

Explore, Engage, Experience: Finding a Future in Trades and Technologies Session Three: EXPERIENCE

The intent of a CASS Learning Guide is to apply research, deepen understanding and enhance professional practice within the Alberta context. With a focus on optimum learning for all students, a Learning Guide provides an opportunity to grow system leader knowledge, resulting in quality school leadership and quality teaching throughout Alberta.

Summary

TAVE's third and final session of the Three-Part Online Learning Series, Explore, Engage, Experience: Finding a Future in Trades and Technologies presents four Alberta Stories of Practice that demonstrate the TAVE outcome of enabling students to experience diverse work-integrated learning opportunities with employers. The stories include:

Story of Practice #9: Chinook's Edge, Red Deer Catholic Regional Schools, and Wolf Creek Public Schools: Achieving Student Career Readiness through Planned Career Pathway Experiences and Powerful Partnerships
(Recording 5:59 – 31:04)



The collaborative efforts of Chinook's Edge Public Schools, Red Deer Catholic

Regional Schools, Wolf Creek School Division, Olds College, Red Deer Polytechnic, and CAREERS have resulted in a highly successful collegiate model for career transitions following high school completion. By working together, these central Alberta partners have increased the effectiveness and efficiency of their practices and the career transitioning opportunities available to students.

The Central Alberta Career Pathway Model involves a four-year high school plan to support students in career exploration, engagement, and work-integrated experiences.

Central Alberta Career Pathway Model				
	YEAR 1	YEAR 2	YEAR 3	YEAR 4 <small>(additional support year as needed)</small>
High School Programming	Graduation Course Requirements all met in home high school			
	Use of high school CTS programming to further develop skill readiness for skilled trades careers.			
Post-Secondary Programming	Skilled Trades Career Cluster Exploration & Skill		Pre-employment Certificate	Pre-employment Certificate
Industry	Exploration of skilled trades and early work integrated learning experiences.		Apprenticeship Placement	Apprenticeship Placement
	Use of CAREERS as a partner in career placements September through June and Summer School			
Student Support & Career Advising	Use of CAREERS as a partner in career advising and career education support			
	School Division academic coaching for student success and career advising support			

Career awareness and readiness experiences are essential for guiding students through a successful career pathway. This comprehensive approach utilizes a variety of methods over several years, including single-day experiences, dual courses/certificates, work-integrated learning, student tracking, staff coaching, and advising.

During the presentation, it was emphasized that training staff to focus beyond credits and graduation is crucial for student success. By identifying career pathways and tracking students from grades 9 to 12, schools provide essential support to students. The goal of this work is to ensure every student is on track to graduate and transition successfully to their chosen career with confidence and career skills.

Congratulations to Central Alberta partners for their collaborative efforts to foster a culture of post-secondary preparedness, enabling students to smoothly transition into their desired career paths.

Team Members

Brianne Fletcher, Career Connections Coordinator from Chinook's Edge School Division bfletcher@cesd73.ca
Tracey Millar, Dual Credit and Off-Campus Divisional Lead Teacher with Red Deer Catholic Regional Schools

tracey.millar@rdcrs.ca

Kylie Kissel, Dual Credit and Career Pathways Coordinator at Wolf Creek Public Schools kylie.kissel@wolfcreek.ab.ca

Story of Practice #10: Edmonton Catholic Separate School Division (ECS): Promoting Opportunities in Aviation
(Recording 31:12 – 58:37)



Cheryl Shinkaruk, the Manager of Programs and Projects, and Tai Eng, a commercially licensed pilot who also serves as a teacher and dual credit instructor in the aviation program shared how

Acknowledgements

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Edmonton Catholic Schools (ECS) is creating integrated learning opportunities for their students.

Tai brought a unique perspective to the discussion by sharing his personal challenges in gaining flight experience. His insights prompted ECS to expand its aviation program to include avionics technology, providing students with an exciting dual credit opportunity to explore the intricate workings of what flies a plane.

By partnering with Prairie College, SAIT, and WestJet, ECSD has taken student learning to new heights. The collaborations have opened doors for students to receive one-on-one instruction in a 737 cockpit, as well as take courses in avionics system installation. This partnership has proven so successful that it has even been extended to include schools from across the area. These experiences can position students to pursue careers in Airline operations, the Canadian Armed Forces, Aircraft Electronics Specialists, Maintenance, Manufacturing, or Research and Regulatory Agencies.

Edmonton Catholic Schools' Promoting Opportunities in Aviation Story provided an exciting glimpse into the innovative ways that ECS is collaborating with business partners to offer integrated learning opportunities that allow students to explore the intricacies of aviation, including being a pilot, avionics technology, and broadening the high school career experience.

Team Member Cheryl Shinkaruk, Manager of Programs & Projects cheryl.shinkaruk@ecsd.net

Story of Practice #11: Lethbridge College and Palliser School Division: Partnership Pathways in Southern Alberta
(Recording 58:57 – 1:29:42)



A trio of speakers unveiled the transformative story of practice related to the "Partnership Pathways in Southern Alberta." Joelle Reynolds, the Associate Dean for Youth Initiatives at Lethbridge College, Paige Thornborough, the Academic Liaison Coordinator for Dual Credit and Exploratory Programs, and Jason Kupery, the Director of Learning at Palliser School Division, described some ground-breaking initiatives that are expanding the realm of dual credit and pathway programs.

The collaborative efforts between Lethbridge College and its partners started with a few schools or divisions and gradually grew into an Alberta Pathway Partnership known as PAS. Over the past year, more than 200 students have enrolled in dual

credit courses, and numerous students have participated in exploratory programs. Lethbridge College's strength lies in its scalability, allowing them to design programs for dual credit, exploratory experiences, and teacher outreach across a larger geographic area and various school divisions. The following table depicts the scope of program offerings:

Trades at LC	Phase 1: Intro to Trades	Phase 2: Trade Specific Cluster (choose one cluster)	Phase 4: Pre-Employment & College Programs (choose one program)
Cooking	Cooking	Cooking	Cooking
Baking	Baking	Baking	Baking
Electrical	Electrical	Hospitality	Hospitality
Wind Turbine	Wind Turbine	Electrical	Electrical
Powerline	Powerline	Wind Turbine	Wind Turbine
Carpentry	Carpentry	Powerline	Powerline
Plumbing	Plumbing	Carpentry	Carpentry
Welding	Welding	Plumbing	Plumbing
Automotive	Automotive	Welding	Welding
Heavy Equipment	Heavy Equipment	Automotive	Automotive
Parts Technician	Parts Technician	Heavy Equipment	Heavy Equipment
Agricultural Technician	Agricultural Technician	Parts Technician	Parts Technician
		Agricultural Technician	Agricultural Technician

Palliser School Division utilizes dual credit and pathway programs to support students with interests in CTS (Career and Technology Studies) courses. These programs complement classroom teaching and provide students with opportunities to further explore their interests. Students document their learning for future employers through a digital portfolio on My Blueprint. Student enrollment numbers have increased, and the division has expanded its offerings by identifying partners for the creation of additional career pathways.

Additionally, Lethbridge College offers a STEM Project focused on science, technology, environment, and mathematics. The project aims to provide teachers with tools to facilitate authentic learning experiences related to math and science for grades K-12.

Kudos to the Southern Alberta Partnership Pathways group for expanding dual credit and pathway programs, increasing student enrollment, and forging valuable partnerships.

Team Members

Jason Kupery, Director of Learning at Palliser School Division jason.kupery@pallisersd.ab.ca
 Joelle Reynolds, Associate Dean, Youth Initiatives at Lethbridge College joelle.reynolds@lethbridgecollege.ca
 Paige Thornborough, Academic Liaison Coordinator for Dual Credit and Exploratory Programs at Lethbridge College paige.thornborough@lethbridgecollege.ca

Story of Practice #12: Calgary Board of Education: Unique Pathways, Dual Credit and Exploratory Programming
(Recording 1:29:48 – 1:54:05)



In this presentation, the Calgary Board of Education shared multiple entry and exit points available for students to explore in their high school careers based on the Career Development

Model flow chart. Tim Kitchen, Specialist Unique Pathways, and Carolyn Mahovich, Supervising Teacher from the Calgary Board

of Education (CBE) shared examples from CBE's Exploratory, Internship, and Dual Credit programming that are providing diverse choices available to students.

CBE supports high schools by employing off-campus coordinators who play a crucial role in facilitating students' experiences beyond the traditional classroom setting. For example, these coordinators oversee the newly introduced work experience/internship positions, allowing students to earn credits while gaining valuable practical skills and a better understanding of their desired career paths. Alongside work experience, CBE also offers internships that provide a deeper focus on developing workplace skills and exploring potential career opportunities. One of the most unique exploration opportunities offered by the CBE is in the transportation field. Students have the chance to engage in activities related to automotives, autobody, rail, motorcycle maintenance, RV maintenance, and heavy equipment. This provides students with a strong introduction to the automotive industry and allows them to explore their interests.

CBE collaborates with post-secondary institutions, industry partners, and community organizations to provide a wide range of dual credit courses and pathways. These dual credit programs allow students to earn credits for the time they invest in work experiences. The aim is to help students transition meaningfully to post-secondary education or the workplace. Examples of dual credit courses include Applied Technology, Business Management, Criminal Justice Studies, Infection Prevention and Control, Introduction to Indigenous Studies, Introduction to Sports Management, Pre-Employment Carpentry, Pipe Trade, and Welding (1st Year Apprentice), Producing Horticulture Crops, Science of Health and Wellness, Solving Technology Problems, Veterinary Technical Assistant (Two Year Certificate), and Water Technology and the Environment.

Thanks to the Calgary Board of Education for providing students with unique pathways through their Dual Credit and Exploratory Programming, fostering personal growth, skill development, and diverse opportunities for academic and career exploration.

Team Members uniquepathways@cbe.ab.ca

Tim Kitchen, Unique Pathways Specialist

tkitchen@cbe.ab.ca

Tom Wong, Learning Leader twong@cbe.ab.ca

Peter Zajiczek, Learning Leader pdzajiczek@cbe.ab.ca

Carolyn Mahovlich, Learning Leader crmahovlich@cbe.ab.ca

Research to Practice

Questions for reflection and dialogue within your context.

1. How can school authorities ensure that students have diverse and meaningful work-integrated learning experiences in trades and technologies throughout their K-12 education?
2. How can school authorities collaborate with post-secondary institutions, employers, industry partners, and trade organizations to create a wide range of experiential learning opportunities for students interested in trades and technologies?
3. How can school authorities provide ongoing support and guidance to students during their work experiences, ensuring they have a positive and meaningful journey in trades and technologies?
4. How can virtual reality, simulations, or online platforms be leveraged to supplement hands-on experiences?

Additional Supports for System Leadership Capacity

- [Watch the full recording here](#)
- [Presentation Slides](#)
- [TAVE Strategic Framework](#)
- [TAVE Strategic Framework Learning Guide](#)
- [2022 Alberta School Authority Skilled Trades and Technologies Survey Report](#)
- [Career Education Task Force - Final Report March 2023](#)

