

**Ottawa School-based Substance Abuse Program
Evaluation Report**

For the year 2011/12

October 2012

Acknowledgements

Participating school boards:

Conseil des écoles catholiques du Centre-Est
Conseil des écoles publiques de l'Est de l'Ontario
Ottawa Carleton District School Board
Ottawa Catholic School Board

Service providers:

Maison Fraternité
Rideauwood Addiction and Family Services

Program funding partners:

Champlain Local Health Integration Network
Ottawa Public Health
United Way Ottawa's *Project s.t.e.p* (including funding from Health Canada)
All participating school boards

Program coordination and report draft:



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1. Executive Summary

This report describes the evaluation work and results for the school-based substance abuse program in Ottawa for the 2011/12 school year. The program is a collaboration between the four Ottawa school boards (Conseil des écoles catholiques du Centre-Est, Conseil des écoles publiques de l'Est de l'Ontario, Ottawa Carleton District School Board, and the Ottawa Catholic School Board) and two service providers, Rideauwood Addiction and Family Services and Maison Fraternité. This is a continuation of the formal program evaluation begun last year, conducted jointly by both agencies across all participating schools. The results to date indicate that the program is meeting its objectives in helping to improve the health and wellbeing of students. Together with other school-based supports, the addiction counseling program is helping to keep at-risk students in school. Feedback from participating schools indicates that the partnerships are working well and that the services are highly valued by the school community.

The evaluation involves the comparison of drug use data and other indicators of student health and wellbeing upon admission to the counselling program with the same indicators at the end of the school year. The sample size is limited by the number of consents received for participation in the evaluation, and the number of students for whom full data sets are available. For the 2011/12 school year, 200 consents were received.

Upon being referred to the program, the typical school-based counselling client is consuming cannabis 19 days a month, is drinking 8 days a month, is struggling academically, and is at risk for leaving school. A considerable minority of clients are also using cocaine and/or other drugs. They are experiencing difficulty in their ability to manage day to day responsibilities.

By the end of the evaluation period, the following outcomes were observed for the sample group of students participating in the school-based counselling program:

- 7 out of every 10 students in the sample group were able to reduce or stop using one or more drugs during the evaluation period (less than one school year)
- 56% of the 150 cannabis-using students in the group reported that they decreased or stopped their use of this drug. Overall alcohol consumption decreased by 35%.
- Over 70% of the clients who previously used cocaine and/or ecstasy reported that they achieved abstinence from these drugs. For clients who used hallucinogens, 80% had stopped use.
- Students who were experiencing the most difficulty upon entering the program showed the biggest improvements in health and wellbeing (as measured by the BASIS 32 assessment tool).
- 89% of the students admitted to the counselling program completed the school year.

In all, 1500 students were served through school-based counselling across all four school boards during the 2011/12 school year. In addition, 500 of their parents were contacted. Another 5400 students participated in prevention and education sessions, and the school-based counsellors also delivered training and education sessions to hundreds of teachers and parents through various school and community events.

2. Background

The school-based substance abuse program is the result of a multi-sector community partnership brought together to address the issue of substance abuse among students in Ottawa. Ottawa youth are certainly not unique with respect to alcohol and drug use. According to the 2011 Ontario Student Drug Use and Health Survey¹, one in eight Ontario students (Grades 7 - 12) may have a drug use problem, but only a small fraction of students have received treatment.

By bringing prevention, education and treatment services into the school setting, the program makes services universally accessible and convenient for students. The overall objective is to improve health, wellbeing and academic outcomes for students. The program is run as a close partnership between the schools and the two service providers, Rideauwood Addiction and Family Services and Maison Fraternité. This model has overcome many of the barriers typically preventing youth from getting the services they need. For a description of the program model, please see Appendix A.

Program oversight is provided by the Substance Abuse and Youth in School (SAYS) Coalition, facilitated by the Ottawa Network for Education (ONFE). The Coalition members include all four local school boards, youth-serving addiction agencies, Ottawa Public Health, United Way / Centraide Ottawa, enforcement and allied professionals. Further details regarding the SAYS Coalition are provided in Appendix B. ONFE also provides administrative services for the school-based program.

Although school-based counselling for students was available in some schools prior to the current program², a much broader implementation was made possible through new funding announced in 2008. At that time, four partners committed to a total of one million dollars annually to support school-based education, prevention and treatment services. The funding partners are the four local school boards (Conseil des écoles catholiques du Centre-Est, Conseil des écoles publiques de l'Est de l'Ontario, Ottawa Carleton District School Board, and the Ottawa Catholic School Board), Ottawa Public Health, the Champlain LHIN (Local Health Integration Network) and United Way/Centraide Ottawa's Project s.t.e.p. Total program funding is allocated to each school board in proportion to the number of eligible high schools it has within Ottawa. Combined with all other sources of funding, this support has enabled school-based services to students to increase by 80% (based on total hours of service) since 2007/08. A small number of the 56 high schools in Ottawa did not yet have school-based counselling services as of June 2012, but it is expected that this gap will be closed during the 2012/13 school year. Note that three new high schools have been opened in Ottawa since 2008, so the demand for service has grown since the initial funding was announced.

¹ The Centre for Addiction and Mental Health's Ontario Student Drug Use and Health Survey (OSDUHS), 2011. The study is conducted every two years. Over 9,200 students in grades 7 to 12 from 40 school boards across Ontario, participated in the 2011 OSDUHS.

² Rideauwood has been providing school-based services since 1986, and Maison Fraternité has been doing so since 1989.

3. Methodology

3.1 Full Collaboration

The program partners all agreed that an outcome evaluation of the school-based program was essential, but that a single process and reporting format must meet the needs of all partners and funders. To this end, a common framework was developed and the evaluation plan was supported by all service providers, school boards and funding partners. Research approvals were obtained following the appropriate processes of each school board.

Funding for the evaluation was provided by Health Canada (via Project s.t.e.p.) as well as the Champlain LHIN. The evaluation plan was based on the logic model developed for the School-based Program by Rideauwood Addiction and Family Services with a grant from the Ontario Centre of Excellence for Child and Youth Mental Health.

The first joint evaluation was carried out during the 2010/11 school year. Several planning and implementation meetings were held between the two service providers, Rideauwood and Maison Fraternité, to ensure consistency in how data would be collected and interpreted. The two agencies had not previously worked together on evaluation, and this new level of collaboration represented a significant step forward.

This collaboration continued throughout 2011/12, and the data collection process continues to improve with the benefit of experience and shared learning.

3.2 Evaluation Plan

The main parameters of interest are changes in student health, wellbeing and academic success. A comparison of pre- and post-counselling results using three clinical tools (described below) are used to assess changes in student health and wellbeing. Changes in academic success are determined by comparing students' grades and credit achievement in the academic term immediately prior to beginning counselling, with the same parameters for the subsequent term. The final aspect of the evaluation does not involve students, but solicits anecdotal feedback from the school administration regarding the overall functioning of the program.

The clinical tools selected are already commonly used in the assessment of clients who are referred for counselling service. The tools are administered as part of the screening/assessment processes early on in the service of clients, and are required by the Ontario Ministry of Health and Long Term Care (MOH/LTC). The tools are validated for use with adolescents aged 12 and over. The plan involves administering these tools again later in the course of counselling as part of a quasi-experimental design to identify client change and progress related to substance abuse counselling. The three tools are included in Appendix C and are briefly described below:

- The Modified GAIN Short Screener (GAIN SS) is a brief screening tool which identifies substance use disorders and mental health problems. It is part of the pilot study used throughout the Champlain planning area by all addiction and mental health services

funded by MOH/LTC, including those agencies providing counselling for youth with substance use problems.

- The Behaviour and Symptom Identification Scale (BASIS 32) is a full assessment tool that identifies problems over five domains, including relation to self/others, daily living/functioning, depression/ anxiety, impulsiveness and psychosis. This tool asks the client to identify the degree of difficulty they have experienced in relation to various tasks or behaviours in the past week.
- The Drug Taking History Questionnaire (DTHQ) identifies the potential mood altering drugs used by the client during a specific period of time, including amounts and frequency of use.

A more detailed description of the evaluation plan is provided in Appendix D.

3.3 Sample Size

The sample size was governed by the number of students for whom consent to participate in the evaluation was obtained, and for whom complete data was available. During the 2011/12 school year, 200 consents were obtained for student participation in this evaluation effort. Due to the nature of the counselling process, however, pre-and post-counselling data is not available for every student using each assessment tool, and the usable sample sizes range from 80 to 144 unique students, depending on the tool and specific parameter.

In order to report results based on the largest sample possible, combined data from both the 2010/11 and 2011/12 school years has been used where feasible and meaningful. In these cases, sample sizes range from 150 - 179.

Due to the limited data set available, the sample was not randomized further. The data is taken from many different schools across all four participating school boards, although the proportions from each school and board may not be identical.

It will be helpful for the evaluation to be continued as planned through another school year in order to further increase the sample size and understand the impact of counselling over longer periods for those students who continue in the program over multiple years.

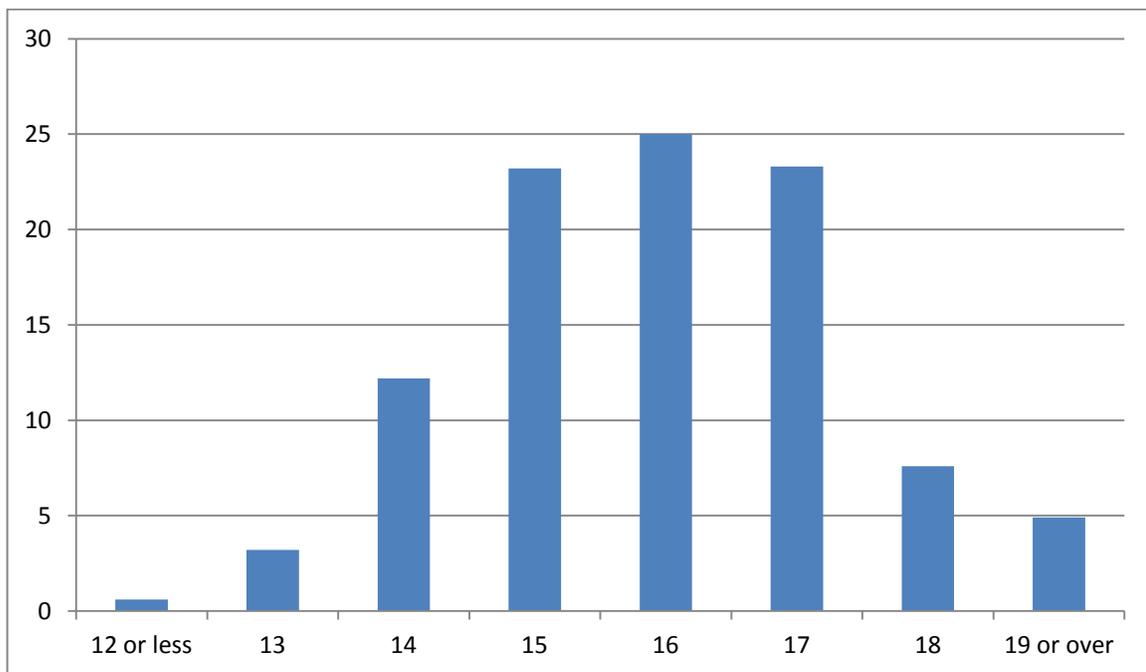
4. Results

4.1 Client Profile

At the beginning of the 2011/2012 school year, the school-based counselling program was running in 48 high schools across Ottawa. The vast majority of these schools received 14 hours/week of service by an addiction counsellor throughout the school year. Although there are a small number of intermediate and elementary schools (Grades 6-8) that also receive some services, these are not included within the scope of this evaluation.

It was found that at the time of admission to the program, the typical school-based counselling client was consuming cannabis 19 days a month, heavily drinking 8 days a month, was struggling academically, and as a result, was at risk for dropping out of school. Approximately 1 in 8 clients were also using cocaine. These students were experiencing difficulty in their ability to manage day to day activities, such as their roles as a student and family member. There was a roughly 60/40 split between male and female clients, with the majority being between 15 to 17 years old, as shown in the age distribution chart below.

Chart 1: Age distribution of students at admission (%)



Students were asked to complete the GAIN Short Screener when they began meeting with their addiction counselor during the 2011/12 school year. This screening tool asked questions about psychological, behavioural and personal problems that students may have experienced in the past year. Table 1 shows the percentage of clients who were flagged for follow-up with respect to various problem areas (based on the 150 students for whom this data is available).

Table 1: Gain SS at Baseline Scores (n=150)

	% Flagged for Follow-up
Internalizing Disorder Screener	61%
Externalizing Disorder Screener	76%
Substance Disorder Screener	68%
Crime/Violence Screener	33%
Eating Disorder Screener	31%
Post Traumatic Stress Disorder Screener	49%
Psychosis Screener	41%
Problem Gaming and Internet Usage	22%
Gambling Screener	2%

Not surprisingly, substance disorder was flagged for the majority of clients, but internalizing disorders (including depression) and externalizing disorders (behavioural issues) were also prominent. These results also point to the complexity of the issues that these young people are struggling with. Based on the GAIN SS results and the counsellor’s judgement, referrals were made to other services as appropriate.

4.2 Program Outputs

During the 2011/12 school year there were 1500 students served through school-based counselling across all four school boards, with an additional 5400 high school students participating in prevention and education programming. In order to better support students referred to counselling, 500 of their parents were also offered counselling support during the year - and almost half (45%) of these parents subsequently participated in counselling or other agency services to help them to support their children and/or address their own addiction-related mental health issues. This is an important result since the literature points to the importance of parental involvement

“In speaking with parents I know they have really appreciated the opportunity to meet and discuss their concerns [with the counsellor].”

- School staff member

“[The prevention workshop] was perfect for our students. Lots of discussion and you could manage the students well.”

- School staff member

for successful outcomes in the treatment of youth addiction.

In addition to service for students and families, the addiction counsellors also provide support for other school-based initiatives, including teacher training and parent events. During the 2011/12 school year, more than 500 teachers received training regarding youth addictions. Counsellors also delivered presentations at approximately 30 community-based events (mainly for parents).

4.3 Student Engagement

In 2011/12, more than 900 new students were referred to the counselling program through participating schools. It is estimated that 75% of the students who meet with a school-based addiction counsellor engage in ongoing counselling³. In addition, many students continue receiving counselling services for multiple years; in fact, 42% of the clients who were seen in 2010/11 continued with services in 2011/12. For many students, a few months of counselling is not sufficient time to overcome their substance use issues and develop the necessary positive behaviours and skills, so this high proportion of returning clients is seen to be an important outcome.

This high rate of student engagement and commitment is one of the hallmarks of this school-based model, and differentiates this program from other types of service delivery models. Getting adolescents to act on a referral and engage in ongoing counselling is one of the most challenging aspects of intervention and treatment. The program's success in this area is credited to the close partnership between school staff and the service providers, including the physical presence of the counsellors in the school building. Each counsellor makes an effort to visit as many classes as possible early in the school year to introduce themselves to new students, and to be a visible part of the school community. The counsellors have earned the trust of students to the point where some students have self-referred or have brought friends to see a counsellor.

"Having a drug resource in the schools opens accessibility to all students. These students would not go off site for this help."

- School staff member

Although services are delivered primarily during the school year (September - June), provisions are made for students to continue to participate in counselling during the summer months if they choose to do so.

4.4 Student Health and Wellbeing

Two clinical tools (BASIS 32 and Modified GAIN SS) were used to assess student mental health and wellbeing during the evaluation period. These were administered to students upon admission to counselling, and then again near the end of the school year.

The BASIS 32 questionnaire addresses five parameters, including relation to self/others, daily living/functioning, depression/ anxiety, impulsiveness and psychosis. Results are measured on a four-point scale, where higher numbers represent increased levels of difficulty. It was found that the BASIS 32 provided data that could be used to assess the degree of change in student wellbeing, and these results are reported below.

Unlike the BASIS 32, which asks clients to categorize the severity of issues experienced over the past week, the GAIN SS has a longer time horizon. It asks clients to indicate the

³ "Ongoing counselling" implies that the student has attended at least three sessions, after which a client is formally admitted to counselling. There may be a variety of reasons why a student may not be admitted, including lack of readiness/motivation or referral to other services.

last time that they experienced a particular problem - from within a month to over a year ago. This was the first year for which GAIN SS data was available for students both pre- and post-counselling. Although very valuable as a screening tool to determine the type of treatment or referrals required, the GAIN SS was found to be less applicable for outcome evaluation over the relatively short span of a school year. For this reason, only baseline GAIN SS data is provided in this report (see 4.1 Client Profile). Data from the year-end administration of the GAIN SS will be used to track trends for students who participate in the school-based program for multiple years.

Students may begin participating in school-based counselling at any point during the school year, and the frequency of counselling appointments may vary, so the number of counselling sessions attended between the baseline and re-administration of the BASIS 32 also varies throughout the sample. For the 144 students for whom pre- and post-counselling scores were available, results show a very small average improvement of 0.1 points across all BASIS categories by the time the second assessment was done. It should be noted, however, that the average score across all domains at baseline was just over 1.0, which leaves limited room for improvement on the scale.

As shown in Table 2, a considerable number of students reported either minimal changes or deterioration between the baseline and reassessment scores in one or more areas (changes of less than 0.25 points in either direction were deemed to be indistinguishable from zero). Those whose scores deteriorated tended to be clients who self-identified as having little to no problems on the BASIS domains (scores less than 2.0) upon admission to counselling. This is likely due more to client perception than reality. Counsellors observe that prior to engaging in counselling, it is not uncommon for clients to be in denial about their problems and/or to attempt to cope through substance use. As clients become engaged with the counselling process, a first step is for them to be able to acknowledge their issues. After this point, it is expected that they will become more realistic in assessing their situation and may recognize that they are having difficulties. This would appear as a temporary increase in severity on the factors examined by the BASIS 32. Additional assessments after a longer period of counselling would help to verify this assumption.

Table 2: Changes in BASIS 32 results at year end as compared to baseline (n = 144, changes +/- 0.25)

Categories	Deteriorated	Unchanged	Improved
Relation to Self/Others	33%	24%	42%
Daily Living/Role Functioning	31%	23%	46%
Depression/Anxiety	29%	30%	41%
Impulsive/Addictive	26%	34%	40%
Psychosis	20%	51%	28%

In order to see the complete picture, the results must therefore be analyzed with respect to the degree of severity at baseline. Students with poorer baseline scores experienced a much higher degree of improvement than the overall average. Clients who were flagged as having moderate to extreme difficulty in a category (scores of 2.0 or more) improved on average 0.8 points on the four-point scale, which is almost a full level of severity. The 22 students in this group represent about 15% of the full sample of clients at baseline.

Table 3: BASIS 32 Comparison for clients with overall baseline scores of moderate to extreme severity (n = 22)

Categories	Baseline	Reassessment	Change
Relation to Self/Others	2.79	1.88	0.91
Daily Living/Role Functioning	2.77	1.88	0.90
Depression/Anxiety	2.61	1.73	0.89
Impulsive/Addictive	2.19	1.42	0.77
Psychosis	1.27	0.68	0.59
Average	2.36	1.55	0.81

4.5 Drug and Alcohol Use

The Drug Taking History Questionnaire (DTHQ) was used to compare students' use of alcohol and drugs upon admission and again in a 30-day period near the end of the school year. Each substance is examined separately, although clients may have used multiple substances over the same period. Although the ultimate goal is abstinence from all substances, this may not be possible in one step. For clients who use multiple substances, counsellors focus most urgently on the drugs that do the most harm.

The most commonly used substances were cannabis and alcohol, followed by hallucinogens, ecstasy and cocaine. Baseline data is available for 193 students (based on combined data from both 2010/11 and 2011/12), and all of these substances were reported among this group. Over 80% used both cannabis and alcohol, and of those who used cannabis, almost half did so daily⁴. Upon re-administration of the DTHQ near the end of the school year, over 55% of students in the sample group had noticeably decreased or stopped their use of cannabis - with decreases in both frequency and quantity. 40% had reduced or stopped using alcohol. For clients who used hallucinogens, 80% had become abstinent, with an additional 13% who decreased use. There were also dramatic drops in the use of cocaine and ecstasy, with over 70% of previous users achieving abstinence from these drugs.

Table 4 provides additional details, and a summary of key outcomes is given below:

⁴ "Daily users" are clients who reported using 25 days/month or more.

- Overall 50% decrease in average cannabis use (based on frequency and quantity consumed)
- Overall 35% reduction in average alcohol consumption across the group who drank
- 85% of clients who used cocaine stopped or reduced their use of this drug
- Over 90% of clients who used hallucinogens stopped or reduced their use
- Over 85% of clients who used ecstasy stopped or reduced their use of this drug
- In all, 71% of unique clients were able to reduce or stop using one or more drugs

Table 4: Substance use in past month at year end compared to baseline

	Cannabis n=152	Alcohol n=127	Cocaine n=14	Hallucinogen n=15	Ecstasy n=15
Abstinent	18%	19%	71%	80%	73%
Decreased Use*	38%	21%	14%	13%	13%
No Change	30%	35%	14%	0	7%
Increased Use*	14%	24%	0	7%	7%

* Change greater than 5 grams or 5 drinks per month

4.6 Student Academic Outcomes

Staying in School

For students referred to the school-based counselling program, staying engaged in learning is very difficult since they typically face multiple risk factors for early school leaving - yet the school environment can be a critical source of support.⁵ One of the key goals of the school-based program is to keep students in school - even if it means decreasing course load while they take time to focus on their health and wellbeing. Of the students participating in school-based counselling, very few withdraw from school during the year. Of the students in the sample group admitted for counselling, 89% completed the school year. Although some students did unfortunately leave school, this is not necessarily a permanent status. There are supports in place within the school system to help students transition back to school, and in some cases students have reconnected with their addiction counsellor during this transition.

⁵ Although no single factor can be said to be the cause of early school leaving, substance use has been identified as one of the risk factors. School-based counselling clients may face other risk factors as well. *Freudenberg, N. and Ruglis, J. "Reframing School Dropout As A Public Health Issue." Preventing Chronic Disease 2007; 4(4). Updated September 2011. Retrieved from <http://theconference.ca/school-dropout-a-public-health-issue> on October 8, 2012.*

Grades and Credits Earned

Students may begin participating in school-based counselling at any point during the school year, so students in the sample group had varying lengths of time in counselling prior to the end of the school year. In some cases, the evaluation period was too short to allow noticeable improvements in academic results to be observed. The 179 students for whom academic data was available before and after engagement in counselling continued to earn credits at the same rate they did during the term immediately prior to the start of counselling. In addition, there was no notable difference in average grades. This is considered to be a positive result as no further deterioration in academic achievement was observed.

It should also be noted that the students in the school-based counselling program benefit from a number of additional support programs within their schools. Although we have no clear way of attributing student success to one program or another, the addiction counsellors work in close partnership with school and school board staff to leverage all the services available to a student so that the maximum positive benefit is achieved.

4.7 Functioning of the Partnerships

Feedback about the functioning of the program was requested from staff at participating schools via a short survey. Responses received from the schools indicate that the school-agency partnerships and overall program model continue to function well. School staff appreciate having the addiction counsellors on site, and most schools have established mechanisms to support collaboration and communication between staff and the counsellors. Teachers and school administrators frequently offer praise for the individual counsellors. The training offered by the counsellors is well received. In some cases, school respondents also indicated that they would like more hours of service.

“The program is excellent and is part of student services at our high school. As lead of guidance, I have had many chances to interact with [our counsellor]. She is supportive of our students, parents, and community. She is an integral part of the school.”

- School staff member

The following are a few representative comments from school staff:

“This program is critical to all schools but more so the Alternate programs. Those are our most at risk youth and usually they have use issues. The program fully integrates with the staff at the Alternate and this solid team approach works very well.”

“You are really great with youth...Not everyone can keep a group of kids attentive and participating. I enjoy listening to your workshops and I learn something too. I will call you again for next year.” (note to Maison Fraternité prevention staff)

“... counselors are a vital part of our program. We experience on-going support and direction as front line workers.”

“[The Rideauwood counsellor] is an invaluable resource for us ... The students trust her, and they like her. Her help and guidance make a huge difference in a large number of lives. One of our students [in counselling] was the grad speaker this year, and is just one example of many. This student made it clear that [the counsellor's] help was crucial in dealing with her addiction, lifestyle issues and school completion.”

“This is an essential school program. We need the access and expertise.”

“An excellent, collaborative program which works very well in our school community.”

“They [the counsellors] are extremely professional and work with the students in a kind, and caring manner. I would hope that the time increases at each school for the number of days a counsellor visits to better address the number of students requiring support. This time could also be used to educate and visit Gr. 7/8 classes for preventative measures.”

“As a Vice-Principal, I work very closely with [our counsellor] on substance abuse issues. She has been instrumental in the development of the effective program for substance abuse recovery. Given the nature of our school community, her services should be expanded. Her waitlist is always long and this has a profound effect on student success. They should be able to access the services right away.”

5. Recommendations

- 1) The school-based counselling model has been very successful in engaging students in need of support, and helping to keep them in school. Once admitted to the counselling program, students tend to experience positive outcomes with respect to drug use and wellbeing in a relatively short period of time (within the school year). The program is meeting its objectives, and continued support for the program is warranted.
- 2) As of the 2012/13 school year, all Ottawa high schools are expected to have access to the school-based counselling program. This is an outstanding achievement, and it will be important to continue community efforts to sustain this service level. There is also a need for increased service levels at some schools.
- 3) The evaluation should be continued through the coming school year in order to further increase the sample size and begin analyzing longitudinal data. Questions to be investigated include: *How does the number of sessions and the duration of counselling affect student outcomes?*
- 4) Although the program model is operating successfully with essential elements in place across participating schools, there is nonetheless an opportunity to learn from different approaches and complementary initiatives that have been tried by various schools over time. Such information might be collected via focus groups or surveys and successful initiatives documented and shared.
- 5) The collaboration between schools, agencies and other partners is working well and should continue to be strengthened. In particular, the collaborative approach to evaluation between Maison Fraternité and Rideauwood should continue.