

BRIEFING ON SOCIAL RETURN ON INVESTMENT FOR SCHOOL COUNSELLING

For Alberta Teachers' Association Council of School Counsellors

Prepared by:

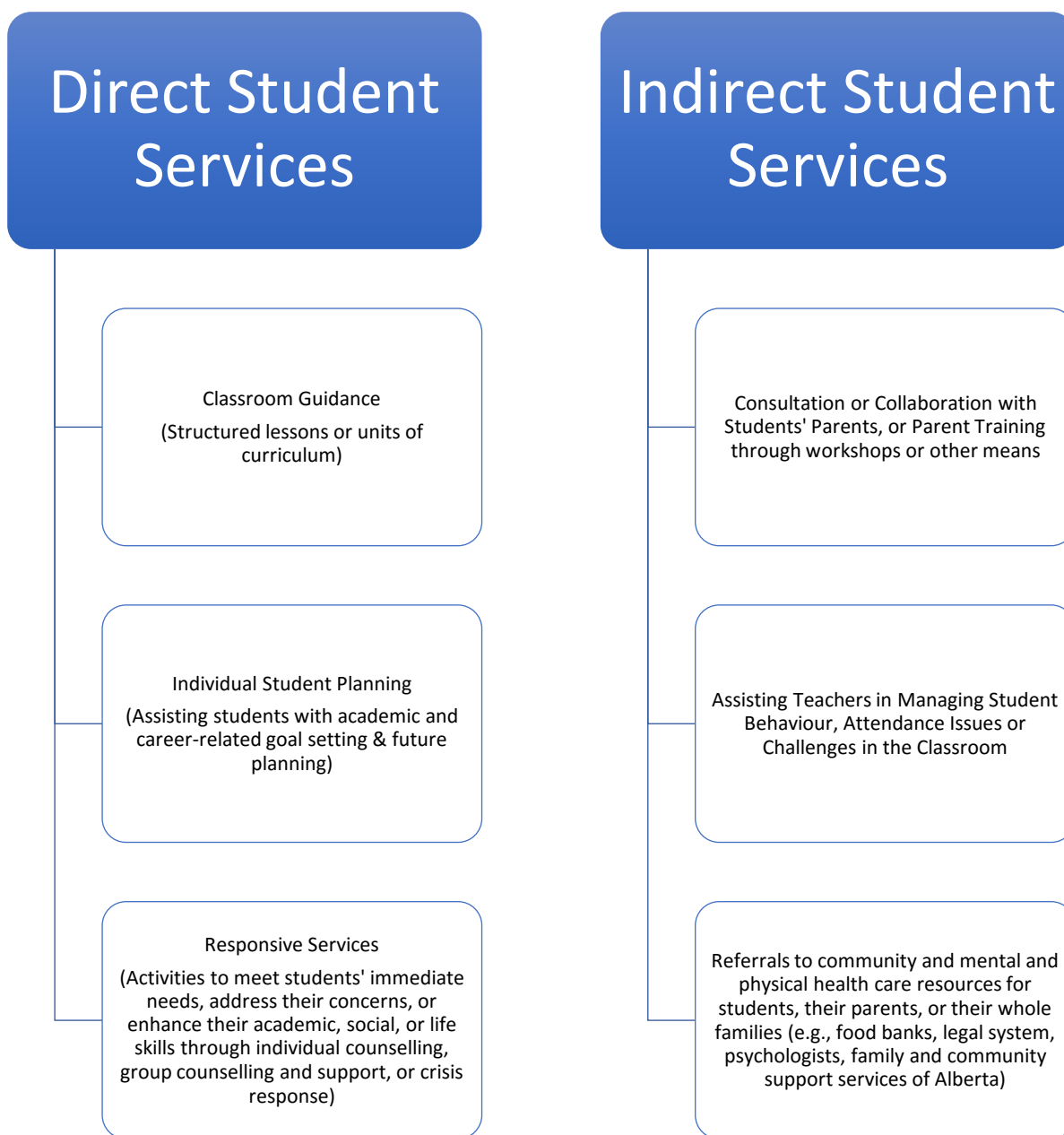
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According to the London Business School (2004), assessing social return on investment (SROI) takes into account the inputs or resources invested (i.e., the hiring of school counsellors), the outputs or specific activities engaged in, the outcomes (i.e., the different types of changes in students that accrue from the activities), and the impact (i.e., the outcomes less an estimate of what would have happened anyway). The impact of school counselling can be shown through studies that compare students who received counselling to those who didn't receive counselling, or comparisons of schools without counselling services and those with counselling services or with different student-to-school counsellor ratios. SROI then goes one step further to demonstrate the value of any service in financial terms. Robertson (2012) elaborates that "SROI is a tool to speak about value, not just the cost. It enables us to illustrate the cost of not doing something", in addition to the cost of doing it.

This briefing documents the key activities school counsellors engage in and summarizes recent research on the specific counselling activities that have the highest impact, as well as the evidence for the wide range of student outcomes that school counselling improves both while students are enrolled in the K-12 system and beyond from longitudinal studies. It also presents studies that evaluate the differences in student outcomes with different inputs, such as different student to school counsellor ratios, which would require different levels of financial investment in school counselling. The briefing reviews the findings of economic and policy research on the major financial cost savings that school counselling services generate, as well as the magnitude of the financial gain that schools accrue for their investment in school counsellors to make a strong case for a very high Social Return on Investment for school counselling.

CORE SCHOOL COUNSELLOR ACTIVITIES/INTERVENTIONS

According to the Canadian Counselling and Psychotherapy Association (2016), school counsellors have the task of supporting students' personal, social, educational, and career development, as well as promoting their mental health and well-being. The diagram on the following page presents a breakdown of school counselling activities and interventions that are implemented to support students in this way, drawing on the summary of school counselling activities from the American School Counseling Association (2016), as the core activities of school counsellors are consistent across North America.



RESEARCH ON COUNSELLOR ACTIVITIES, STUDENT OUTCOMES & FINANCIAL SAVINGS AND GAINS

A recent meta-analysis of school counselling interventions and outcomes across 118 published research studies and theses which had a combined sample of over 16,000 students who received school counselling, including students at the elementary, junior high and high school levels, found that the highest impact and most effective interventions in order of

importance are: (a) workshops for parents ($d+=.94$), (b) activities to meet students' unique needs under responsive services ($d+=.42$), (c) equipping peers to help fellow students with academic, personal, and social issues ($d+=.40$), (d) small group counselling ($d+=.36$), and (e) guidance curriculum units ($d+=.35$) (Whiston, Tai, Rahardja, & Eder, 2011). It is important to note that the effect sizes for school counselling interventions were strongest when school counsellors were supported in their activities to help students through collaboration with other help providers in or outside of the school, such as teachers, school administrators, or community/mental health service providers ($d+=.44$).

In this study by Whiston et al. (2011), school counselling interventions had their greatest effects on increasing students': (a) skills to be able to help and work with others, i.e., their collaboration skills and altruistic behaviours ($d+=1.14$); (b) problem-solving abilities ($d+=.96$); and (c) career knowledge ($d+=.67$). These are knowledge, skills and attitudes that are essential in preparing students for success in 21st century careers and for life in the real world outside of school. It makes sense that all these areas would also be enhanced through the work school counsellors do to train parents to support their children's academic, personal, social and career success. In addition, school counselling interventions had strong effects on decreasing students' discipline and behaviour problems ($d+=.83$), as well as significant, but more moderate effects on reducing student anxiety ($d+=.40$) and depression ($d+=.37$) levels. It is important to note that school counsellor interventions and their outcomes were evaluated across studies included in this meta-analysis through multiple sources, including teacher reports, student reports, data from children's school records, and counsellor reports. Therefore, this was a very rigorous study that relied on various sources of evidence about school counselling impacts apart from just counsellors' own perceptions, eliminating any bias in the results.

A note about interpretation of effect sizes: the $d+$ values in brackets in the above paragraphs refer to effect sizes. According to the Centre for Evidence-Based Policy and Intervention at Oxford University (2016), effect size is a measure of the pooled average impact of the variable being studied across the multiple studies included in a large-scale meta-analysis, and is expressed as a fraction, with values from 0.0 to 1.0 and above. Values below .2 are considered to represent small effect sizes, whereas values between .35 and .5 and above are considered to represent significant and moderate effect sizes, and values above .8 are considered to represent very large and powerful effects on the outcome variables being studied.

Complementing the finding of a very strong effect of school counselling on student behaviour problems, several other large-scale studies have also reported that having a counsellor at the school who is available to address and respond to student needs and to work with teachers dramatically reduces student behaviour problems (see Carey & Dimmitt, 2012; Carey & Harrington, 2010a, 2010b; Carey, Harrington, & Hofman, 2012; Carrell & Carell, 2006; Carrell & Hoekstra, 2014; Lapan, Gysbers, Bragg & Pierce, 2012; Lapan, Whitcomb, & Aleman, 2012; Rebak, 2010; Whiston & Quinby, 2009). A few of the most important findings from these additional studies will be highlighted here. Many schools have a less than ideal student to school counsellor ratio. The proposed ratio recommended by the professional associations for

School Counselling in Canada and the United States is a minimum of 1 school counsellor for every 250 students in the school. In their studies across several major schools and districts, Carrell and Carrell (2006) found through the application of statistical linear regression methods that for schools that have many more students to school counsellors than the recommended ratio, reducing the student to counsellor ratio 250 to 1 would result in a 59 percent decrease in major student discipline or behaviour problem incidents reported by teachers, or 45 students less per year with these problems. Reducing the student to school counsellor ratio even further, would lead to even further gains and improvement. They calculated that the approximate annual cost to reduce the student to school counsellor ratio in most school would be approximately \$113 per student, but that the result would be close to double the cost saved in additional programming, positive behaviour supports, and resources invested in students with behaviour and discipline problems. Carey and Harrington (2010a; 2010b) also found that receiving school counselling significantly reduces the number of suspensions across schools in a given school district each year.

Furthermore, in an economic analysis specifically focusing on elementary schools, Carrell and Hoekstra (2014) found that school counselling reduces the misbehavior of boys by 20% and of girls by close to 30%, and also has a strong effect on academic achievement for both genders; it increases their academic achievement or grades by three-quarters of a percent of a standard deviation compared to not receiving school counselling. Interpreting this finding in financial terms they quote: "Given the finding in the literature that a one standard deviation increase in teacher quality increases achievement by one-tenth of a standard deviation, a back-of-the-envelope calculation indicates that hiring an additional counselor is approximately equivalent to increasing the quality of every teacher in the school by 0.3 standard deviations. The estimated impact of counselors is also large compared to the impact of hiring an additional teacher to reduce class size.....this suggests that hiring a counselor is approximately twice as effective as hiring an additional teacher". Since school counsellors are trained teachers, they are uniquely positioned to support students' academic and career success, as has been found through the following studies.

A number of other studies have investigated the relationship between school counselling and students' academic achievement more closely to examine student performance in core subject and skill areas. For example, Carey and Harrington (2010a, 2010b) examined the effects of receiving school counselling on students' math and reading performance across several school districts across two major states in the US, controlling for other school variables such as class size, per student school expenditures, student to counsellor ratios, and student social class or racial group membership. They found that being a recipient of school counselling significantly increases both literacy and numeracy skills, as those students who had accessed counselling had statistically significantly higher grades in Math and Reading and significantly higher grades on state-wide achievement tests. Similarly, Wilkerson, Perusse, and Hughes (2013) found that elementary schools with comprehensive school counselling and guidance programs that met the recommended minimum student to school counsellor ratio had significantly higher English Language Arts and Math proficiency scores among their student body according to school records and achievement tests than schools without such programs,

and that higher math and English grades were maintained even after 4 years of follow-up in their longitudinal research study. This finding suggests that investing in school counselling from the earliest grades in the K-12 system has lasting gains for children's academic achievement.

When considering higher levels of the school system, Berger (2013) found that small group counselling interventions by the school counsellor significantly improved the achievement of under-achieving grade 9 and grade 10 students, by increasing their organizational skills, time management skills, and motivation to succeed. Similarly, Kayler & Sherman (2009) found that small group counselling with at-risk grade nine students led to significant improvements in the students' study skills and grade point averages compared to before they received the group counselling intervention. Other studies have found that one of the other possible vehicles through which school counselling improves student academic achievement is by increasing student attendance and reducing school truancy, helping to ensure that students are exposed to critical curriculum content for their learning. For example, in Carey and Harrington's two studies across entire school districts (2010a; 2010b), they found that the number of counsellors to students in a given school accounts for 12% of the variability in student attendance at each school, even after controlling for other differences between student characteristics, backgrounds, and classes. Reback (2010) operationalized the impact of school counselling on student attendance even further, finding that school counselling reduces the number of students cutting class in a given school by 8%.

In light of the findings from the above studies related to academic achievement, it is not surprising that multiple studies have found school counselling to be directly significantly positively associated with high school completion or graduation rates (see Carey & Dimmitt, 2012; Carey & Harrington, 2010a, 2010b; Carey, Harrington, & Hofman, 2012; Lapan, Whitcomb, & Aleman, 2012) and to college or university enrollment (see Bryan, Moore-Thomas, Day-Vines & Holcomb-McCoy, 2011; Hurwitz & Howell, 2014; Pham & Keenan, 2011), and directly negatively related to school drop-out (Engelman, Morgan, Ruthven, & Pugh, 2016), which has direct and profound financial implications which will be discussed shortly.

To highlight the power of school counselling, consider the findings of the study by Salina, Girtz, Eppinga, Martinez, Blumer Kilian, Lozano, and Shines (2013), who monitored and evaluated student outcomes before and after comprehensive school counselling services including all the direct and indirect counselling activities documented in the chart in this briefing were introduced in a school with a low completion rate of only 49%. Within three years of the introduction of comprehensive school counselling services at the school, the high school graduation rate of the school went up to 78.8%. Furthermore, In Bryan et al.'s 2011 study cited earlier, high school students who had at least one contact with their school counsellor were found to be significantly more likely to apply to college than those who did not have any school counsellor contact. This suggests that the findings from the meta-analysis study described earlier in this briefing that school counselling increases students' career knowledge actually translates into students taking action towards gaining post-secondary training in their chosen careers. In another study, Hurwitz & Howell (2014) were able to quantify the impact of school counsellors on actual college enrollment rates (versus just applying for post-secondary

education); they found that an increase in 1 school counsellor at a given high school corresponded to a 10 percent increase in successful college or university admission of the students in that high school to 4 year degree programs.

Conversely, when we add school counsellors to high schools, the drop-out rate decreases, as found in one of the largest studies on drop-out and school counselling conducted by Engelman et al. (2016) through the Colorado Department of Education (CDE). The CDE provided major grants to schools to hire more counsellors and implement more comprehensive school counselling programs that include all the direct and indirect services shown in the diagram earlier in this briefing. The CDE calculated that each student dropout costs \$321,450 dollars per lifetime of that individual, based on estimates of taxes lost and spending via other systems, including welfare, incarceration, and healthcare. The funding of the grants they provided enabled them to cut the student-to-counselor ratio down from 363:1 to 216:1 across 59 schools in this region. Over a three year follow-up period in this study, this investment in school counselling enabled the 59 schools to reduce their drop-out levels by almost half to 3.5 percent, “yielding a highly lucrative return on the state’s investment, totaling approximately \$319,842,750 or \$20 saved for every \$1 invested” (Engelman et al., 2016). Engelman et al.’s (2016) study sheds light on the amount of money saved through school counselling, whereas another recent study by the Unlocking Potential Foundation (2015) actually calculated the financial gains of counselling. This foundation reported that each dollar invested in counselling services for children and adolescents generates social value of \$1.62 after one year.

Another critical social contribution of school counselling to consider in the present global context of humanitarian crises and increased interracial tensions, is that a state-wide study of over 51 different elementary and junior high schools conducted by Dimmitt and Wilkerson (2012) which included schools with high proportions of ethnic minority students, found that school counselling services driven by student needs related to students’ reporting significantly fewer incidents of hassles between students and fewer incidents of experiencing bullying. Also, students reported a significantly greater sense of belonging and attachment in their schools when school counselling services were provided. A positive and safe school climate can go a long way in promoting students’ mental health and well-being, and in enabling them to maximize their learning experiences.

THE BOTTOM LINE

School counselling inputs and activities/interventions have strong and significant effects on a number of critical student outcomes, both at the K-12 system level and beyond, including:

- Academic Achievement – Especially in Core Subject Areas Related to Literacy and Numeracy
- Behaviour Problems and Suspension Rates
- Problem-Solving Skills

- Collaboration and Helping Skills
- Mental Wellness (i.e., depression and anxiety levels of students)
- Attendance
- Degree of Tensions/Hassles Between Students and Amount of Bullying Incidents in a School
- Student Feelings of Attachment/Belonging at School
- High School Completion Rates
- Drop-out Rates
- Career Knowledge
- College and University Admission Rates

These effects have been demonstrated through multiple rigorous research studies in the areas of education, economics, and public policy, that were described in this briefing. The skill sets school counselling helps students to build are inarguably essential for success in today's knowledge economy and in 21st century careers. It is particularly important to highlight that financial and statistical calculations indicate that employing additional school counsellors has a more potent effect on student achievement and behaviour than hiring additional teachers, and that the presence of school counsellors in a school actually improves the performance of every teacher in the school by a fair margin in enabling those teachers to maximize their students' learning potential.

The long-term financial savings that school counselling provides over each year and over children's lifetime are in the multi-millions, and financial gains of school counselling are a strong testament to its very high social return on investment of \$1.62 dollars for every \$1 invested. Furthermore, the fact that school counselling services have been found to be related to less student victimization/bullying and less interpersonal tensions or hassles between students at school supports the role these services play in creating a safe and welcoming educational climate, which is particularly important at the present time of escalated interracial and inter-religious tensions both in Canada and Abroad.

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