	Community	MEW Parents	MEW Students	Comparison Students
Cross Lake	1	1	0	0	0	0
Norway House	1	1	1	14	13	1
Peguis	1	1	0	3	11	4
Selkirk	1	1	2	10	13	8
Swan River	1	1	2	8	5	4
Thompson	1	3	2	10	14	3
Total	6	8	7	45	56	20

³ The term "parents" is used to refer to parents, legal guardians, or other primary caregivers.

Table 3: Overview of MEW Student Data

Site	Number of Students			
	Complete Data*	Survey Data Only	Admin. Data Only	Total Some Data
Cross Lake	21	0	3	24
Norway House	16	0	0	16
Peguis	13	0	0	13
Selkirk	12	2	7	21
Swan River	6	0	1	7
Thompson	13	0	5	18
Total	81	2	16	99

*Note: Complete data means for these students both the survey and administrative data were available.

Table 4: Overview of Comparison Student Data

Site	Number of Students			
	Complete Data*	Survey Data Only	Admin. Data Only	Total Some Data
Cross Lake	6	0	3	9
Norway House	1	0	9	10
Peguis	2	2	0	4
Selkirk	5	1	19	25
Swan River	3	0	3	6
Thompson	4	0	25	29
Total	21	3	59	83

*Note: Complete data means for these students both the survey and administrative data were available.

Analysis and Reporting

As far as is known, there were no expectations that data from school records would be provided in a consistent format for purposes of the evaluation. Therefore, in 2009 schools provided their best available data on credits acquired, marks, course selection and attendance to Proactive. The result was a mix of different formats and differing levels of detail.⁴ The variability of school record (administrative data) meant that certain decisions had to be made in order to create comparable data sets for analytical purposes.

An in-depth review was conducted of all data provided from the six schools to determine where indicators were similar enough and consistently provided. Selecting items that could be interpreted to be consistent from school to school allowed for cross comparison between schools and the ability to provide similar analysis and results for each school. It should be noted that, even with this selection

process, there are still gaps in the analysis for some schools due to lack of sufficient data. The following discussion explains the items selected for analysis.

All schools provided marks for the 2008/2009 school year, and due to graduation requirements, the majority of students completed one or more English Language Arts (ELA) course and one or more Math course. Due to this consistency, these courses were selected as the measure for comparison of marks.

Most schools provided the number of absences per course or semester allowing for a comparison of overall average absences in a semester/course, as well as absences specifically for ELA and Math courses.

Schools provided the number of credits for each school year, with the exception of two schools that did not provide credits for 2005/2006, one of which did not provide 2006/2007 credits for the comparison students. With an adjustment for this one school, analysis was performed for total number of credits

⁴ In the interests of making the process as easy as possible for schools, Proactive accepted the school record data in the format already used by the school.

reported. Further analysis was completed for number of credits acquired across the 2007/2008 and 2008/2009 school years due to data being provided for all students from all schools.

As much as possible, school records were also used to determine retention rates; that is, the number of students who had remained in school. Finally, graduation status was compared between those students graduating at the end of the 2008/2009 school year and those who were not.

As previously mentioned, this report addresses initial findings related to student outcomes (with the exception of 2d), but has a focus on answering the process questions.

Challenges and Limitations

The first challenge to creating this evaluation report was that Proactive only became involved in the evaluation in the spring of the MEW student's graduation year (2009). No data collected over the first years of MEW were available, with the exception of the school record (administrative) data which schools could provide. Therefore, no baseline data on student engagement or post-high school intentions was available.

The timing also meant that site visits took place late in the school year, making it difficult to schedule data collection with certain students who had academic or other conflicts.

Finding students in the comparison group was particularly difficult. Therefore, the limited data from the comparison group inhibits analysis for some school communities.

As previously mentioned, lack of consistency in record keeping and some years of missing data also limited the analysis that could be performed on the school record data.

Finally, it became evident during the final data collection stage that the original research design⁵ presented both practical and ethical dilemmas. The design randomly placed eligible students into the MEW or the comparison group, the intent of which was to create a situation where the comparison group received none of the MEW interventions. However, in four of six sites, the MEW teacher provided some level of support to at least some of the students in the comparison group. In small communities with caring teachers who know the young people in their communities, it is not surprising that the teacher would provide support to any student requesting help, particularly where pre-existing (sometimes familial) relationships exist. Therefore, the potential for finding differences in the outcomes between the two groups was reduced, while the chance of educational success for students in the comparison group was increased.



⁵ The research design was developed by the original research firm and approved by the Canada Millennium Foundation, prior to Proactive's involvement.

Discussion of Findings

The discussion of findings in this report will address the relevant evaluation questions; that is, the questions related to student outcomes (with the exception of 2d) and the process questions. The focus will be on the process questions, although initial highlights related to student outcomes will be presented.⁶ The student outcomes and lessons learned will be addressed more fully in the outcomes report.⁷

Process Issues

Research Design and Application

The original research design called for creating a list of eligible students who would then be divided into the MEW pilot group and a comparison group. Students were not to be considered eligible if they were in an individualized program that involved a cognitive disability, students with a history of violence, or students over the age of 18.

While the original research design and sample selection may have been consistently and appropriately applied across sites, this was not perceived to be the case. In most sites, people raised concerns that the individuals hired by the original research firm to select the sample were not consistent in their approach and/or did not apply the appropriate selection criteria.

I threw them [student names] all into the pot. They [the research company] wanted only high performers, but I thought that would skew the data (MEW teacher).

There were also special education students in the MEW group. Also there was no replacement for those who never registered or never attended (MEW teacher).

These perceptions speak to confusion and distrust of the selection process in a number of sites. Furthermore, in addition to confusion about the process, many comparison group students wanted to be included in MEW.

I wish I was in it. I didn't know what a comparison student meant and why I was put into that group, (Student in the comparison group).

Also in a number of the sites, interviewees felt that MEW should have been available to all eligible students, rather than creating a comparison group where students could not (theoretically) access support.⁸ As mentioned by a senior administrator:

It seemed like some kids were set up to succeed [MEW students], while the comparison group was set up to fail.

Adults were not the only people who raised this issue, as MEW students did as well.

The comparison students should have been allowed to be with us. They are my friends and they missed out.

However, in four of the six sites, the MEW teacher supported some students in the comparison group to varying degrees, often through tutoring and mentoring; *"I did it on the side; I didn't turn them away when they asked for help."*

Implementation of the Model

Teachers were assigned to MEW in May/June of 2005. In September to December they met with the Provincial Coordinator to determine delivery and develop programming, including the MEW curriculum. Program implementation was to begin in January 2006; however, in November it was decided that the program would be pushed back a half year, making the start date September 2006.

In retrospect, many of the educators interviewed suggested that a program such as MEW should begin in Grade 9 or even earlier, in middle years.

6 Differences are evident among sites; however, these are not included in this report. Results for individual sites are reported in each site-based summary report.

7 Gender differences will be discussed in the outcomes report. It may be worthy of note that a larger percentage of MEW students were female, as compared to the comparison group.

8 The Canada Millennium Scholarship Foundation mandated that the research project required a comparison group



As previously mentioned, the MEW teachers worked with the MEW Provincial Coordinator to develop a curriculum which included six half credit courses, focused on Aboriginal culture and heritage. As one MEW teacher noted:

[MEW] was a coming together of different people with different ideas to create a program that never existed before.

MEW students were to take two of these courses each year as part of their high school program. While these courses were valued and often described as “excellent,” one teacher explained: “having to take an extra MEW course caused extra pressure for those kids.” Indeed, as students progressed through their high school program, it became more and more difficult for some students to take the MEW courses. Therefore, not all students completed all courses within the MEW curriculum, usually because of timetable conflicts.

In a number of sites there was also a lack of understanding about the program, including roles and responsibilities, an issue which often extended to the MEW teachers:

I remember feeling like I had 20 bosses – the school, the MEW provincial group, and the research firm. I was getting mixed messages, which was frustrating. At the beginning, the project was not established, and it was difficult to determine directions.

The issue of lack of clarity extended to the community members on the Local Advisory Groups (LAG).

I didn't really know what was to be accomplished as there was no curriculum at first ... this caused problems for the MEW teacher, as no one knew what the purpose really was (LAG community representative).

While all sites had functioning LAG groups at onset, the LAG groups did not continue to operate throughout the course of the project in the majority of sites. People did not see the need for their ongoing operation.

Regardless of the issues raised, implementation included many positive activities for students such as drum-making, soap stone carving, learning about the seven sacred teachings and the Medicine Wheel, attending sweat lodges, learning about the importance of the land, and various other cultural field trips, in addition to the annual MEW gatherings.

[The trips] help open your eyes to other things. People need to have an opportunity to go and see things, otherwise how will they know? Young people need to get an opportunity to see there is a bigger world than this little community (MEW student).

While the specific activities varied according to local adaptations, the focus on cultural learning and experiences was common to all sites. As a student explained, “the focus on Aboriginal values...on how to live within them and how to instill them in others [was very important to me].” However, in one community, a LAG member suggested that even more should be done to get students:

... out onto the land where they could incorporate other things like storytelling, fasts, sweats, and ceremonies.

The importance of having the same teacher and the same group of students over multiple years created important bonds and relationships for MEW students in all sites.

[The most important] is the human side of the equation. The first objective is to get into their heart and, by the time they realize it, it is too late. Once the bond is there, you can discipline or scold [when you need to] (MEW teacher).

To build these relationships the MEW teachers did home visits and connected with parents in a variety of ways. As one MEW teacher noted:

I knew I would be everything to these kids; 24/7/365 days a year, acting as a teacher, father, uncle.

[The MEW teacher] was like a mother hen to those kids. She was the right person for the job and was always there for them. She approached other teachers on behalf of her students. She was doing a lot of parenting as well. Realistically, if she had not been around, I don't know how successful the project would have been (Principal).

Although it should be recognized that the MEW room was not equally utilized in all sites, having a designated classroom for MEW was an aspect of implementation that strengthened a sense of belonging for many students.

I think every high school should have a room like this. Kids feel safe here . . . what students really need is a quiet place to work, research, and get help (MEW teacher).

Evolution of MEW

Recognizing the variability across sites, the program model also underwent evolution over the years of implementation. In some sites, schools were not prepared to fully implement the program: *"The rush to full implementation created animosity at the school level"* (Community representative).

While MEW was intended to be integrated into the school, in some sites it evolved as a more isolated project and was not incorporated into the school and

community as intended. And, as MEW evolved, the LAGs tended to meet less often in all sites.

In one site, the MEW teacher became part of the Aboriginal Youth Council which met in the MEW room, connecting MEW students to the Council. Finding ways to connect students to each other, their culture and their communities was a focus for implementation in all sites.

As previously mentioned, in a few sites, scheduling conflicts between the MEW curriculum and the courses students required for graduation posed problems, particularly in the higher grades. Therefore, it was in these sites where some students did not take MEW courses in Grades 11 and 12.

Finally, in terms of the implementation and evolution of MEW, superintendents and education authorities felt that much was beyond their control.

There were some local adjustments, but they [the Millennium Foundation] were paying the bills so they called the shots....I signed the documents. [I just] knew about what it was trying to accomplish.

One superintendent suggested that it would have been helpful to implementation and mutual learning had the superintendents and directors of education been brought together a few times throughout the project. While the Provincial Coordinator indicated that such opportunities were available at certain times, many of the superintendents/directors of education did not realize these opportunities existed, possibly because some were new in their positions.

Influence of Context

The question of the influence of school context and culture needs to be considered in conjunction with the potential influence of community characteristics.

A number of contextual factors appeared to have an impact, including:

- Size of school (MEW more likely to be isolated in larger school contexts, recognizing that three of the six sites operated in large regional secondary schools,
- Support of school administration (in some sites administrative turnover or lack of support from administration were a hindrance, while in others, supportive administration was a positive influence),

- Connection with other programs was a positive (e.g., a breakfast program operating out of the MEW room),
- Students' personal realities (as one MEW teacher noted, when reflecting on the number of young people who were young parents, "my program has eight babies"),
- Buy-in of other school staff (in some sites MEW operated in isolation from the rest of the school, occasionally with other staff showing some resentment towards the program, particularly at the outset).

There were a lot of people making racist remarks and there wasn't much support for [the MEW teacher]. ... [The MEW teacher] didn't complain to us. But I knew that it was going on. [Parent of a MEW student].

Finally, community context and values had an influence. In more than one community, some parents removed their children from the program because they did not like some aspects of the MEW curriculum (i.e., traditional spirituality viewed in conflict with Christianity). Over time, with greater understanding of the program's benefits, most of these students returned to MEW.

Role of Resources

The role of resources represents another consideration in the ability of sites to implement the model. As expressed by one MEW student, representing the views of many:

MEW is a big benefit, we have this room, computers and a quiet place; it is a big advantage.

The computers were viewed as an important resource in a number of sites, although they did not always arrive when anticipated. The access to computers was deemed important by students who rated computers as the third most important element that supported their learning.

Some superintendents felt MEW resources were not always spent effectively. Concerns were expressed about the richness of the research incentives available to students and parents, particularly as they could be viewed in a paternalistic light. In addition, at more than one site, there were issues raised

regarding the administration of MEW dollars; "there were too many restrictions and nobody knew what anyone else was doing."

On the other hand, a number of educators saw easy access to supplies in a positive light.

Whatever we needed from the school board we got for the program, plus the supplies that the MEW teacher could access.

Having funding available to take students on field trips was also mentioned as important by several MEW teachers as these trips helped give students the "history of our people."

Superintendents and heads of educational authorities appreciated the support provided by MEW, but they indicated it would be very difficult to replicate a similar project without a similar level of funding:

If it paid a huge dividend then that would be something learned. But even then school divisions can't afford it. It's a great idea, but it is not sustainable. You don't have money to support small numbers of students with one teacher and laptops for [virtually] every student.

Changes in Attitudes, Behaviours, and Practices

The final process issue concerns whether or not MEW contributed to changes in attitudes, behaviours and/or practices of the various groups affected by Making Education Work.

MEW Students

MEW students identified improvements in their academics, including listening and speaking skills. Changes identified by MEW students included both academic and personal changes.

I saw the path I was heading down ... I needed to change, if not for [the MEW teacher] I would have dropped out.

Usually I am gone by the time the birds come back, but this year I got help and I got all my credits.

Just being in MEW made me think about my future more and what I want to do when I finish high school.

MEW helped me stay away from drugs – it's fun, but you still learn a lot.

I hoped it would help me get back in touch with my roots. It has done this for me.

[MEW helped me] overcome prejudice, and accept people. So many different people come into this room [the MEW classroom]. It opens your mind to see you can be friends with anyone.

Many students, when asked what they wished had been different, replied that they wish they had “*tried harder*” in high school.

Parents noted that their child had gained confidence, as well as motivation, determination, and hope.

When he was first going through school he was having a hard time adjusting and it [MEW] brought him through; that gave him direction and motivation.

I am a single mother and I have raised four kids and he is the only out of them that is pushing himself. [The MEW teacher] explained MEW to him and he hasn't missed a class since. ... He has signed up at the University of Winnipeg. [The MEW teacher] pushes his students.

[The MEW teacher] pushed it in a good direction so that he [my son] wasn't too much of a wild stallion. In that way it helped him. He can have ten dreams, but you need to start with one and then build.

Other parents noted the importance of the cultural aspects of MEW.

[My son] was able to talk about our family history, history of this reserve; he could share it and it made him feel good that he had this knowledge.

The positive impact on students was also observed by community members, such as this LAG member.

Kids get along and are accepting of one another ... they are more positive and more confident and take risks because of MEW.

As one MEW teacher concluded:

The students are changing – [they] became more confident . . . more aware of their identities and that they could make a difference in the world.

Parents/Families of MEW Students

In many sites, the improved relationship between home and school was noted, along with parents' increased trust in the school. Parents concurred, indicating that it had been a great support to them; “*it has been a big change for our family knowing that support is there for him [their child].*”

In some sites there was an identifiable impact on the parents themselves.

Last year I drove some kids and we had a picnic. My wife is a pretty shy person, [the MEW teacher], has helped her because she knows he is not a threat. When we went there she was making bannock and she would never do that around strangers.

One father noted that it made him want to become an educational role model for his children, supporting the contention that MEW not only had an impact on students, but on some families as well.

MEW Teacher

In some communities, the MEW teachers indicated that it helped them connect more closely with the community. School/community connections (at least through the MEW program) were solidified.

Overall, MEW teachers were most likely to reflect back on the impact of the program on their students rather than themselves. They saw that MEW touched the students, not the high achievers or the students who were far behind academically, but rather:

There was a middle group, those that struggled and are still achieving, they are the greatest success of the project.

Student Outcomes

Success in High School

A number of measures constituted success in high school.

- Credits acquired,
- Marks and course selection,
- Attendance,
- Graduation rate,
- Engagement in school.

Credit Aquisitions

From 2006 to 2009,⁹ MEW students earned, on average, approximately five and a half more credits than comparison students. The mean number of credits for MEW students was approximately 24, while the mean number for comparison students was approximately 18 credits.

From 2007 to 2009, MEW students earned, on average, four more credits than the students in the comparison group. The mean number of credits for MEW students was 12, as compared to eight for comparison students.

Included in their high school credits, MEW students had most frequently taken three or four MEW courses (n=56 or 69%). MEW courses were not available to comparison students.

MEW students acquired more high school credits than did comparison students.

Marks and Course Selection

Students are able to take a wide range of courses over their high school careers. In order to have sufficient and comparable data for analysis, the decision was made to focus on English Language Arts (ELA) and Mathematics courses.

English Language Arts (overall): When all students' ELA marks were analyzed (including non-Grade 12 courses), MEW students, on average, had 7% higher marks than comparison students (58% versus 51%). The similar result was found when only students' ELA Grade 12 courses were considered (average mark of 63% for MEW students versus 57% for comparison students).

Overall Mathematics (overall): When students' Mathematics marks were analyzed (including non-Grade 12 courses), MEW students, on average, had 7% higher marks than comparison students (58% versus 51%). When only Grade 12 Mathematics marks were considered, MEW students' average marks were 9% higher than comparison students (65% versus 56%).



⁹ Analysis was adjusted to take into account missing data from one site for the 2005-2006 school year.

Grade 12 Course Selection and Marks: The level of courses selected by students may affect their marks. Therefore, the level/type of English Language Arts (ELA) and Mathematics courses selected by MEW and comparison students at the Grade 12 level is presented. The number (#) represents the number of students who took each level/type of course. The percentage represents the average grade achieved for MEW students and comparison students.

The following are brief descriptions of the different ELA and Mathematics courses.

- **ELA - Comprehensive:** Students develop and refine a range of literacy skills that deepen their engagement with and appreciation of a variety of texts and that help them function more effectively in their private spheres and in the global community. Students engage with and compose texts that inform, persuade, analyze, foster understanding and empathy, reflect culture, express feelings and experience, and bring enjoyment.
- **ELA - Transactional:** Students develop and refine a range of knowledge, skills, strategies, and attitudes that help them function effectively in various communities. Students engage with and compose texts primarily for pragmatic purposes.
- **Mathematics – Essential (formerly Consumer):** is intended for students whose post-secondary plans do not include a focus on mathematics and science-related fields. It emphasizes

consumer applications, problem solving, decision making, and spatial sense.

- **Mathematics – Applied:** is intended for students considering post-secondary studies that do not require a study of theoretical calculus. It is context driven and promotes the learning of numerical and geometrical problem solving techniques as they relate to the world around us.
- **Mathematics – Pre-calculus:** is designed for students who intend to study calculus and related mathematics as part of post-secondary education. It comprises a high-level study of theoretical mathematics with an emphasis on problem solving and mental mathematics.

When analysis was done to differentiate between Grade 12 ELA Comprehensive and Transactional courses, MEW students had higher marks, on average, in both courses; 68% versus 54% in Comprehensive and 63% versus 57% in Transactional.

When analysis was done to differentiate between Grade 12 Mathematics courses, MEW students marks were consistently higher; 64% versus 54% in Essential, 61% versus 52% in Applied, and 71% versus 60% in Pre-Calculus.

MEW students had higher marks in English Language Arts and Mathematics than did comparison students.

Table 5: Grade 12 Course Selection and Average Marks in English Language Arts and Mathematics for MEW and Comparison Students*

Courses Selected	MEW		Comparison	
	n=99	Mark	n = 64	Mark
ELA: Comprehensive	46	68%	33	54%
ELA: Transactional	43	63%	23	57%

Courses Selected	MEW		Comparison	
	n=60	Mark	n = 39	Mark
Mathematics: Essential (Consumer)	29	64%	21	54%
Mathematics: Applied	16	61%	8	52%
Mathematics: Pre-Calculus	15	71%	11	60%

*A few students took other ELA courses and one MEW student took calculus. However, the small numbers do not support further analysis

Attendance

Given the difficulties in creating comparable attendance statistics across schools, attendance was only analyzed for the 2008-2009 school year.

On average, MEW students had 17 absences, as compared to 20 absences for the comparison group.

When absences in ELA and Mathematics were considered separately, MEW students had two fewer absences in ELA and one fewer absence in Mathematics. However, these differences were not statistically significant¹⁰.

MEW students had fewer absences than did comparison students.

Retention and Graduation Rates

According to school records¹¹, 84 or 88% of MEW students were in still in high school during the 2008/09 school year, as compared to 52 or 64% of comparison students.

For this report, “on-time” graduation rate was assessed; that is, what percentage of students graduated in June 2009, after their fourth year in high school.

In June 2009, 59 MEW students or 62% graduated “on-time,” as compared to 35 comparison students or 48%; a difference of 14%.

MEW students had higher retention and “on-time” graduation rates than did comparison students.

Engagement in School

A variety of questionnaire items provide insights regarding students' engagement in school¹². First, it may be worthy to note that while students were randomly assigned to the two groups, in retrospect there appear to be some underlying differences. For example, MEW students were more likely than comparison students to indicate that, at sometime in their school career, they had 'seriously thought about quitting school' (an 18% difference). This raises the question as to whether the MEW group might actually have been at higher risk regarding school success than the comparison group.

On numerous items, MEW students were less positive than comparison students regarding their high school experience. For example, MEW students were:

- 18% more likely than comparison students to 'disagree' that the school helps students to respect individual differences,
- 16% more likely to 'disagree'¹³ that their school helps students appreciate cultural differences;

MEW students were also 14% more likely to 'disagree' that staff in the school care about students, although they were 19% more likely to report that a teacher (likely the MEW teacher) helped or supported them in understanding and respecting themselves. These findings may point to a difference between MEW students' view of their school and teachers in general, and their view of the MEW teacher.

MEW students participated in peer support or leadership programs at a 13% higher rate than did comparison students. Also, 19% more MEW students indicated that “love of learning” was one of their strengths.

MEW students were also asked about their participation in MEW, what they had learned as a result, how being in MEW had supported their learning, and how they would rate MEW.

As a result of being in MEW, students were most likely to report they had learned about:

- Aboriginal worldview (n=70 or 90%),
- Aboriginal ceremonies/gathering (n=69 or 90%),
- Traditional arts and crafts (n=63 or 83%),
- Traditional herbs and medicines (n=51 or 72%),
- Pow Wows (n=54 or 72%),
- Traditional feast/pot luck food (n=55 or 72%).

¹⁰ Where differences are cited above, these differences are statistically significant, unless otherwise noted.

¹¹ School record data are from the six participating sites and do not include students who may have transferred to other schools.

¹² The outcomes report will include more detailed analysis on various factors related to student engagement.

¹³ This represents a combination of 'disagree' and 'strongly disagree.'



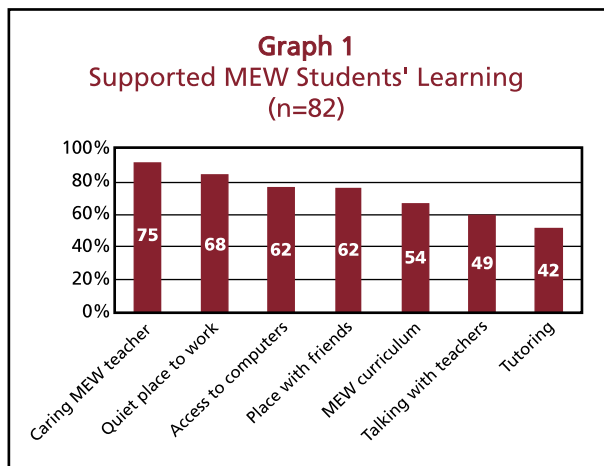
Also, 96% (n=78) 'agreed'¹⁴ that being in MEW had helped them "gain a better sense of my Aboriginal identity." As MEW students confirmed in the interviews:

Most Aboriginal students don't get a chance to learn about their cultures. [The MEW teacher] explained our traditions to us.

I learned about my heritage and that, all over the country and the world, there are Indigenous peoples.

The most important thing in MEW was what I learned about my culture ... [and] how to deal with racism and not flip out.

MEW students indicated that numerous MEW program elements "often" supported their learning (Graph 1).



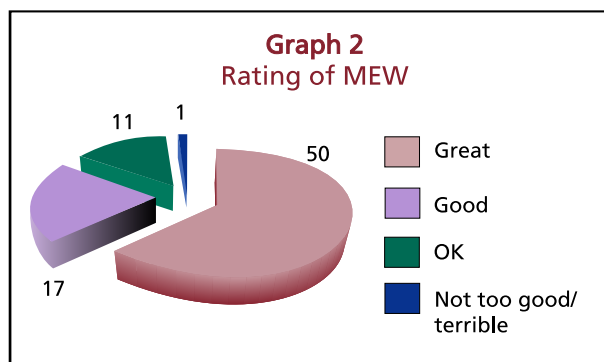
Actual number of students is shown in the bars.

Ninety-two percent of MEW students (n=75) indicated that the MEW teacher cared about them. This was often confirmed in the interviews wherein many MEW students commented on the importance of the MEW teacher, both personally and educationally.

I didn't have support before I came here. [MEW teacher] helped me out and if I had troubles I wasn't afraid to ask him.

We wouldn't be where we are without [the MEW teacher]. S/he encourages us to do everything perfectly.

Overall, 98% of MEW students (n=79) "agreed" that being in MEW helped them with "skills for high school success." Finally, 85% of MEW students (n=67) rated MEW as "great" or "good" (Graph 2).



Note: actual numbers of students shown on the graph.

The interviews with MEW students confirmed the findings from the surveys.

The MEW class has been a big part of high school [for me] ... I always come to do my homework here [MEW classroom].

MEW did what I expected, anything I needed, food, a place to vent, help with math. It gave me a place to sit and think. I always knew I could come here and count on this room ... I can count on [MEW teacher] for everything; he is always there.

14 This represents a combination of "strongly agree" and "agree."

If I fall behind in assignments, I can come here [MEW classroom] and get help. I do better. I didn't expect that from my classes.

MEW is one of the main reasons I am graduating on time.

In some sites, the comparison students wished they had been in MEW. They believed they would have “received more help, got better grades and more people would have graduated.”

While MEW students overall appeared less engaged with several aspects of their high school experience than were comparison students, they were very positive about their experiences and learnings from being in MEW.

Post-High School Planning

The majority of MEW students for whom data were available (n=76 or 94%) 'agreed' that being in MEW helped them with advice on course choices. As high school courses need to be selected to ensure students have the prerequisites for their desired post-

secondary program, this is one aspect of post-high school planning. Again, almost all MEW students (n=77 or 95%) 'agreed' being in MEW had helped them know what courses they needed to graduate. Also, 96% (n=78) of MEW students 'agreed' that MEW had helped them with “skills to help me continue with my education.” As one MEW student concluded:

MEW helped me a lot with myself, my schooling and my future. It was a great program.

Enrollment in Post-Secondary

Eighty-eight percent (n=71) of MEW students for whom data were available believed that MEW helped them with “getting information on post-secondary options.” Data from post-secondary enrollment and bursary access (provided by Manitoba Education) indicates that MEW students were more likely to be enrolled in a post-secondary program: 38 MEW students, as compared to 16 comparison students.

As of September 2009, MEW students were more likely than comparison students to have enrolled in a post-secondary program.

Summary

Table 6: Overview Graduation and Post-Secondary Participation

Site	MEW				
	Total #	# with Data	Grad Data	Graduated	Bursary
Cross Lake	27	24	24	19	17
Norway House	28	16	16	9	8
Peguis	19	13	13	11	6
Selkirk	27	21	18	10	4
Swan River	15	7	7	5	0
Thompson	30	18	18	5	3
Total	146	99	96	59 (62%)	38 (33%)

Site	MEW Comparison Group				
	Total #	# with Data	Grad Data	Graduated	Bursary
Cross Lake	14	9	9	9	4
Norway House	16	10	10	5	3
Peguis	15	4	2*	2	2
Selkirk	25	25	18	10	5
Swan River	11	6	6	3	1
Thompson	29	29	29	6	1
Total	110	83	74	35 (47%)	16 (22%)

*The two students identified as having graduation data and graduating are only known because they were on the bursary list.

In Conclusion

Overall, the academic outcomes of MEW students were higher than those of students in the comparison group, including graduation rate and post-secondary participation rate.

MEW combined many features about what was known to be effective educational practice for Aboriginal students' school success. MEW confirmed that:

- Students benefit from a sustained, trusting relationship with a caring adult in the school.
- Students profit from a supportive academic environment (e.g., tutoring, mentoring, quiet and safe place to work).
- Learning about one's culture and connecting to one's heritage and community supports students' confidence and school success.
- Building supportive trusting relationships between school and families supports student success.

MEW is a good example of how the system can function; engage students in meaningful ways in curriculum and engage parents as partners (Community partner).

When considering lessons learned from MEW, people attending the public consultations observed that:

- MEW benefited the students who were involved; MEW should be viewed as 'a success.'
- MEW confirmed that some students benefit from additional teacher support and one-to-one attention which schools could accommodate through minimal increases in staffing.
- The educational system could support increased teacher advocacy for Aboriginal students and greater attention to Aboriginal culture without needing to commit additional resources.
- The MEW curriculum should be available to Manitoba schools.

While MEW experienced some of the growing pains often inherent in innovative pilot projects, virtually all concurred that MEW made a positive difference.

References

Canadian Council on Learning (2009). *No 'drop' in the bucket: the high costs of dropping out*. See: <http://www.ccl-cca.ca//pdfs/OtherReports/CostofdroppingoutHankivskyFinalReport.pdf>

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