

EDMONTON PUBLIC SCHOOLS

January 26, 2010

TO: Board of Trustees

FROM: E. Schmidt, Superintendent of Schools

SUBJECT: Responses to Board Requests for Information

ORIGINATOR: D. Barrett, Assistant Superintendent
T. Parker, Assistant Superintendent

RESOURCE
STAFF: Gloria Chalmers

INFORMATION

CONFERENCE COMMITTEE REQUEST #260, DECEMBER 15, 2009, BRING A REPORT TO CONFERENCE COMMITTEE IN JANUARY TO CONSIDER THE POTENTIAL IMPLICATIONS OF THE VARIOUS STRATEGIES/PRIORITIES DISCUSSED WITH RESPECT TO THE LINKAGES COMMITTEE. For the February 4, 2010 Linkages meeting, representatives have been asked to come prepared to identify and discuss adopting a common strategic priority that all Linkages Committee members are prepared to support. The intent is to have one common focus across the region to enable greater collaboration, coordinated advocacy and links among jurisdictions and partners from other sectors such as children's services and health. It is possible that the Linkages Committee will be unable to agree on one common priority. If that is the case, preliminary discussion suggests that members may wish to collaborate in subgroups around a priority that is meaningful to that group of members. The plan is to find common ground not to impose common ground.

Because, as portrayed on the chart (Appendix I) prepared for the December 15, 2009 Conference meeting, there is strong alignment between the Board's Strategic Plan and input at the Linkages Committee Governor's Forum, it is reasonable to expect that the Board will find a match with all or some Linkages members. The early years and collaboration in support of vulnerable populations, including potential for supporting improved health and wellness of all students, are reflective of comments at the forum, as well as in line with the Board's Strategic Plan and the District's Three-Year Education Plan for 2009-2012. If any of the aforementioned areas are identified as a shared priority, it would have the potential to enhance the Board's plans by benefitting from the expertise and efforts of partners work in the same area. As the purpose is to find common ground, the Board would not be expected to commit to a priority that is not aligned to their direction.

Sharing the Board's strategic directions (Appendix II) and the District's Three-Year Education Plan for 2009-2010 (Appendix III) may enable the process as it could provide other members with an opportunity to more readily identify areas of common interest.

BOARD REQUEST #268, JANUARY 12, 2010, PROVIDE AN ANALYSIS OF THE IMPACT OF THE FINDINGS ALBERTA EDUCATION HIGH SCHOOL COMPLETION LONGITUDINAL STUDY ON THE DISTRICT IN THE FUTURE AND IN RELATION TO THE WORK ON SECTOR REVIEWS: A copy of the *High School Completion Longitudinal Study* summary is provided in Appendix IV.

The findings listed seven predictors that led to a higher possibility, and seven predictors that led to a lesser possibility of completing high school.

As well, the study went on to list five strategies under the Alberta High School Completion Framework that support high school completion. These strategies are: personalized learning, successful transitions, collaborative partnerships, positive connections and tracking progress.

High schools are continuing to develop new initiatives to support these strategies. For example, Jasper Place High School has initiated summer school for at-risk junior high students that allows them to achieve early success in their high school studies. Last year, 24 junior high students took part in this initiative and 22 of the students achieved six credits during the summer, and two students achieved three credits. This year, follow up with the students shows that the students who achieved the six credits have less absences and are more successful in the first semester than those who achieved only three credits. It is the intention of the school to expand this process for summer 2010.

This initiative reflects all five of the strategies to some degree and has been shared with others across the high school principal network.

Related to the work on sector reviews, high schools are their own sector and will be reviewed independently of the schools listed in their geographic sector.

One of the predictors listed in the study, related to predictors that decreased the possibility of high school completion, was that of student mobility. As one possible outcome of a sector review is school closure and consolidation, this factor must be considered in light of high school completion. One of the benefits of consolidation of students into larger schools is that it allows for the five strategies listed above to be effectively operationalized for students.

DB:TP:ja

APPENDIX I	Strengthening Integrated/Coordinated Services Chart
APPENDIX II	Board's Strategic Directions
APPENDIX III	Excerpt from District's Three Year Education Plan 2009-2010
APPENDIX IV	High School Completion Longitudinal Study

Strengthening Integrated/Coordinated Services Edmonton Public Schools Governance Actions

EPS Board Strategic Plan	Linkages Governor's Forum	Actions Suggested During Forum	Potential Strategic Priorities
<ul style="list-style-type: none"> • <i>Every student is successful.</i> <ul style="list-style-type: none"> ○ Helping students in the early years creates a solid foundation for future success. ○ Supporting and advocating for early childhood education programs to provide students with the best start in school and in life. ○ Focusing on successful high school completion beginning the moment a student enters the school district and continuing throughout public schooling. ○ Enabling students to make a smooth transition into a variety of post-secondary institutions or the workforce. 	<ul style="list-style-type: none"> • <i>Governor's Discussion Points.</i> <ul style="list-style-type: none"> ○ Experiences from conception to school entry have a significant impact on child development making shared services and partnerships key to improving student life and academic outcomes. Although early childhood services were not a specific focus of the forum, the principles and solutions suggested are congruent with the board strategic plan. ○ Improving high school completion was a focus of discussion at the forum and improving completion rates for vulnerable populations of students, particularly those who require cross sector supports, was key to these discussions. ○ Members of the forum advocated information sharing, development of common protocols and the commitment to holistic approaches to service delivery as mechanisms to support vulnerable students and families to successfully complete high school and transition into the world of work or post secondary education. 	<ul style="list-style-type: none"> ○ Continue dialogue with Linkages member boards to promote collaboration and strategic action to improve outcomes for vulnerable children, youth and families where support from other sectors is needed. ○ Receive data that provides governors with examples of effective practices or programs based on collaborative work between sectors. ○ Make improved coordination of services part of CEO performance contracts. ○ Identify and implement common strategic priorities for boards within the region. 	<ul style="list-style-type: none"> ○ Early Years ○ Collaboration in support of vulnerable children, e.g., children in care, First Nations Métis Inuit (FNMI), immigrants and refugees, students with special needs. ○ Advocate for more integration between Advanced Education (particularly training of teachers) and Ministry of Education.

EPS Board Strategic Plan	Linkages Governor's Forum	Actions Suggested During Forum	Potential Strategic Priorities
<ul style="list-style-type: none"> • <i>Respectful, responsive and inclusive learning culture</i> <ul style="list-style-type: none"> ○ Implementing strategies that increase understanding and valuing of the needs of the District's diverse student population. ○ Creating a multicultural education policy and supporting transition programming for refugee students to support them in real and meaningful ways. ○ Monitoring and reporting on the Aboriginal Education plan based on the Aboriginal Education Policy and Regulation. 	<ul style="list-style-type: none"> • <i>Integrated or Coordinated Services</i> <ul style="list-style-type: none"> ○ Finding better ways to serve the diverse needs of children, youth and families was key to the discussions at the governor's forum. Participants talked about the need to collapse organizational barriers that impact our ability to work collaboratively to serve vulnerable populations such as FNMI, immigrant/refugee or children in care, and to align such things as eligibility criteria, access to services between the ministries of health, education and children's services. ○ Creation of policy, such as the Multicultural Education Policy, although not discussed in detail, was one of the areas of focus as board policy drives administrative practice. 	<ul style="list-style-type: none"> ○ Review and revision of board policies that negatively impact the ability to work collaboratively with other service providers/sectors. ○ Remove barriers to information sharing and administrative processes to improve access and continuity of service. ○ Advocate creation of a Children's Ministry was recommended by one participating breakout group. 	<ul style="list-style-type: none"> ○ Collaboration in support of vulnerable populations. ○ Improved information sharing and clear protocols to allow information to flow. ○ More streamlined referral process so teachers can quickly and easily connect vulnerable students with the help they need. (note – this is a strategy within vulnerable populations).
<ul style="list-style-type: none"> • <i>Employer of Choice</i> <ul style="list-style-type: none"> ○ Providing a collaborative, healthy and innovative workplace. ○ Supporting opportunities for growth and professional development. ○ Supporting the principles and objectives of the District's strategic workforce plan. ○ Involving all staff and recognizing staff for their 	<ul style="list-style-type: none"> ○ Many of the discussions focused on the need to establish trust and positive relationships between partners at the governance and administrative levels. ○ Joint professional development is a vehicle that may hold promise for improving organizational ability to form and strengthen collaborative partnerships. 	<ul style="list-style-type: none"> ○ Provide training to help staff facilitate integrated service plans so that students and families have one plan that meets their needs. ○ Provide training to increase awareness of the mandates and guiding legislation and policies of other organizations to improve practice and the 	<ul style="list-style-type: none"> ○ Joint professional development (PD); especially in areas not typically covered through our PD, i.e., PD on collaboration, on referrals and on poverty, etc. (note – Joint Action Committee for Children (JACC)

EPS Board Strategic Plan	Linkages Governor's Forum	Actions Suggested During Forum	Potential Strategic Priorities
contributions.		ability to work collaboratively.	will be sponsoring joint PD on autism).
<ul style="list-style-type: none"> • <i>Stewards of public education</i> <ul style="list-style-type: none"> ○ Increasing opportunities for public engagement. ○ Advocating on behalf of the children, youth and families served. ○ Partnering with others to respond to a broad range of needs. ○ Exercising fiscal responsibility. 	<ul style="list-style-type: none"> ○ Advocacy for funding from the provincial government was noted in light of the increased costs to release staff to participate in cross sector meetings and cross sector projects. 	<ul style="list-style-type: none"> ○ Advocate to the Premier and MLAs, about the importance of collaboration including ideas such as creation of a children's ministry, coordinator positions whose role is to assist member organizations to find solutions and identify effective practices that improve our ability to work together between education, health and children's services. ○ Consider creation of coordinator position regionally, to focus on creating and strengthening partnership and joint accountability for collaborative partnerships and processes that are focused on integrated services. 	<ul style="list-style-type: none"> ○ Advocacy re: financial support for collaboration, especially the creation of a coordinating position, so dedicated and consistent support could be available to enable continuous collaboration.

Board of Trustees' Strategic Plan

The Board of Trustees' strategic plan is a key document that assists Trustees in providing local governance of public education in the most effective and efficient manner possible.

The areas of focus for actions identified in the Board Strategic Plan are:

- *Every student is successful.*
 - Helping students in the early years creates a solid foundation for future success.
 - Supporting and advocating for early childhood education programs to provide students with the best start in school and in life.
 - Focusing on successful high school completion beginning the moment a student enters the school district and continuing throughout public schooling.
 - Enabling students to make a smooth transition into a variety of post-secondary institutions or the workforce.
- *Respectful, responsive and inclusive learning culture*
 - Implementing strategies that increase understanding and valuing of the needs of the District's diverse student population.
 - Creating a multicultural education policy and supporting transition programming for refugee students to support them in real and meaningful ways.
 - Monitoring and reporting on the Aboriginal Education plan based on the Aboriginal Education Policy and Regulation.
- *Employer of Choice*
 - Providing a collaborative, healthy and innovative workplace.
 - Supporting opportunities for growth and professional development.
 - Supporting the principles and objectives of the District's strategic workforce plan.
 - Involving all staff and recognizing staff for their contributions.
- *Stewards of public education*
 - Increasing opportunities for public engagement.
 - Advocating on behalf of the children, youth and families served.
 - Partnering with others to respond to a broad range of needs.
 - Exercising fiscal responsibility.

The plan guides the Board's approach to enabling all students to demonstrate outcomes of the provincial curriculum and preparing the leaders of tomorrow. It involves, but is not limited to, assisting students to develop a deep respect for cultural differences, to become global citizens, to tap into their own potential and to create their own pathway to a bright future.

EXCERPT FROM DISTRICT'S THREE YEAR EDUCATION PLAN 2009-2012

Global Strategies	Expected Impact	
	PATs	Diploma Results
<p>Early Years - Targeting prevention and early intervention:</p> <ul style="list-style-type: none"> - The District provides full-day kindergarten in 25 high needs schools. It offers eight early learning programs offering enriched language learning opportunities and early education programs for students with mild-moderate and severe learning needs. It also offers subsidized space for child care, before and after school care, Head Start, nursery and pre-school programming and is evolving closer links with these providers. These programming initiatives benefit students deprived due to poverty, new Canadians, Aboriginal students and those identified with speech, motor and language delays. - (NEW) The District is an early adopter of the Early Development Instrument (EDI). The EDI will provide helpful cohort information to the District and contribute to a better understanding of the developmental progress of five year old children in Edmonton. Combined with community mapping, it will enable the District and other main providers of services to children and families to examine community factors that might influence the patterns of development. 	<p>Short & Medium Term</p> <p>Medium Term</p>	<p>Long Term</p> <p>Long Term</p>
<p>(New Cycle) Alberta Initiative for School Improvement (AIS) – Targeting a job-embedded approach:</p> <ul style="list-style-type: none"> - The District will involve teachers and principals in tasks, activities and processes (e.g., facilitated teacher networks, inter-visitations, collaborative lesson design, etc.) that connect 21st century literacies, essential learning outcomes and effective instruction (differentiated instruction, effective assessment practices, integration of technologies, etc.) to engage all students. - Teachers will engage in ongoing assessment of the impact of teaching (e.g., building common assessments, gathering student voice, providing students with timely, specific feedback, etc.) and use this data to identify teaching strategies that are positively impacting learning and are matched to the needs of learners. - Principals and other instructional leaders will participate in professional development (PD) activities that focus on how to effectively support improvement in teaching and learning. - Principals and teachers will engage in collaborative processes to effectively plan for student transitions – grade to grade, teacher to teacher. 	<p>Short, Medium & Long Term</p>	<p>Short, Medium & Long Term</p>
<p>Numeracy – Targeting mathematics outcomes:</p> <ul style="list-style-type: none"> - (NEW) The District developed Mathematics for All, a three year comprehensive support for mathematics teachers, in conjunction with the new mathematics program of study, 	<p>Medium Term</p>	<p>Medium Term</p>

Global Strategies	Expected Impact	
	PATs	Diploma Results
<p>Grades 1 to 9. In year two, teacher coaches trained in the first year of the project will work closely with staff to enhance teaching strategies for mathematics learning. Each year, new grades are targeted as the new mathematics program of study is implemented. This approach develops staff capacity at the school site to enhance implementation of a new curriculum.</p> <ul style="list-style-type: none"> - Teacher coaches will engage in collaborative processes to design common assessments for each grade level. 		
<p>Literacy -Targeting literacy outcomes:</p> <ul style="list-style-type: none"> - The District provided 67 schools with support for training in Reading Recovery. Trained teachers assist students in Grade 1 who need more intensive literacy intervention. - (NEW) The District, in collaboration with community, will pilot Firm Foundations, an early literacy phonemic awareness program, that showed promise in Vancouver where it was developed, in schools selected based on demographic and high needs criteria. - (NEW) The District, in partnership with the University of Alberta, will pilot Pass Reading Enhancement Program (PREP) and Cognitive Enhancement Project (COGENT) in several high needs schools. They are cognition support programs based on the Planning, Attention, Simultaneous, and Successive (PASS) Theory of Intelligence and support cognitive development in four areas: Planning, Attention, Information Processing - Simultaneous and Successive. - The District will continue to provide support to train teachers in Balanced Literacy, Middle Years Literacy and Meaningfully Applied Phonics. These strategies are designed to provide a strong literacy instruction throughout the District, augmented by targeted strategies in schools with specific literacy needs. 	Short & Medium Term	Medium & Long Term
<p>Assessment/Monitoring – Using data to inform instruction:</p> <ul style="list-style-type: none"> - The District supports electronic tracking of student progress through Grade Level of Achievement reporting, Highest Level of Achievement (HLAT) tests in reading and writing, electronic Individualized Program Plan (IPP) reports and Provincial Achievement Tests (PATs) and uses this information to refine programming. - The District will continue to disaggregate data for First Nations Métis Inuit (FNMI) students, English Languages Learners (ELL) students, students with special needs eligibility and alternative programs to analyze the impact of strategies on student learning. - The District has revised the process for exemptions and accommodations of students for PATs and increased communication with schools around practices that allow more students to participate in the provincial testing program. 	Short, Medium & Long Term	Short, Medium & Long Term
	Short, Medium & Long Term	Short, Medium & Long Term

Global Strategies	Expected Impact	
	PATs	Diploma Results
<ul style="list-style-type: none"> - (NEW) District psychologists, reading specialists, English Language Learning consultants and Programs staff, along with community specialists, are evolving practice related to culturally sensitive assessment. - (NEW) To identify schools where collaboration between schools and provincial and local social services agencies should be initiated or maintained, demographic data, social vulnerability indicators and student mobility rates are tracked. This data assists in the identification of schools that are complex based on the multi-layered needs of the diverse student population they serve. 		
<p>Alternative Programs – Responding to needs and interests:</p> <ul style="list-style-type: none"> - Alternative programs based on pedagogy support academic success by providing instruction in the preferred learning style. - Alternative programs based on subject matter (e.g., sports and fine arts) support academic success by motivating students because of their passion for the subject. - Bilingual alternative programs enable students to develop strong skills in other languages. They also enable students from families whose home language is not English to enhance and maintain their home language. Research on language acquisition advises of the importance of a strong foundation home language or mother tongue. 	Short & Medium Term	Medium & Long Term
<p>Partnerships/Collaboration – Targeting poverty factors:</p> <ul style="list-style-type: none"> - In partnership with community organizations, the District offers after school and summer programs that assist students with homework, enhance literacy and numeracy, provide enrichment experiences etc. - In partnership with Big Brothers Big Sisters, Bent Arrow Traditional Healing Society and others, in-school mentoring is provided in many district schools. - Through partnerships and grants accessed in collaboration with community groups, the District provides supports such as Elders, youth workers, success coaches, in-school settlement workers and cultural brokers. - Through collaborations with community groups and individuals, the District provides nutrition programs to students in high needs schools. - Through collaborations with Alberta Health Services and Children's Services initiatives such as early identification of children with special needs, improving success for children in care, wrap-around approaches as seen in The Way In and Strength, Tolerance, Attitude and Resilience (STARS) programs are viable. These and other collaborations enable students and their families to access support for needs that impact learning that go beyond the expertise or mandate of Education. 	Short & Medium Term	Medium & Long Term
	Short & Medium Term	Medium & Long Term

Targeted Strategies	Expected to Impact	
	PATs	Diploma Results
<p>Aboriginal Education:</p> <ul style="list-style-type: none"> - The District has developed a plan to implement the directions indicated in the Aboriginal Policy and Regulation in support of success for FNMI students. This plan is updated yearly and a report provided to public board. - Highlights of this plan include implementation of a Cree extended alternative program, provision of transition support from junior high to high school, creation of an Aboriginal Centre at a district high school, collaboration with group care operators to decrease barriers for students who are transient or in temporary housing and work with the Aboriginal parent community to plan a parent conference for fall of 2009. 	Medium Term	Medium & Long Term
<p>Multi-cultural Education:</p> <ul style="list-style-type: none"> - (NEW) As a result of the Multicultural Task Force, a Multi-cultural Education Policy has been developed and a regulation is under consideration. The intent is to develop a plan in fall of 2009 to support the implementation of the directions indicated in the policy and to report to Board on an annual basis. - (NEW) Additionally, the Board is considering the development of a Kindergarten to Grade 12 centre to serve refugee and immigrant children and youth with limited English, minimum understanding of Canada and the Canadian education system, and/or little or no formal education experience. 	Medium & Long Term	Long Term
<p>Special Education:</p> <ul style="list-style-type: none"> - (NEW) Based on the work undertaken in relation to the provincial Setting the Direction for Special Education initiative, the District has developed a plan to begin moving the District in directions articulated in the responses to the province. The intent is to report to Board annually on progress made. - (NEW) Highlights of the plan include creation of a parent advisory committee to increase parent involvement; expanding the inclusion pilot to increase staff capacity to serve all children; working collaboratively with health, children's services and other school jurisdictions to provide PD regarding autism for a range of staff; and collaboration among Kindergarten Inclusive Developmental Services (KIDS), Special Education Support Team (SEST), Edmonton Regional Educational Consulting Services (ERECS) and programming for student differences to explore a cross-department service model and to extend supports into Grade 3. 	Short & Medium Term Short & Medium Term	Medium & Long Term Medium & Long Term
<p>High School Success:</p> <ul style="list-style-type: none"> - The District provides high schools with a core course retention and marks analysis report, with emphasis on Grade 10 courses, as it is critical to build a strong foundation in the first 		Short & Medium Term

Targeted Strategies	Expected to Impact	
	PATs	Diploma Results
<p>year of high school; the information is shared and allows schools to compare their successes and share successful practices.</p> <ul style="list-style-type: none"> - (NEW) Using Backwards Design, teachers from three district high schools are working collaboratively with a writer and facilitator from Alberta Education to plan for instruction in the core courses 10-2 stream. This planning identifies a range of effective practices and facilitates an ongoing network that leads to fine-tuning of plans. This work will continue for core courses in the 10-1 stream. - To meet the needs of a broad range of learners, the District offers different courses for each core subject area (e.g., English Language Arts 10-1, 10-2 and 10-4), has implemented the Knowledge and Employability courses and offers International Baccalaureate and Advanced Placement courses, as well as a broad range of locally developed courses responding to student needs and interests. - (NEW) Consulting Services has hired five consultants with high school experience to provide support in the core subjects and in programming for student differences. - To increase relevancy and to meet the needs of hand-on learners, the District has introduced The Skill Centre with the support of NAIT and Advanced Education funding through the Innovation Grant; it continues to provide off campus experiences including Career Internship, Work Experience, Registered Apprenticeship Program (RAP) and Military Work Experience. - To accommodate schedules and learning styles, the District provides flexible programming through outreach and transition programs, LearnNet, Centre High and Metro Continuing Education. - To encourage youth engagement in schools, high schools provide programs such as Adopt a Student, offer a range of clubs and sports activities and work in partnership with the Family Centre, Catholic Social Services and Actions for Healthy Communities to connect students to their school and community. 		Short & Medium Term

(Note: A list of selected research used in the development of the plan is provided at the end of the document.)

In addition, under each provincial outcome (pages 16 to 39), a District context has been provided which highlights major strategies specific to that provincial outcome, as well as many school and decision unit strategies that support the achievement of the outcome.

HIGH SCHOOL COMPLETION LONGITUDINAL STUDY

Summary

The purpose of this study is to contribute to evidence-based decision-making at a district, school and system level to improve high school completion. Specifically, the study examines how longitudinal school-based data can be further enriched and utilized to track and understand student progress and to:

- understand the dynamics of key contributing factors at various stages of students' high school completion process
- identify and address gaps in the available Alberta evidence
- focus collaborative cross-disciplinary research and interagency effort to improve completion rates
- stimulate value-added information exchanges within the education system.

The results of the study can be utilized by jurisdiction and school administrators, teachers, education stakeholders, policy makers, researchers and the broader community.

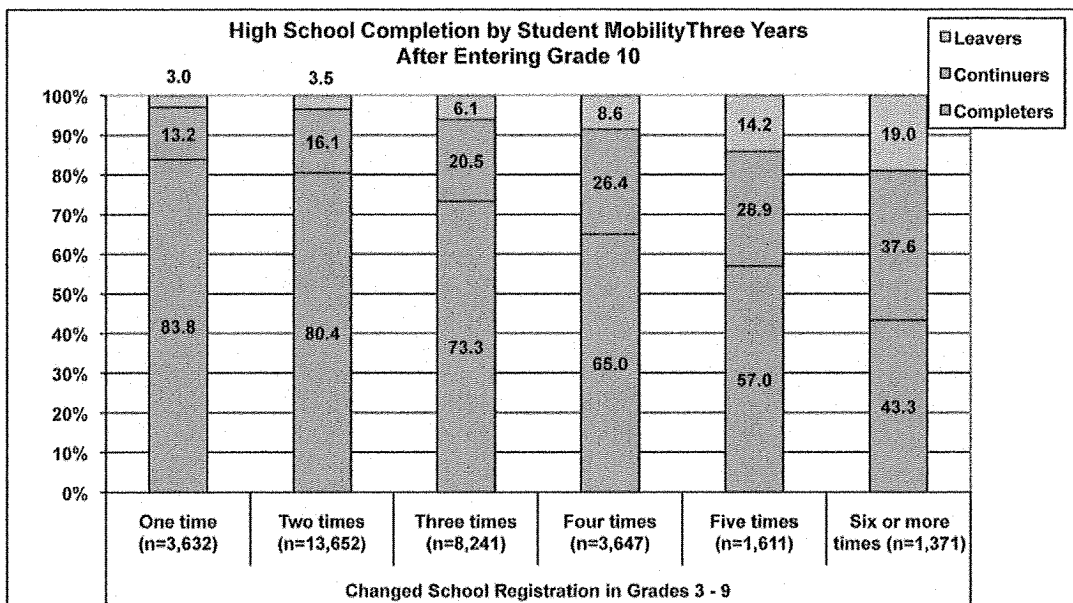
Highlights

(The following information is taken from Alberta Education's *High School Completion Longitudinal Study Highlights* document found at http://education.alberta.ca/media/1079010/hschighlights_final.pdf.)

Scenario:

Principal Smith was not expecting a visit from Mrs. Jones, the mother of Rachelle, a Grade 5 student at Horse Head Nebula Elementary School, but she was in his office waiting impatiently and she seemed upset. Principal Smith didn't know why Mrs. Jones was there, but he suspected it was about an apparent personality conflict between the Grade 5 teacher, Ms. Green, and Rachelle. "Once again," Mrs. Jones began, "Rachelle has been insulted by Ms. Green, and I am not going to tolerate this anymore. I have arranged to transfer Rachelle to the school down the street." Principal Smith assured Mrs. Jones that if they worked together with Ms. Green and Rachelle that any conflict could be resolved, but Mrs. Jones was adamant and insisted on the transfer. Principal Smith intuitively knew this decision was not in the best interests of Rachelle, but he did not have any research-based evidence he could use to try to convince Mrs. Jones to change her mind.

The latter scenario describes a situation that could well contribute to Rachelle having a reduced probability of completing high school. Research, based on extensive Alberta data that tracked students from Grade 3 to four years after entering Grade 10, was recently completed by Alberta Education. This study, among other factors, clearly demonstrates that school mobility or the number of school registrations a student experiences over the course of schooling increases the probability of leaving school before graduation (refer to the graph below).

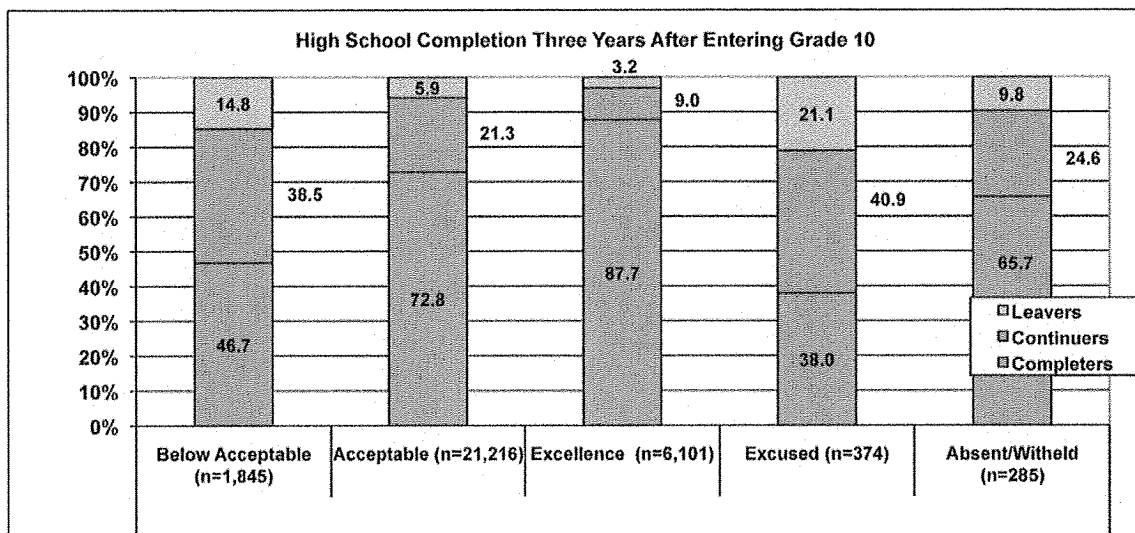


Note: Each total column represents the overall number (100%) of students in a particular mobility category. The sections of the columns are percentages of leavers, continuers and completers within each category.

The purpose of this longitudinal study is to contribute to the Alberta High School Completion Initiative by conducting a concurrent, comprehensive large-scale analysis of provincial Student Information System data and other data sources (e.g., Statistics Canada 2001 census data), in order to better understand the local contexts and factors pertinent to high school completion and inform policies and programs directed at helping students complete high school.

The findings presented in the report are based on the cohort of 32,721 Alberta students who started Grade 3 in 1995–1996 and entered Grade 10 in 2002–2003. The report can be used as a wide-ranging reference source for education practitioners who are looking for evidence-based information to support the policies and strategies targeting high school completion at a school, jurisdiction or provincial level. Examples of such practical usages include scanning and evaluating educational environments, and identifying optimal school size, program type, and other potential applications such as gaining insight into factors associated with high school completion.

The initial analysis, using bivariate statistics¹, supported the proposition that high school completion is a prolonged process rather than a single occurrence or event. For example, the data empirically illustrate the key importance of early school years (e.g., Grade 3) for student success at the secondary level (see the graph below), as well as challenges associated with being an English as a Second Language learner and/or student with special needs, especially during high school years.



Note: Each total column represents the overall number (100%) of students in a particular achievement or absence category. The sections within each column are percentages of leavers, continuers and completers.

Subsequent multiple regression statistical analysis also demonstrated that high school completion is a remarkably complex and dynamic process, which may entail differentiated priorities and supports, depending on the stage of the high school completion process and types of potential completers and their specific needs. The multiple regression analysis resulted in identifying the following significant predictors for high school completion outcomes (after controlling for the effects of other predictors) three years after entering Grade 10 (see also the table on the following page):²

- academic achievement (positive association)
- gifted coding (positive association)
- gender: female (positive association)
- students attending rural high schools or schools in small urban communities under 25,000 (positive association)
- average family income (positive association)
- average percent of families in owned dwelling (positive association)
- average total years of mother’s education (positive association)

¹ Bivariate analysis involves examining one-on-one relationships between high school completion outcomes and each of the variables that can potentially affect these outcomes.

² It should be noted that after combined effects of all included predictors are controlled for in the multiple regression model, the individual associations that were observed as a result of bivariate analysis may change their relative strength or direction.

- student mobility: cumulative number of changed school registrations prior to entering Grade 10 (negative association)
- student mobility: district/school change incident(s) after starting Grade 10 (negative association)
- special needs coding (negative association)
- larger jurisdiction size (negative association)
- schools proximity to economically expanding (oil) regions (negative association)
- schools proximity to colleges (negative association)
- average percent of lone parent families (negative association).

Model of Predictors of High School Completion (Multiple Regression Analysis)*		
HSC Predictors	3yrs after Gr. 10	4yrs after Gr. 10
PAT : Math 9	↑↑	↑↑
PAT: Math 9 – did not write	↓↓	↓↓
Mobility: Number of changed registrations in grades 3–9	↓↓	—
Mobility: Jurisdictions/schools changes in senior high	↓↓	↑↑
Special needs: Severe codes in grades 3–9	↓↓	—
Special needs: Mild/moderate in grades 3–9	↓↓	↓↓
Special needs: Mild/moderate in grades 7–9 only	↓↓	↓↓
Special needs: Mild/moderate in grades 3–6 only	↓↓	—
Gifted in grades 3–9	↑↑	—
ESL: any ESL codes assigned in grades 3–9	—	↑↑
Gender: female	↑↑	—
Average years of teaching experience per teacher	—	—
Grade range	—	—
School size: total student population	—	—
Jurisdiction size: total student population	↓↓	↓↓
Rural schools/schools in small (under 25,000) urban locales	↑↑	—
Proximity to the booming oil production regions	↓↓	—
Direct proximity to colleges (in the same community)	↓↓	—
Direct proximity to universities (in the same community)	—	—
Average family income	↑↑	—
Average percent of families in owned dwellings	↑↑	—
Average total years of mother’s education	↑↑	↑↑
Average percent of lone parent families	↓↓	—

*Green arrows (↑↑) represent statistically significant positive associations and orange arrows (↓↓) represent statistically significant negative associations.

Analysis of the data on students who continued into the fourth year after entering Grade 10 resulted in an unanticipated finding that many of the previously noted variables (predictors) did not contribute to predicting the probability of high school completion at this stage. This finding argues for conducting data collection and analysis that specifically addresses high school completion for students who require extra time to complete. This may be an important starting point for developing evidence-based differentiated approaches to older students who try to complete high school after Grade 12. Further evidence should be generated to uncover the key factors that may enhance high school completion at these later stages.

The findings outlined in this report have clear practical implications for cross-disciplinary research, focused policy development and interagency interventions at a school, jurisdiction and system level. The full report discusses policy implications of the presented findings resulting from the study and suggests several recommendations for future data collection, research and practice to address high school completion issues. For example, consideration should be given to more comprehensively tracking student progress using variables that affect high school completion at different stages of their schooling in order to identify high-risk students, alert jurisdictions and support these students in completing school. A complete copy of this study may be obtained at http://education.alberta.ca/media/1079006/hscdataanalysis_report_final.pdf.