High school completion is an important milestone in an individual's life. It is a stepping stone for further educational opportunities, training programs and employment. In our increasingly knowledge-based economy, high school graduation alone, without subsequent training or education, no longer guarantees employment opportunities; however, the lack of a high school diploma remains a significant predictor of negative outcomes: poverty, unemployment, reliance on social assistance and teen motherhood.

Increasing the rate of high school completion is therefore a worthy goal, and Manitoba has had some success in this area: the article by Lowe et al. on page 36 of this magazine suggests that completion rates have gone from just over 70 per cent in 2002 to almost 76 per cent in 2006. And results from international educational tests indicate that Canadian students do exceptionally well compared to other countries, with Manitobans scoring at the Canadian average on measures of reading, mathematics and science (Bussiere et al., 2004; Willms, 2004).

Are all students equally likely to succeed?

But does everyone in the school system in Manitoba have an equal opportunity to succeed? Our previous work suggests that the answer to this question is “no.” Children in families living in areas with the lowest socioeconomic status have a substantially greater likelihood of school failure than children from families in wealthier neighbourhoods. For example, Grade 9 students from the Winnipeg neighbourhoods with the lowest socioeconomic status were almost eight times more likely to withdraw before completing high school compared to their peers from the highest socioeconomic status neighbourhoods (Brownell et al., 2004; Brownell et al., 2006). And students in primary grades have a greater likelihood of being retained if they come from areas with lower socioeconomic status (Guévremont et al., 2007). While it has long been recognized that students with lower socioeconomic status have poorer educational outcomes, the extent of the differences in outcomes across socioeconomic groups was not fully recognized until population-based research highlighted these differences (Brownell et al., 2004; Roos et al., 2006).

According to the Manitoba Department of Education Citizenship and Youth (2007), “it is important for an education system to seek better outcomes for all students but it is vitally important to focus attention on those who are not succeeding. In the absence of academic success, students lack the skills needed to secure relevant training and employment and to participate fully as citizens.” Our own work has continued to focus on youths who are at risk of not completing high school—particularly those living in poverty and challenged circumstances. The results of some of this work are discussed below.

Educational outcomes for high-risk students

We started by looking at two cohorts of children—those born in Manitoba in 1984 or 1985 and residing in Winnipeg the year they turned 18 years of age. This gave us 11,703 kids. Next we defined “high-risk” children as those whose family experienced poverty, or who grew up with teen mothers, or who had contact with the child welfare system. Children were identified as having experienced “poverty” if their family had received income assistance for two months or more at some point over the period when they were 10 to 17 years of age. Children were put into our “teen mom” group if their mother was a teen when her first child was...
born. We chose to look at outcomes for these children because teen motherhood is often a marker for mothers who have minimal education and are lone parents, both of which put their children at risk of poor outcomes. Children were put into our “CFS” group if the child had been taken into care, or the family had received services from Child and Family Services (CFS) at any time over the period when the child was aged 10 to 17 years. Children are judged to require care or services from CFS for reasons such as child abuse or neglect, or when a child is judged to be beyond the control of others.

Nearly 14 per cent (1606/11703) of the children in our study lived in families that had received income assistance at some point while the child was 10 to 17 years old. Nearly 17 per cent (1949/11703) lived in families where the mother was a teen at her first birth. And just over 17 per cent (2016/11703) had been taken into care or received services from CFS at some point while the child was 10 to 17 years old. Although one might think the children with these different risk factors are the same kids, Figure 1 shows that there is less overlap between these groups than expected: fully 31 per cent of the children in the cohorts (3,648/11,703) had at least 1 risk factor. The majority (2187) had only 1 risk factor, whereas 999 had 2 risk factors and 462 had all 3 risk factors.

Next we looked at the high school completion rates for these children at risk. To determine high school completion, we took from our 1984 and 1985 cohorts those youths who started Grade 9 in any of the years 1997/98 through 2001/02 and were still living in Manitoba 6 years later. Using graduation and course completion records we were able to determine what per cent of these youths failed to complete high school within 6 years of entering Grade 9. Figure 2 shows these results. The figure demonstrates that youths with any of our three risk factors are at high risk of failure to graduate from high school within 6 years of entering Grade 9. About 20 per cent of the youths with none of these risk factors failed to graduate within 6 years. In other words, 80 per cent of the kids with no risk factors graduated from high school. Youths with any one of the risk factors were 2 to 3 times more likely NOT to graduate within 6 years. Forty-four percent of those with a teen mom (but not the other two risk factors) failed to graduate; 49 per cent of those in care or receiving services from CFS failed to graduate; and 63 per cent of those whose family had received income assistance failed to graduate. For youths who had 2 of the risk factors, the outcomes were even more discouraging. Sixty-seven percent, or two-thirds of the youths who had a teen mom and who had been in care or received services from CFS failed to graduate. Almost 77 per cent of the youths who had a teen mom and
whose family had been on income assistance also failed to graduate. And almost 80 per cent of the youths who had been in care or received services from CFS and whose families had been on income assistance failed to graduate. Those youths who had all 3 of our risk factors were at the greatest risk for failure: almost 90 per cent failed to graduate within 6 years. In other words, only 1 in every 10 youths with all 3 of these risk factors graduated from high school within 6 years of entering Grade 9.

Another indicator which can be used for early identification of youths who may be at risk of not completing high school, is whether a Grade 9 student completes a full load of courses (8) (King et al., 2005). We examined this outcome for Winnipeg students and found that whereas only about 17 per cent of the students with no risk factors failed to complete 8 credits by the end of Grade 9, students with any of our risk factors were much less likely to complete these credits: 34 per cent to 52 per cent of students with 1 risk factor, 59 per cent to 71 per cent of students with 2 risk factors, and fully 81 per cent of students with all 3 risk factors failed to complete 8 credits by the end of Grade 9 (Figure 3). The good news is that for those students at risk who do complete 8 credits by the end of Grade 9, their likelihood of completing high school is greatly increased compared to those who achieved fewer credits in Grade 9 (Figure 4). Whereas only 14.6 per cent of students with a teen mom who achieved fewer than 8 credits in Grade 9 went on to graduate, almost 69 per cent of these students went on to graduate if they had completed 8 or more credits in Grade 9. Similar large differences in graduation rates were observed for our other two risk groups between those who had completed 8 credits in Grade 9 and those who had not.

What happens after high school?

Given the poor high school completion rates of the youths with these risk factors, it is not surprising that they were also more likely to have poor outcomes as young adults. We asked how many of our cohort of kids (those born in 1984 and 1985) ended up receiving income assistance as a young adult (18 to 20 years) and how many of the girls became teen moms.

Young adults with none of the risk factors almost never became early income assistance recipients (one per cent). With even one of these risk factors, the likelihood of receiving income assistance increased dramatically (4 to 17 times). With 2 risk factors the likelihood of being on income assistance as a young adult was even higher: 15 per cent to 29 per cent of these young adults were receiving income assistance. And fully one-third of the young adults with 3 risk factors received income assistance.
The risk for the females with any of the three risk factors to become teen moms themselves is also high. Adolescent girls who have none of the risk factors rarely become mothers in their teenage years—only 2.1 per cent. However, having even one of these risk factors increased the probability of becoming a teen mother by 5 to 10 times, with 9.5 per cent to 20.9 per cent becoming teen mothers. With 2 risk factors the risks were 13 to 15 times higher, with 27 per cent to 31 per cent of these girls becoming teen mothers. Girls with all 3 risk factors were 21 times more likely to become teen mothers compared to girls with none of the risk factors: fully 44 per cent of them became mothers in their teenage years.

Did major risk factors at birth set these at-risk children on the course for poor outcomes? Were they born prematurely, or were they of low birth rate or did they have poor physiological functioning (as judged by the 5 minute Apgar score)? This was not the case. We found that for three key measures of global health at birth, even kids with two or three of the risk factors were overwhelmingly normal at birth. Ninety-four per cent of the children with no risk factors had a "normal" birth weight (2500 g or greater), as did 94 per cent of the children with all 3 risk factors. Likewise, an equal percentage of kids with no risks and three risk factors were not born prematurely (95 per cent) and similar percentages (98 per cent and 97 per cent respectively) had good Apgar scores (7 or greater) at birth.

Implications
We have shown that children and youths with even one of the three risk factors we have focused on (those in families who have
received income assistance, with a teen mother, and/or in care or receiving services from CFS) are at high risk for school failure and subsequent challenges in young adulthood. And over one-third of children in Manitoba experience at least one of these risk factors.

We believe our findings highlight a growing crisis in Manitoba of lost potential—which will have an impact not only on these kids themselves but on the future prosperity of the province. We know that not all children have the same abilities, and not all children are going to be “A” students and excel in school. What our results suggest, though, is that for many children, it is factors beyond individual ability that are holding them back and preventing them from maximizing their educational (and developmental) potential.

There are myriad ways this crisis of lost potential needs to be tackled, beginning with early prevention of these risk factors and support for challenged families. Education in particular has a critical role to play. As noted above, the Department of Education, Citizenship and Youth recognizes that it is “vitaly important to focus attention on those who are not succeeding.” We have demonstrated that for three groups of children and youths, the risks of not succeeding are very high. The good news is that if these high-risk children stay in school and keep up with their peers, they do reasonably well. So if programs can be developed to help these high risk kids stay engaged in school, we can be optimistic about their outcomes. Such programs would need to start early, before school entry, so that high-risk kids don’t enter school already behind their peers.

Substantial resources and supports are therefore needed in order to provide these children and youths with the opportunities to succeed, both before school entry and throughout their school years. Analyses of over 60 peer-reviewed studies have shown a strong positive relationship between school funding and student performance (Greenwald, Hedges and Laine, 1996). Currently in Manitoba, educational funding per child is relatively equal across areas (Task Force on Educational Funding, 2001) with some extra funding going to schools that have more students from low income families and students in care of CFS (which would include many of our at-risk families). However, this additional funding does not appear to be at the level necessary to provide these high-risk children with what they require to succeed.

While targeting particular groups of children may seem the antithesis of equal opportunity in education, it may be the only way
to raise high-risk children’s success rate. High-risk children don’t need the same good education that children without risks receive; they need considerably more resources and supports to ensure they acquire the skills necessary to participate fully in school and in society (Tough, 2006).

Footnote 1 Our analysis above found that 31 per cent of the children from the 1984 and 1985 birth cohorts had at least one of the three risk factors. Examination of more recent birth cohorts (1995-1999) suggests that 37 per cent to 38 per cent of Manitoba children fall into at least one of these risk categories.