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## Unique Pathway Opportunities



Unique Pathway Opportunities |  
High School Success



**Calgary Board  
of Education**

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# Executive Summary

## Background



*Each student, in keeping with his or her individual abilities and gifts, will complete high school with a foundation of learning necessary to thrive in life, work and continued learning. (CBE Mission Statement)*

*“...learning does not occur only in educational settings. It must be recognized that opportunities for learning also occur in the workplace, in the community, and in the broader world around us”*

*(Inspiring Education p.23)*

The CBE Mission Statement challenges all of us to consider how each student will be successful in their learning throughout their K – 12 experience; it calls upon us all to focus on each student’s success by being inclusive of student strengths, needs, values, interests, backgrounds and circumstances. Our concerted efforts to personalize learning for each and every student have, over time, allowed us to expand our instructional strategies and have led us to new ways of thinking about student success.

Expanded notions of student success have influenced high school programming in profound ways. While academic success continues to be a focus for schools, the inclusion of student voice as well as discussions about engagement in learning have led to the establishment of a variety of unique pathway opportunities for high school students that provide meaningful and relevant learning experiences. These learning opportunities fall into a number of different categories but virtually all of them include off-campus learning and working with community and business partners. The purpose of these unique opportunities is to provide high school students with learning experiences that build on personal interest or future aspirations.

This report will provide a summary of unique pathway opportunities within the following categories:

- Off-Campus Exploratory Programs

These programs offer students exploratory experiences in an occupation with industry professionals, often at training facilities operated by industry experts. Students involved in these exploratory programs frequently gain employment in the industry and many have continued their pursuit of a career in these fields through apprenticeship training.

- Internships

Through strong industry and community partnerships, students are provided with an opportunity to engage in industry specific work with experts over a prolonged period of time (ex. summer months) to gain experiences within that occupation. These internships are often paid positions and can lead to continued employment for students within the industry.

- Dual Credit

Dual credit programs are designed to increase learner retention, high school completion, participation in post-secondary programs and help students make meaningful connections to the labour market. Dual credit programs provide learning experiences that may lead to gaining credits at both the high school and post-secondary level, achieving certification or earning preferred consideration into a post-secondary institution. These programs attract students who have made a commitment to further studies in specific areas.

- Multi-disciplinary Learning

Building on the lessons learned from the establishment of the Career and Technology Centre at Lord Shaughnessy, programs are being established that are designed to attract students from their home schools to engage in project-based learning centred on a particular area of interest such as balanced energy literacy or media studies. While these emerging programs may utilize CTS pathways as a central theme, students will meet outcomes from a variety of disciplines. For example, a balanced energy literacy program could draw easily on outcomes from Social Studies and Sciences. Additionally, some multi-disciplinary opportunities expand on existing programs, such as Leadership and the Green Certificate Program, fostering student agency.

## Unique Pathway Opportunity Aims

Unique CBE opportunities encourage students to:

- define and monitor their own learning goals.
- explore and gain transferable skills and competencies while earning credits.
- build a sense of community and relationships through partnerships.
- translate classroom learning into relevant world settings, and world learning back to classroom settings.
- develop a sense of belonging within their learning.

## Unique Pathway Opportunity Benefits

The CBE high school unique pathway opportunities previously offered have been overwhelmingly successful on many fronts.

Observed benefits to students include:

- ability to contribute to the content, delivery and pacing of their learning.
- opportunity for students to gain insight into career before commencing post-secondary programs, apprenticeships or careers.
- development of transferable skills such as teamwork, collaboration and problem solving.
- improved relationships with community members.
- increased motivation, confidence, engagement, accountability and self-esteem.

Observed benefits to the CBE and community:

- development of informed, empowered and enabled learners.
- ability to connect relevant and meaningful learning between the classroom and the community.

- improved relationships.

## Unique Pathway Categories & Programs

The opportunities offered through CBE Unique Pathways have been categorized into four groups for the purposes of this report. However, due to the flexibility and individual nature of each opportunity, some programs could be included in multiple categories. The categories and programs outlined in subsequent sections are included in Table 1.

**Table 1: Unique Pathway Categories and Programs**

Category	Programs
Off-campus Exploratory Programs	Plumbing and Pipefitting, Ironworking, Woodworking, Residential Construction, Electrician, Thermal Insulating, Boilermaking, Supply Chain, Automotive Technician
Internships	Educational Technology Development (Nureva), Human Resources (Canadian Freightways), Communications in Non-Profit (EducationMatters), Supply Chain in the Energy Sector (TransCanada Pipelines and Talisman Energy), Alberta Health Services Internships
Dual Credit	Pre-apprentice Carpentry, Pharmacy Assistant, Design Studies/ Communication Technology, Fashion Institute, First Responder, Pre-apprentice Auto Service, Production Field Operator, Business Administration, Child Care
Multi-Disciplinary	Green Certificate, Entrepreneurial Tradesperson, Entrepreneurial Artist, First Robotics, CBE Film Institute, Pre-Engineering Institute, Leadership, Registered Apprenticeship Program (RAP)

## Off-campus Exploratory Programs

Recognizing that many students require an opportunity to discover and research career pathways, exploratory off-campus programs have been designed to give students the opportunity to experience an occupation in a safe and positive learning environment. Typically, the students' instruction takes place outside of a school setting and is primarily hands-on. Although these opportunities can lead to an apprenticeship this is not a requirement. The intent is for students who may not have a background in a given profession to learn more about it in a practical setting. Students who have participated in these programs have consistently expressed a better understanding of their own educational needs and have a greater engagement in their learning both in the exploratory program and their school-based courses.

*“Watching our son work in the program has been an eye opening experience for us. The growth in his maturity level and dedication to the program has made us quite proud. Our son has already been accepted as an apprentice and the hours he works are now being put towards him getting his ticket.*

Parent

Students attend exploratory programs at various times; from half-days throughout the school week, to evenings and weekends. Such flexibility ensures students are experiencing real-world situations and accessing training from industry experts while continuing to meet other high school requirements. Additionally, students have shown to not only gain specialized skills and competencies within occupations but have also developed transferable skills. Students participating in off-campus exploratory programs have demonstrated:

- improved motivation
- increased confidence
- high levels of engagement
- connections between school and workplace learning.

To date, many of the exploratory programs established have focused on locations with existing training facilities and instructors. Consequently, most of the exploratory programs have been developed within the trade areas. However, the establishment of the exploratory programs have provided models that are being explored in other areas such as e-learning, media and communications.

### Plumbing and Pipefitting

The plumbing and pipefitting program was first implemented in October 2013 with 8 students participating from 2 different CBE high schools. Students receive training at Local 496, the Plumbing and Pipefitting Union, in five different trades: plumbing, steamfitting/pipefitting, gasfitting, B pressure welding and sprinkler fitting. The students receive 150 hours of instruction over the course of 16 weeks and can receive 6 credits in Work Experience. Students also receive industry recognized credentials in fall protection and construction safety. Upon successful completion of the course, students have the option of entering one of the pipe trades as a first year apprentice with the full support of the union. Since its first inception, the program has expanded to include both morning and afternoon sessions with a capacity of 16 students each. The fall session of 2014 saw the first all-female cohort with 7 girls receiving training in the pipe trades. The next two cohorts begin February 9, 2015 and have complete enrolment.

## Ironworking

Building on the success of the Plumbing and Pipefitting program, the Ironworkers Union Local 725 began offering an exploratory Ironworker program in April 2014. The initial program saw 10 students receive 75 hours of instruction in the many facets of the ironworking trade. Students received 3 credits in Work Experience for attending the trade school for 3 hours per day/ 4 days per week. Students also earned industry recognized credentials in fall protection, construction safety, aerial work platform, and telehandler. Upon successful completion of the course, students were provided with the option of entering the trade as a first year apprentice with full time employment for the summer months. The Ironworking program has expanded from 75 to 150 hours (6 credits). The second cohort is fully subscribed and is set to begin February 9, 2015.

## Woodworking

The Calgary Drop-In Centre Woodshop provides an opportunity for students who have an interest in woodworking/cabinet making to receive instruction under the direct guidance of a journeyman. Students develop core carpentry skills through 150 hours of instruction and receive up to 6 Work Experience credits. Participants who complete the program are partnered with an industry employer and have the ability to enter the Cabinetmaking trade as an apprentice. Since its inception, 8 students from 5 CBE high schools have completed or enrolled in the Woodworking exploratory program.

## Residential Construction

This unique program is a four-way partnership with Brookfield Residential, Habitat for Humanity, Professional Home Builders Association (PHBI) and the CBE. Brookfield Residential has agreed to pay Habitat for Humanity so CBE students can work on active build sites in an exploratory residential construction program that exposes students to several aspects of residential construction (framing, plumbing, wiring, floor covering). In addition, students will have the opportunity to complete the academic accreditation of the Level One Residential Construction Site Manager program. To date, 6 students from Diefenbaker High School have participated in this program.

## Electrician, Boilermaking & Thermal Insulating

Following the models established through the Ironworkers and Plumbers and Pipefitters exploratory programs, the CBE has been working with partners in three other trade areas: Electrical, Heat and Frost Insulation, as well as Boilermaker trades to develop similar programs. Each of these industry partners value the opportunity to allow youth to explore their occupational areas and develop skills while linking workplace and classroom learning. As with the Ironworkers and Plumbers and Pipefitters exploratory programs, the Electrical workers, Boilermakers and Thermal Insulators have expressed interest to work with the CBE to adapt existing training models from their trades to create exploratory programs for high school students. In the case of the Heat and Frost Insulators, to accommodate for a lack of training facilities within the Calgary area, a space at Bowness High School is being considered for this program.

## Supply Chain

Off-campus programs in the supply chain industry provide students with a means to understand the complexity of supply chain management, through meaningful experiences. Students build foundational skills and knowledge surrounding the management of flow of goods, services, finances and others. Experiencing the industry first-hand provides invaluable knowledge for students, exposing them to the many post-secondary opportunities available to explore this career further. Additionally, students have the

*This program changed their lives. It allowed them to see that there is the possibility for change and let them dream the bigger dream! The work of the instructors went above and beyond to mentor these young men in not only the industry, but in life too. I cannot say enough positive things about this program, and pray that we will be allowed to belong to it in the future."*

Guidance counsellor

opportunity to align their experiences in industry with Alberta curriculum in Career and Technology Studies (CTS) courses. In the 2013-2014 school year, six students participated in supply chain exploratory programs at two different industry locations (Sears & SCM).

### Automotive Technician

In late 2014, the CBE was approached by a member of the Calgary City Police (CPS) Fleet Department to work together to establish a paid work experience with the CPS automotive fleet department. Intended to provide a student with automotive service and maintenance experience from CTS courses at their high school, this program would provide an opportunity to engage in regular vehicle maintenance (tires, engine work, oil changes, etc.) on Police vehicles. Additionally, the students would have the opportunity to explore the possibility of apprenticeships related to automotive work, transfer skills learned in school mechanics class and share learning experiences in the fleet department back at school. Anticipated start date of this pilot program is spring 2015.

## Internships

*“As a start-up company, we were really excited to help promote the entrepreneurial spirit and provide students with the opportunity to contribute in a meaningful way to the development of our new educational technology product. They exhibited the creativity, passion and maturity we were looking for in our new team members.”*

Employer

The Calgary Board of Education has reached out to industry and community partners to provide meaningful off-campus opportunities for students. Internships help students find their passion and prepare them to make a successful transition to post-secondary education and/or a career. Through participation in CBE Internship Programs, students discover potential career pathways, gain valuable experience and obtain first-hand knowledge within industry because they participate in in-depth experiences within an occupation.

Through working with industry, the CBE has successfully offered a variety of student Internship Programs for high school students. These have included student placements in both corporate and non-profit settings in areas such as educational technology product development, education trust (non-profit) and supply chain. Through Internship Programs, students have been able to learn first-hand about product development start-up, communications, human resources and supply chain, while contributing to the workflow of the office setting.

Designed to suit the needs of both the industry partners as well as students, these programs have been offered as either summer or school year internships. Additionally, as these programs are delivered through Alberta Education work experience courses, flexibility exists that allow programs to be designed that best suit the industry and needs of the teams taking on students. As students are accessing work experience high school credits, they are also supervised and supported by an Off-campus Coordinator at their high schools for the duration of the internship. At the corporate level, students are supported by industry personnel.

To effectively personalize Internship Programs for both industry and students, industry partners work together with a system level CBE representative to determine the skill set needed for a successful applicant. Industry representatives play a key role in creating the internship to suit the needs of the organization as well as being active in the selection process.



Previous and developing internships for CBE high school students have involved a variety of roles and industries.

### **Educational Technology Development (Nureva)**

In the summer of 2014, two students from two different CBE high schools completed an eight week paid summer internship at Nureva. At this educational technology development company, the student interns learned about the product management process as well as the roles and responsibilities of different team members. In their work, the students completed brand and market research, wire framing projects and consulted on software development. Nineteen students applied for the two internship placements. A second internship is scheduled to occur for the summer of 2015.

### **Human Resources (Canadian Freightways)**

Having successfully hired post-secondary summer interns, Canadian Freightways worked with CBE to offer a similar internship for one high school student. The position was a paid, full-time Human Resources position for July and August of 2014. In this role, the successful applicant was a grade 12 student who participated in an off-campus exploratory supply chain program. She worked with the Safety and Compliance Team at Canadian Freightways booking appointments for new hires, scheduling interviews, booking appointments, completing reference checks, posting job ads and providing support to other team members. Both the employer and the student intern highlighted the value of the knowledge and competencies gained from the intern's previous off-campus experience.

### **Administration & Communications in Non-Profit (EducationMatters)**

EducationMatters is charitable trust that funds innovative enhancement programs to help CBE students maximize and enrich their learning experiences. In keeping with their mandate to enrich education offered to students, EducationMatters initiated the development of a one semester high school student internship. This internship will provide the opportunity for a student to explore a career in non-profit administration and communications, working half-days and attending their high school the other half days. This structure not only provides relevant workplace learning, but allows the intern to transfer meaningful skills and competencies from the workplace to school and from school to the workplace. One internship was created to commence February 2015 which saw six CBE high school students apply, representing six different high schools.

### **Supply Chain in the Energy Sector (TransCanada Pipelines and Talisman Energy)**

Supply chain, a high-demand and rapidly growing sector, offers many career choices for students particularly in the energy sector. The CBE is working with corporate partners (TransCanada Pipelines and Talisman Energy) to give high school students exposure to a career in supply chain and corporate experience through internship programs. Following established summer internship models used for post-secondary students, CBE high school students will develop skills and an understanding of logistics, distribution, purchasing and more. These energy sector internships are currently under development, expected to be offered in the summer and/or fall of 2015.

### **Alberta Health Services Internships**

The Health Services Youth Initiative provides grade 11 and 12 students the opportunity to explore over 200 health occupations through summer internships in conjunction with Alberta Health Services. In the wide variety of placements, from health-care careers and nursing, to diagnostic imaging and laboratory medicine, students earn an honorarium, school credits and experience in the health services field of their interest. During the summer of 2014, over 200 hundred applications from CBE students were submitted. From

*"I'm happy to be an advocate for this program. I am happy to speak to my peer group in industry and say that this is a program that has great benefits, not only for the individual and for CBE... there are benefits to businesses too."*

Industry partner

the successful applicants, 47 students from 13 CBE high schools had summer Health Services Internships.

## Dual Credit

The intention of dual credit programming is to create more opportunities for students to meaningfully personalize their educational experience and assist students in pursuing their passions and exploring potential career paths. Through student agency, learner retention is increased as students become more engaged in the educational process; they are able to make connections between post-secondary and their high school learning or linking the world of work with their personal interests. The most common dual credit approach involves students receiving both high school credit and post-secondary credits simultaneously, but other dual credit models may include:

- preferred selection in a post-secondary institution
- receiving industry recognized certifications while in high school

Diverse dual credit opportunities are available to all CBE students and involve multiple strategies to help students achieve success in high school, post-secondary and career paths.

### Pre-apprentice Carpentry

In partnering with Calgary Construction Association (CCA) and SAIT, the CBE has received government funding to deliver a Dual Credit Pre-apprentice Carpentry program. 16 students, representing nine CBE high schools, will attend SAIT for three semesters and upon completion, earn 15 3400-level CTS credits, a SAIT certificate, and have the capacity to challenge the First Period of their technical training. The CBE has positioned a teacher that holds a Journeyperson's ticket in Carpentry to support the students throughout the program. The partnership with CCA will provide students the opportunity to engage in summer employment both years and apply their technical skills in a work setting. A second cohort is scheduled to start in February 2016.

### Pharmacy Assistant

The Pharmacy Assistant course is a three semester program that has students attend classes on the SAIT campus in the morning, three times per week. Students return to their home schools in the afternoon to attend regular classes. The program is open to grade 11 students who may be interested in pursuing health care professions. Students who complete this course will receive 25 credits towards their high school diploma as well as a SAIT Pharmacy Assistant Certificate. The first cohort is currently completing their practicum phase with nine students receiving certification. The next cohort is set to begin February 2016 with a capacity of 16 students.

### Design Studies/ Communication Technology

This offering, supported by government funding, is currently in development with the Alberta College of Art and Design (ACAD). In this program, students are able to access post-secondary credits in Design Studies and Communication Technology. Students who complete a "bundling" of selected courses, as offered by their high school, can apply to have those courses recognized by ACAD. Participating schools will be required to have the interested teachers participate in a teacher's institute to ensure specific outcomes are met and there is consistent delivery of the courses.

*"The off-campus programs offered through CBE have provided high school students with real world connections. Although students may struggle in an academic setting, they have flourished and excelled in these programs. Giving them the opportunity to see what future lies beyond high school is a valuable opportunity that helps re-engage in high school with new hope for the future."*

Guidance counsellor

## Fashion Institute

Students have the opportunity to pursue their passion for Fashion while completing courses at the Fashion Institute at Olds College (Calgary Campus). Both college courses offered, Introduction to Image Consulting and Garment Analysis, allow students to receive current industry training while achieving CTS credits in Fashion Studies. The partnership between Olds College, CBE and Level 2 Sports Wear Inc. ensures students gain industry relevant experiences. This opportunity has also been supported with government funding. Currently, eight students from three high schools are enrolled in Image Consulting for the second semester with Garment Analysis scheduled to run in the fall of 2015-16.

## First Responder

The CBE is partnering with Kinetic Medical Incorporated to deliver a Dual Credit First Responder program. Qualified Kinetic Medical instructors, registered with the Alberta College of Paramedics, will be delivering two CTS courses (HCS 3020 – First Responder 1 and HCS 3030 – First Responder 2) to approximately 30 students at William Aberhart and approximately 20 students at the Career and Technology Centre starting Feb 2015. Students wishing to continue their studies in emergency medicine can count the 50 hours from the two CTS courses against the practicum hours required for the EMR program through Kinetic Medical Incorporated.

## Pre-apprentice Auto Service

The CBE will be offering a Dual Credit Pre-apprentice Auto Service program to interested high school students starting in the fall of 2015. The program will run out of Central Memorial High School for two semesters, for up to 16 students across the CBE. The content will be delivered by a CBE teacher that holds an Auto Service Journey person's ticket. Students will earn 15 3400-level Auto Service Apprenticeship credits, and upon completion, have the capacity to challenge the First Period of their technical training.

## Production Field Operator

In partnering with Cenovus Energy and SAIT, the CBE has received government funding to deliver a Dual Credit Production Field Operator program. Students will focus on the initial separation processes or the special treatment required in ensuring that impurities such as water, gas and sediments are removed from oil and gas in the field. Once separated, the oil or gas is transported by pipeline to refineries, gas plants or markets. This program is slated to begin in 2015-2016 at SAIT.

## Business Administration

This offering is currently in development with the SAIT School of Business. Specified groupings of courses currently offered in the BIT cluster will be recognized for credit in SAIT's introductory Business Administration courses. SAIT is currently developing a D2L-based delivery method that would allow students to complete courses either at home or in a school-based setting. CBE teachers would oversee the program at a school level, with common exams to be administered through SAIT.

## Child Care

Students at Jack James High School have the opportunity to gain valuable experience and certification in child care through an on-site preschool. This program has been operating for over 30 years and is unique within the CBE. While providing a valuable community service, grade 11 and 12 students learn appropriate child management techniques. Each semester 14 high school students take part in the program and earn high school credits as well as their Red Cross Standard and/or Child Care First Aid Certification. Upon successful

*"This program is preparing him for a field that he is excited in entering. This isn't just a job for him, it's his career."*

Parent

completion of the program, students receive their Child Development Assistant Certificate from the Alberta government and have preferred placement in the Early Learning Child Care certificate program at Bow Valley College.

## Multi-Disciplinary

Task design and assessment rooted in cross-disciplinary teaching and learning is a high priority for the Calgary Board of Education. Through the Instructional Core, teachers are being supported and encouraged to ensure meaningful connections exist between their content and that of all disciplines. This has led to many great examples of multidisciplinary projects across the system. Building on these lessons and through the engagement of our community partners, new programs with an integrated curriculum are emerging. This linked learning approach will allow students to meet the outcomes from a variety of disciplines while pursuing a passion and/or pathway.

*“What I enjoyed the most was getting the hands on experience, instead of just being told what to do and told what happens, I actually got to do”*

Student

### Green Certificate

The Green Certificate Program is an apprenticeship-style training program designed by Alberta Agriculture, Food and Rural Development. Focused entirely on learning skills and competencies through hands-on daily tasks, students are directed through a comprehensive program of studies in one of nine specialization areas:

- Bee Keeper Production
- Cow–Calf Beef Production
- Dairy Production
- Equine Technician
- Feedlot Beef Production
- Field Crop Production
- Irrigated Field Crop Production
- Sheep Production
- Swine Production

Students work under the guidance of an industry based trainer and support of an Off-campus Coordinator and Alberta Agriculture representative.

The Green Certificate program is available to all Alberta high school students. Within the CBE, this program is a focused area of growth as it aligns highly with aims of both the High School Success Initiative and Inspiring Education. As each specialization area is offered and delivered in three non-sequential courses, the flexibility of these programs allow students to progress at a pace that is meaningful to them, their trainer and the specialization area, while also maintaining the detail required for credentialing.

In the 2013-2014 school year a total of seven courses were completed in the Green Certificate program at four CBE high schools. However, as the Green Certificate program pace is student driven and credits are only earned once testing is complete, credit allocation does not accurately represent student participation. As of January 2015, 19 students from eight CBE high schools were registered in the green certificate program with Alberta Agriculture.

## Entrepreneurial Tradesperson

In partnering with Junior Achievement, the CBE is building a program to promote financial literacy and entrepreneurship as it relates to the skilled trades. Students will personalize their focus within in the trades while earning five CTS credits in Enterprise and Innovation. Industry professionals bring increased relevancy and authenticity to the learning experience through their classroom visits and review of student presentations/business plans. The program is scheduled to be piloted in two CBE high schools in the fall of 2015.

## Entrepreneurial Artist

Building upon our collaborative relationship with Junior Achievement, this program is designed to help high school students engage in and better understand the role of business in our society and how being an artist is connected with entrepreneurship. This cross disciplinary approach allows students to pursue their passion in the arts while achieving five CTS credits in Enterprise and Innovation. Volunteer professional artists bring increased relevancy and authenticity to the learning experience through classroom their classroom visits and review of student presentations/business plans. The program, estimated to serve 60 students this year, is currently housed in four CBEhigh schools each employing a variety of implementation structures that will inform the expansion of the program across the CBE .

*"I gained a lot of knowledge about the professional work environment, and also about how important connections are."*

Student

## First Robotics

In partnership with FIRST Robotics and the industry professionals, CBE students participate in engaging mentor-based programs that build science, math, engineering, technology, communication and leadership skills. Competing and collaborating with thousands of international teams, students experience real world challenges that inspire innovation and foster their passion for Robotics. Although most students participate as an extracurricular pursuit, they have the ability to receive credits in CTS Computer Science, Electro Technologies and Design Studies. Currently, there are six CBE high school teams and a few community teams that comprise of CBE students including the Intimitrons All Girls Team.

## CBE Film Institute

Grade 11 students will have the opportunity to explore their passion in Film in a comprehensive one semester program at a designated CBE school. Using an integrated project-based approach, students will achieve outcomes from English 20, Social Studies 20, Film Studies 25, Calm and Communication Technologies while actively engaging in real-world situation and challenges. Community partnerships and collaboration with industry experts will bring increased relevance and authenticity to student learning. Initially, a pilot cohort of 30 students will travel to a designated school for this rich, semester long experience. Student interest will dictate possible expansion of the program at other schools across the district.

## Pre-Engineering Institute

Building from prototyping experiences at the Career and Technology Centre, a unique, project-based and integrated opportunity is being explored for CBE students. Students wishing to pursue their interests in Engineering will join a cohort of likeminded students in a full year, integrated curriculum at a designated school. Industry, community and educational partnerships will bring increased authenticity to project-based learning, real world engineering challenges, student competitions, exhibitions and internships. The rigorous and practical application of the integrated curriculum will bring increased relevance to math, science, technology, design and communication concepts for students.

## Leadership

*"I believe leadership opportunities are important because they allow for students to expand their knowledge and think in new ways from the diverse opinions shared. This allows for creative ideas to be generated in an environment that promotes new ways of thinking and problem solving".*

Student

The Calgary Board of Education's unique approach to student voice and leadership has been on-going for the past six years. The Chief Superintendent's Senior Advisory Council has set a precedent for advancing student voice and leadership initiatives within a personalized, community-based learning environment. It allows students to earn high school credits for work completed outside the traditional school day and traditional high school setting. This leadership initiative supports the notion of extended learning beyond the classroom, in a collaborative environment, with relevant and authentic opportunities to connect with leaders locally, nationally & globally.

This opportunity allows students to build leadership, mentorship, interpersonal and collaborative skills and competencies with practical, relevant applications to life outside of school. They are involved in discussions on current educational issues -- helping to shape the future of education in our city. This leadership opportunity is being offered within the framework of a formal cluster of courses in the Career and Technology (CTS) Program of Studies and courses from Introductory Level to Advanced Level. Students design their own leadership pathway based on their passions and interests. Marks/credits are earned through mandatory face-to-face work with the course instructor, online instruction, volunteer opportunities, Service Units and the Chief Superintendent of Schools.

## Registered Apprenticeship Program

While the pursuit of a post-secondary education is valuable, it is not the direction that every student wishes to pursue. Many students consider themselves to be "hands-on" learners and are impatient to enter the workforce. Apprenticeships in Alberta typically occur after graduation from high school, but some students recognize that a career in skilled trades is the path they wish to pursue. The Registered Apprenticeship Program is an off-campus, experiential program that allows students to earn high school credits and receive pay, while working towards their journeyman certificate in their choice of one of over 50 skilled trades.

RAP students are both full-time students and registered apprentices. Students take their core courses to ensure they meet graduation requirements and the time normally spent in complementary programs is spent learning their chosen trade under the direction of a qualified supervisor. RAP students can earn up to 1000 hours of time credits toward an apprenticeship and simultaneously earn up to 40 credits towards high school graduation requirements.

The time a RAP student spends at school and on the worksite can be quite flexible. The student, school and employer jointly agree on a suitable schedule. The student might work as a RAP apprentice for a semester, for half of each school day, for one or two days per week, or during summers, holidays and weekends.

As a worker, the RAP student is expected to take on the same responsibilities as a regular apprentice and be just as productive. The RAP apprentice is required to work safely, be punctual, and completes tasks as assigned by the employer. As a student, the RAP apprentice attends classes, completes school assignments and maintains passing grades.

The apprenticeship ends when the RAP student finishes high school. The student is then automatically registered as a regular apprentice and the credit earned while in the RAP program is applied to his or her apprenticeship through the apprenticeship program.

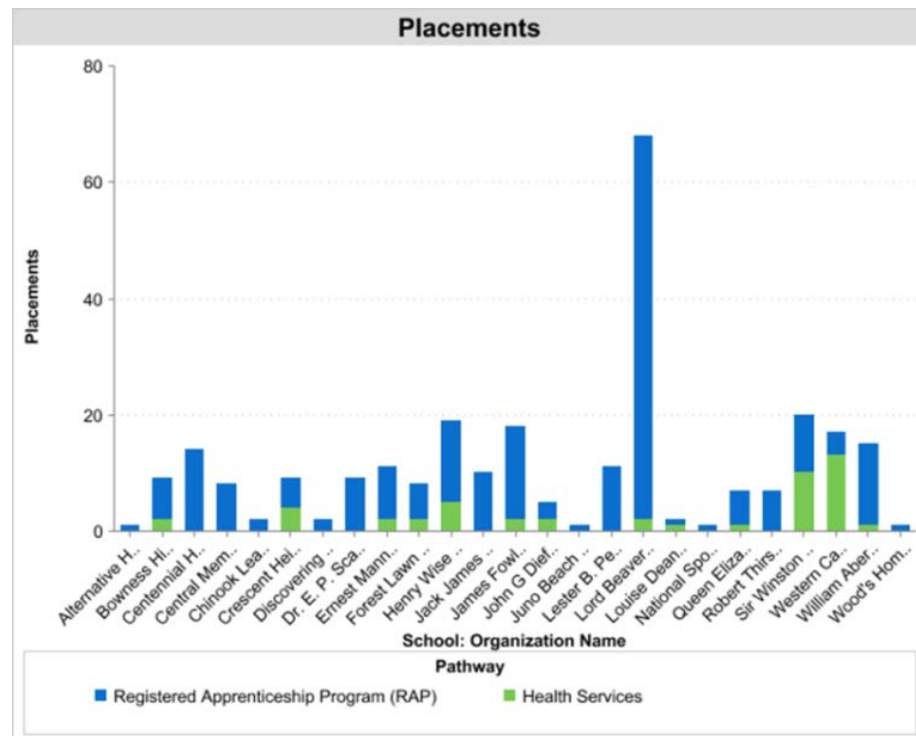
The Registered Apprenticeship Program is available to all CBE high schools and the number of students enrolled has increased over the past three years.

*"I wouldn't have graduated from high school without RAP. It made me realize how important it was for me finish. I had something to work for and for the first time I saw a future for myself."*

Former CBE student, second year apprentice

The following table, provided by Careers: The Next Generation identifies enrolment by CBE school in RAP for the 2013-2014 school year.

**Table 2: Enrolment in RAP by school**



## Conclusion

### Growing Unique Pathway Opportunities

At the time of writing, the 29 unique pathway opportunities developed at the system level, described in this report, are available to connect students' learning in school with their passions, interests and future aspirations. The programs outlined above have provided opportunities for over 400 high school students to engage in meaningful and relevant learning in an out-of-school setting with the support of community expertise. The CBE continues to explore opportunities with community and business partners to expand the number of programs as well as the number of occupational areas in which opportunities are available to our students.

In addition to the system pathway opportunities outlined in this report are the hundreds of work experience and RAP placements that are organized at the local school level. Almost 1800 students successfully completed credits in an off-campus learning experience in the 2013 – 2014 school year which was a 60% increase over the 2012 – 2013 school year. This substantial growth makes clear that students, parents and schools value the learning opportunities offered through unique pathway opportunities. However, the 1800 students who received credits over the 2013 – 2014 school year represents only about 5% of the overall high school population.

## The High School Success Initiative

The CBE High School Success initiative is built around four integrated themes which include flexibility, task design and assessment, transitions and pathways. The unique pathways opportunities described in this report builds upon these integrated themes in the following ways:

Flexibility: Many community-based programs have been made available to students over time periods that do not align with the semester or the school day. High school administration and counsellors have been extremely flexible in adjusting schedules and providing course-based instruction to students outside of the traditional timetable. The removal of the 25 hour requirement has opened the door for schools, students and parents to adopt a flexible mind-set to leverage these unique opportunities in ways that do not disrupt the overall high school program for students.

Task design and assessment: As these unique opportunities emerge and teachers consider ways to incorporate learning from them into the school-based learning the focus of professional decision making is less on the nature of a 'course' and shifting more to the nature of an engaging learning task. Examples of unique learning opportunities with the community and the desire to create learning which is connected to life and relevant have led to many of the multi-disciplinary approaches that are developing. In addition, teachers are building on community expertise to bring added value and relevance to the learning of their students to engage them more deeply.

Transitions: Although some of the unique opportunities described in this report were not designed to attract students who have struggled in the school setting, there are many examples of how such a connected learning opportunity has actually helped students transition their learning more seamlessly into the school setting. The goal-oriented approach to many of these opportunities as well as the connection to meaningful employment and careers has helped many of the participating students see relevance in all of their learning. It has also helped them understand and build a supported transition into life after school – whether it is further study or the world of work.

Pathways: The development of learning pathways is the *raison d'être* of these system designed learning opportunities. All of the programs described in this report are designed to either expose students to a future career or provide an opportunity for a student to get a head start on a chosen career while still in high school. In either case, these programs help students build confidence, learn skills and make community connections that connect their passions with their futures.

Conversations among high school leaders that have taken place over the last two years have raised the profile of unique pathway opportunities which has resulted in an expressed desire from principals, counsellors, teachers, parents and students to have more student involvement. As the program offerings continue to expand, so do the connections with community and business partners. These increased connections with the community at large are building understanding and momentum in the conversation about the nature of student learning and our expanding conceptions of success in school. The trajectory of the conversations among schools, community and home is pointing to the critical importance of continuing the growth of these programs to meet the Mission of the CBE and the vision of a broad community involvement in education as expressed in *Inspiring Education*.

*“Students see the real world connection of success in the world of work and success at school and there is a resultant focus, diligence and task completion on the part of students.”*

High school principal