

Competencies for Life



TABLE OF CONTENTS

Execu	ıtive Summary	4
Defin	ing a LearningCITY	5
0	Certified Learning	
0	Non-Certified Learning	
0	Informal Learning	
The P	ath to a LearningCITY	7
Pilot	Scope	9
0	Project Management	
0	Roles and Responsibilities	
Progi	am Deployment	11
0	Impact of COVID-19	
0	Talent Development Partner Selection	
0	Pilot Tool Development	
Pilot	Evaluation	14
Key I	nsights	14
0	Talent as a Systematic Market	
0	Influence of Diverse Talent Development Market	
0	Lack of Enabling Competency Recognition	
0	Importance of Purpose-based Talent Development	
0	Operational Insights	
0	Essential Role of Verification	
0	Scaling Through Digitization	
0	Importance of Purpose-based Talent Development	
Path	Forward	17
0	Establish a Calgary Talent Backbone	
0	Harmonize Competency Assessment and Verification	
Appe	ndix	21
Endn	otes	28

































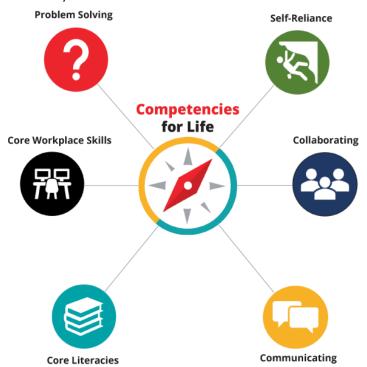
EXECUTIVE SUMMARY

Calgary is a city in transformation. To succeed, Calgary must be a city that learns and adapts faster and better than others. However, Calgary's strength in developing domain-specific expertise linked to energy related fields, is an embedded barrier to our city's adaptive capacity. This is because learning and adaptation is rooted, not in domain-expertise, rather it is rooted in *enabling competencies* such as curiosity, collaboration, problem solving and communications.

Competencies for Life

To become a city that learns fast and better than others, in March 2021, Calgary City Council approved the LearningCITY community pilot. This project piloted the introduction of the Competencies for Life (C4L), a unified set of 25 enabling competencies anchored in six clusters: problem solving, self-reliance, collaborating, communicating, core literacies, and core workplace skills.

The C4L project was led by a team of students from a range of postsecondary institutions and supported by diverse community partners, including the Calgary Public Library, the Genesis Centre, and the Centre for Newcomers.



The Competencies for Life

The pilot was broken into three phases:

Phase 1 (March – May): Define the scope of the project and confirm community partners

Phase 2 (June – July): Work with community partners to integrate the talent development tools into their programming.

Phase 3 (August – October): Evaluate the outcomes of the pilot.

Impact of COVID-19

The provincial government's compressed COVID-19 reopening had a dramatic impact on the ability of talent development partners to commit resources to support the implementation of the pilot. Most talent development partners shifted resources to preparing to reopen facilities. The pilot proceeded as scheduled but partners could only provide limited commitment to the program.

Insights

The pilot identified seven key insights:

- 1. The success of C4L will be driven by talent seekers adopting the model.
- 2. The C4L must be flexible to support diverse talent developers.
- 3. The critical role of enabling competencies is not recognized or prioritized.
- 4. C4L must be integrated with purpose-based talent development programming to maximize impact.
- 5. For C4L to achieve scale, a critical mass of partners must commit to C4L.
- 6. Harmonized assessment and verification are essential for C4L to achieve scale.
- 7. C4L can be scaled through digitization.

Path Forward

- 1. Establish an independent *Calgary Talent Backbone* to accelerate, coordinate and harmonize high-impact system-level initiatives.
- To maximize efficiency and adaptive capacity, the city's certified and non-certified talent development system must incorporate a consistent competency assessment and verification model.

Defining a Learning CITY

An unstable global energy market, combined with the structural impact of the pandemic, are contributing to seismic economic and social change in Calgary. ¹ The historical demand of the energy sector for skilled labour generated the highest concentration of high-tech workers in Canada and the second highest number per capita of small businesses and self-employed individuals in the country.² At 80 percent, Calgary ranks lowest (tied with Edmonton) amongst the six cities in the proportion of population who have completed a degree, diploma or certificate. However, at 25 percent, Calgary is six percent above the national average and ranks third in the completion of a university credential, behind Montreal and Toronto; but at six percent, Calgary is two percent below the national average for an apprenticeship or trade credential.

Though, Calgary possesses the highest proportion of graduates in energy specific science, technology, engineering, and mathematics (E-STEM) and business. This deep expertise reflects a vertical talent development system with deep domain-specific expertise in energy. For example, though we lead in E-STEM, Calgary's proportion of technical expertise in fields related to software and data science is less than half of other major Canadian cities.³ Moreover, the city's strength in E-STEM has come at the measurable expense of fields such as arts, design, communications, social services, humanities and social sciences including psychology, marketing and economics. The scope of these disciplines provides an important enabling for individuals, organizations ecosystems to adapt and move horizontally between domains in the face of disruption.

The risk of the current domain-centric talent development system becomes amplified when Calgary Economic Development forecasts that half of the jobs performed by Calgarians today could be at risk of automation over the next 20 years.⁴ The Calgary Economic Development and CityXLab report *Calgary on the Precipice* highlights this risk, as does the *Business Council of Alberta*, in their report, *Skilled by Design: A Blueprint for Alberta's Future Workforce*. The result is Calgary paradoxically is facing both a talent surplus and talent deficit.⁵ In response, the Government of Alberta has initiated *Vision 2030* to explore the evolution of postsecondary education in the face of this disruption.

This mismatch of competencies is not unique to Calgary or Alberta. The World Economic Forum forecasts that by 2022, 75 million jobs will be displaced across the leading 20 economies, while 133 million new jobs will be created in nascent sectors. It has been estimated that 50 per cent of employees globally will need to be reskilled or upskilled between 2018 and 2022.6 surprisingly, 91 per cent of human resource decision-makers view an employee's ability to adapt as a critical competency.7 The result is talent seekers are demanding people who possess the capacity to live with uncertainty, adapt to new roles and learn new competencies quickly. 8 These competencies transcend industries professions. If there were such a thing as a defining competency in the next decade, it would be adaptability.

Adaptive capacity is the ability to anticipate systematic changes and proactively reconfigure existing resources, or acquire new resources, to maintain a competitive advantage. Whereas resiliency presumes dominance of the external environment over the individual or institution, adaptive capacity posits that the individual or institution maintains agency. 10

Adaptable people can adjust to the dynamic context of the world today. Adaptability can be reactive, like how many are learning to live in a new reality during the COVID-19 pandemic. However, adaptability can also be proactive and intentional, characterized by anticipating change and planning our response in advance.

A city's adaptive capacity is anchored in the ability for its labour force to meet increasingly dynamic demands for new competencies. Moreover, increasing labour uncertainty forces individuals to rigorously maintain currency within their field or pivot to new fields. Thus, as a city, our challenge is to develop citizens not only for defined jobs or career paths, but who will also professionally thrive in a turbulent and dynamic world.

To become a city that adapts, we propose that Calgary must become a city that develops talent faster and better than others. To do so, talent development must systematically integrate three forms of learning: certified, non-certified, and informal (Figure-1).

A recent audit conducted by Calgary Economic Development and the CityXLab estimates there are **3000 organizations**, delivering **27,000** certified and non-certified talent development programs, and **2.7M** learning experiences. **92**

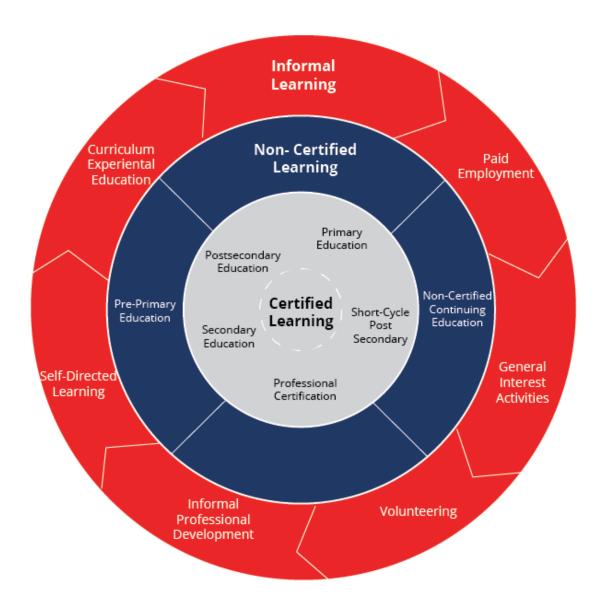


Figure-1: The Holistic Talent Development System

percent of talent development programming is non-certified, including creative arts, sports and recreation, and professional development.

Certified Learning

Structured and organized training, education or professional development experiences that are provided through an educational institution, in the workplace, or by a professional accrediting body. It is institution-bound and time-bound and results in formal certification by a formal institution, professional body, or sanctioned certifying agency. In Calgary, there are almost 600 certified learning providers, from elementary schools to universities, offering learning to 294,000 Calgarians annually. We have clustered these in eight sub-categories:

- 1. Primary education
- 2. Lower secondary education
- 3. Upper secondary education
- 4. Bachelor's or equivalent
- 5. Master's or equivalent
- 6. Doctoral or equivalent
- 7. Accredited short-cycle tertiary education (e.g., micro-credentials)
- 8. Professional certification (e.g., professional engineer).

Non-Certified Learning

Organized or systematic education, training, or professional development activities delivered by a

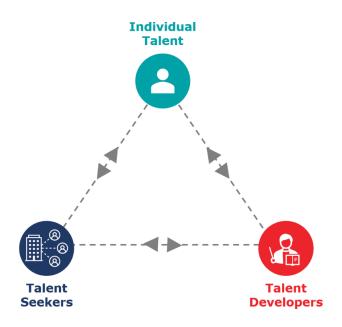


Figure-2: The Talent Market

variety of institutions, community organizations, or training agencies. This type of learning requires registration but does not result in an accredited certification by a government or professional body. Individual certificates may be provided by the service provider, independent of government or a professional body. There are an estimated 1600 non-certified learning providers in Calgary. We have clustered these in three sub-categories:

- 1. Early childhood education
- 2. Postsecondary non-tertiary education
- 3. Non-accredited short-cycle tertiary education (e.g., professional development, language training)

Informal Learning

The process of acquiring knowledge, skills, and values from daily experiences at home, in the community, or at work. The process may appear unorganized and unsystematic, but it is not necessarily unintentional in that people may seek out these experiences to enhance their individual or collective learning. Informal learning is the dominant learning channel in Calgary, exponentially larger than both certified and noncertified learning. However, quantifying informal learning is impossible as it incorporates not only the 155,000 commercial, social, and public organizations in Calgary, but also every book, documentary, podcast, blog, and household activity. Studies suggest that over 90 per cent of

Canadian adults engage in 10-15 hours of forms of informal experiential learning weekly. ¹⁹ We have clustered these in six sub-categories:

- 1. Curriculum-based experiential learning
- 2. Self-directed paid employment
- 3. Self-directed volunteering
- 4. Self-directed learning
- 5. Self-directed professional development
- 6. Self-directed learning resources

Table-2: Transitioning to a LearningCITY

Traditional Model	LearningCITY
Anchored largely to certified learning, where learning occurs within accredited institutions (e.g., schools or colleges). Age is the common variable to cluster individual cohorts.	Individual-centric. Talent development occurs across a web of certified, non- formal and informal learning providers.
Designed to certify every learner and deliver them to a common destination as efficiently as possible. Efficiency prioritization limits variance in curriculum.	Rooted in a personalized learning plan that remains anchored in certified learning but is augmented with diverse non-certified and informal learning.
Accredited by government or professional bodies. Additional forms of verification (e.g., references) is largely ad hoc.	Transition to a digital verification system supporting institutional, social, and evidentiary forms of verification with high levels of legitimacy.

The Path to a LearningCITY

This talent market is not based on the exchange of goods or services, rather it is based on the development and exchange of valued competencies. To consider this, we need to define the three central exchange partners in the market (Figure-2).

Individual Talent. Individuals who possess or seek to develop a competency.

Talent Developers: Organizations and individuals who facilitate development of competencies through certified, non-certified and informal learning.

Talent seekers: Incorporate organizations who require talent to generate a valued outcome (e.g., goods or services).

In this market, societal organizations define the competencies that are in demand and seek to acquire these competencies. Individuals who possess these competencies offer them to organizations for a negotiated price. The value of a competency is defined by demand and scarcity. Individuals who do not possess the demanded competencies will seek to develop them through certified, non-certified and informal learning. The underlying currency that enables this talent market to function is competencies. However, today's talent market is highly inefficient because it lacks a common precise understanding of the currency being exchanged. Without a common currency, organizations have difficulty acquiring the competencies they require, while both talent developers and individuals remain uncertain on the competencies in demand. Thus, introducing a common currency in the form of a communitybased competency model is essential to reducing the friction and inefficiencies in the current talent market.

Competency models emerged as a framework to increase the efficiency of the exchange in a talent market by developing a common competency vocabulary and a system to verify the competency. Competency models in general incorporate two-types of competencies. The first what we call domain-specific tvpe competencies (DSCs). DSCs are competencies you need to complete a specific job, whether it be welding, policy analysis or engineering. DSCs may incorporate role specific competencies, for example, the competencies required to be an accountant. They may also include industry specific competencies, for example, the competencies required to be an accountant in the oil & gas sector. Historically, DSCs were highly valued by talent seekers as they were essential to generating short-term economic value. The challenge is DSCs are highly contextual and possess a shorter lifespan than ECs.²⁰ In the past, a trade learned as a teenager could be developed and refined through a lifetime of experience and maintain its value. Today, DSCs often become dated and demand continual training to maintain their value. The primacy of DSCs is visible in every postsecondary institution which has entire schools, departments, diplomas, and degrees dedicated to developing specific domain-specific disciplines.

In contrast to DSCs, **enabling competencies** (ECs) (also known as soft, essential, or transferable skills) are foundational and enable an individual to succeed across a diverse range of personal and professional contexts.²¹ However, a lack of a common EC currency contributes to significant inefficiencies in the talent market.

Tour analysis provided a foundation to refine and test what we call the *Competencies for Life (C4L)*. The C4L are a composite of the leading 25 enabling competencies within six competency clusters (Figure-3). C4L possesses the potential to overcome the current inefficiency and friction in Calgary's talent market.

From a societal perspective, the C4L provides the ability to clearly communicate the competencies demanded. This in turn, provides individuals the ability to focus on developing these competencies. Lastly, it provides the ability for diverse talent developers from across the certified, non-certified and informal learning market to clearly articulate the competencies their programs develop. The implications of a common currency on certified, non-certified and informal learning partners cannot be overstated. The contribution by the thousands of sports, arts, and social organizations for the first time will be integrated and recognized as a critical dimension of the talent market. Moreover, it will recognize the critical contribution of certified learning programs, such as liberal arts,



Figure-3: Competencies for Life

in developing highly valued ECs. Table-3 summarizes the benefits of adopting the common currency of a C4L for each of the exchange partners in the talent market.

Moreover, it is important to emphasize that the critical role of ECs is as an enabler of DSCs. In other words, the value of ECs is related to the capacity they provide an individual to acquire and activate DSCs. DSCs are essential for generating economic value. However, DSCs are dynamic and possess an increasingly shorter lifespan and must be continually updated to maintain their value.²² Therefore, it is possessing the optimal level of both ECs and DSCs that seamlessly work together, which provides an individual the capacity to adapt, as the world around them changes.

Table-3: Benefits of Common Currency

Talent	Individual	Talent
Seeker	Talent	Developer
 Aligning the supply and demand of priority competencies. Accelerating the acquisition and retention of talent. Accelerating retraining and upskilling. 	 Accelerating employment transitions. Providing guidance to focus both formal and informal learning. Providing guidance on experiential learning. 	 Aligning talent development opportunities and outcomes to community priorities. Providing a framework to link informal talent development to community.

Pilot Scope

In March 2021, Calgary City Council unanimously approved a pilot to test the contribution of the C4L in navigating talent development pathways to support increased adaptive capacity and employability.

The pilot is designed to meet the following criteria.

- It must guide the development goals of Calgarians, enabling more efficient labour transition.
- It must be complementary to existing role or sector level DSCs models to maximize adoption.
- 3. It must be adaptable to enable it to be adopted across the diverse commercial, social, and public sectors.

- 4. It must be simple, to enable adoption by small and medium enterprises that make up over 90 per cent of the Calgary market.
- 5. It must provide support for diversity of talent development pathways including all forms of learning to guide effective scaffolding of competencies.
- 6. If deemed effective, it must provide guidance on how the C4L could be deployed at scale across diverse contexts.
- 7. Validating the ability of a common C4L to improve experiences and outcomes for community members.
- 8. Providing input and feedback to inform the refinement of the C4L.
- Enhancing our collective understanding of the in-community challenges and dynamics affecting our city's ability to support lifelonglearning and communicate about competency.
- 10. Developing robust relationships to further grow Calgary's talent market.
- 11. Identify potential pathways to future scaling of the pilot.

Project Management

Critical Path

The three phased critical path ran from March to October 2021:

Phase 1 (March – May): This phase defined the project oversight, refined the scope of the pilot, recruited community partners and prepared and tested tools to support the pilot.

Phase 2 (June – October): This phase deployed the C4L in Northeast Calgary via a select number of talent market partners and talent seekers.

Phase 3 (August – October): This phase evaluated the outcome of the pilot and recommendations for next steps.

The project team includes five stakeholder groups:

- 1. Calgary Economic Development
- 2. C4L advisory team
- 3. C4L project team
- 4. Talent development partners
- 5. Talent seeker partners

Page 9

Roles and Responsibilities

Calgary Economic Development

Calgary Economic Development (CED) is accountable to City Council as the program champion. CED directly employed the C4L student team. Dexter Lam, Talent Manager is the CED project lead.

C4L Advisory Team

The C4L advisory committee included a diverse representative from across the talent market, including educators, administrators, community partners, and talent seekers. The advisory committee provided guidance to the project director in areas related to project scope, structure, implementation, and scaling.

- Alex Bruton Learning Experience Catalyst at SAIT
- Janet Lane Director of the Human Capital Centre at Canada West Foundation
- Jennifer Konopaki Executive Director of Sport at WinSport
- Paul Bourque Manager, LR/ER of Integration
 & Planning at Suncor
- Sharon M. McIntyre Consultant & Educator in Marketing, Entrepreneurship & Innovation from Mount Royal University and President & Founder of New Cottage Industries & Co.
- John Taylor Off-Campus Coordinator at Livingstone School Range District
- Sarah Imran Director of Career Services at Mount Royal University
- Pablo Franco Team Lead, Career & Employment Services at Centre for Newcomers
- Ayotunde Kayode Director of Community Relations & Mentorship at Centre for Newcomers
- Eleanor Chiu CFO, Trico Group

C4L Project Team

This project is led by Calgary Economic Development with the support of Mount Royal University's CityXLab. The project is being led by Dr. David Finch of Mount Royal University and the Director of the CityXLab. The project team is responsible for:

Recruiting project partners

- Identifying partner's needs to support the implementation of the pilot.
- Developing partner tools and supports to enable the implementation of the pilot.
- Developing a scaling strategy if the pilot was determined to be a success. This included identifying areas for refinement.
- Facilitating an evaluation of the pilot and preparation of a final report for submission to CFD.

Talent Development Partners

Talent developers incorporate all educators, facilitators, coaches, and mentors from across certified, non-certified, and informal talent market. Talent development partners are responsible for:

- Identifying existing program(s) they offer that best align to the testing the goals of the pilot. Partners may also have the option of choosing to develop and pilot a new program as part of C4L.
- Work with the project team to conduct a competency development audit of the pilot programs relative to the 25 discrete enabling competencies included in the C4L being utilized for the pilot. Partners had the option of delegating this competency audit to the project team.
- Work with the project team to identify the tools and supports required to support the implementation of the pilot within their defined program(s). Partners had the independence to identify the level of support they would like from the project team to support the successful implementation.
- Identify program participants who may be optimal individual "job seeker" candidates.
- If applicable, introduce the project team to talent seeker partners they may currently collaborate with.
- Work with the project team to conduct an ongoing evaluation of the pilot and identify opportunities for real-time or future refinement.

Talent Seeker Partners

The pilot sought to engage a diverse range of talent seeker partners who are actively recruiting employees. Talent seeker partners are responsible for:

- Identifying existing roles that best align to the testing the goals of the pilot.
- Work with the project team to conduct a competency audit of the selected roles. Pilot programs relative to the 25 discrete enabling competencies included in the C4L being utilized for the pilot. Partners had the option of delegating this competency audit to the project team.
- Work with the project team to evolve the job description/recruitment posting to align to the terminology included in the C4L.
- Work with the project team to conduct an ongoing evaluation of the pilot and identify opportunities for real-time or future refinement.

Job Seeker Partners

The pilot engaged a diverse range of Calgarians actively pursuing employment. The goal of engaging job seekers is to explore the implications of aligning their current competencies to the terminology embedded in the C4L and/or identifying competency gaps that they need to develop to achieve their personal or professional goals. Job seekers were identified through talent development program partners. The role of job seekers was:

- Worked with a talent development partner and/or the project team to conduct a competency audit of themselves relative to the 25 discrete enabling competencies included in the C4L.
- Worked with a talent development partner and/or the project team to align their employment tools (e.g., resume, LinkedIn profile) to the terminology and competencies included in the C4L.
- Work with a talent development partner and/or the project team to conduct an

ongoing evaluation of the pilot and identify opportunities for real-time or future refinement.

Program Deployment

Impact of COVID-19

26th, the provincial On May government announced their multi-phased COVID-19 reopening plan, with the goal of having the province fully reopen by July 1st. The C4L pilot launched on June 7, 2021. The compressed schedule for the reopening had a dramatic impact on the ability of talent development partners to commit resources to support the implementation of the pilot. As a result, most talent development partners immediately shifted resources to preparing to reopen facilities and face to face programming for the first time since Fall 2020. In most cases, this reopening required a total revamping of existing partner programs to reflect the previous 15-months of COVID restrictions. Similarly, talent seekers focused their resources on rehiring staff to support their reopening and were unwilling to commit resources to support the introduction of new initiatives. As a result, the pilot proceeded as scheduled between June and October 2021, but additional support was allocated to minimize internal partner resources. Examples of this included actively leading C4L programming and integration from some partners. Though COVID-19 impacted both the breadth and depth of the pilot, the program provided sufficient learning.

Talent Development Partner Selection

In March and April 2021, the C4L team met individually with a diverse range of talent developers, primarily based in Ward 5 in Northeast Calgary. Five criteria were used to identify candidates. Refer to Table-4.

Table-4: Talent Developer Section Criteria

Cri	iteria	Rational
1.	Actively providing talent development programming to those aged 16-39.	Enable tools to be consistent and focus on the C4L link to employability goals.
2.	Partners who are intrinsically motivated to invest time into integrating the C4L pilot into their existing programming.	Pilot partners who were prepared to commit to investing resources to integrate into existing programming.
3.	From different parts of the talent development market.	Test how the pilot performed across different parts of the market.
4.	Servicing diverse audiences.	Test how the pilot performed across different audiences.
5.	Optimally based in Ward 5.	Councillor for Ward 5 championed the proposal.

Based on these criteria, the Genesis Centre in Ward 5 was defined as an anchor partner. The management of the Genesis Centre introduced us to a range of community partners-based at Genesis. Refer to Table-5.

Table-5: C4L Community Partners

Partner	Partner Program(s)	Audience	Scope
Antyx	Youth programming in the arts	Youth and Young Adults	Integrate language into programming, website descriptions, and job postings.
Be a Changent	Summer Camp	Youth	Integrated into two camp cohorts.
Calgary Public Library	ESL Conversation Cafe	New Canadians Volunteers	Incorporate language into conversation discussion related to workplace skills.
Centre for Newcomers	Professional Development Workshops	New Canadians	Integrate Language into workshops and materials.
Genesis Centre	Develop new program	Youth	Pilot of purpose-based learning program in partnership with Nelson Mandela High School.
Joy for Jobs	Consultation	Youth	Advised on refining purpose-based learning to support students in grade 10 to 12.
Legends Basketball	Leagues	Youth	Integrated into league materials and additional player support.
Livingstone Range School District	Potential integration into Career and Life Management.	Youth	Collaborated to refine tools to support piloting program in the Career and Life Management (CALM) module. This is ongoing.
Mount Royal University	Consultation	Continuing Education	Integration into existing continuing education program.
Nelson Mandela High School	Potential integration into Career and Life Management.	Youth	Pilot of purpose-based learning program in partnership with Genesis Centre.
School for Advance Digital Technology (SAIT)	Consultation	Retraining Adults	Alignment with new program development.
Trellis	Potential integration into support programs	Youth	Integration into existing programs and additional client support.
WinSport	Consultation	Youth Volunteers	Opportunity to align programming and volunteering program to tangible competency outcomes.

Table-6: Pilot Tool Library

Tool	Description	
C4L Website	Central one stop location to learn about and have support for the competency model for talent developers, talent seekers and individuals.	
C4L Learner eGuidebook	An applied PDF guide to provide individual learners an overview on the C4L. Includes diverse examples how each competency is used in both a personal and professional context.	
C4L Learner eGuidebook (Simplified)	A simplified language version of the applied PDF guide to provide individual learners who may have difficulty comprehending the full version. This includes youth and ESL learners.	
C4L Talent Developer eGuidebook	An applied eBook PDF guide for talent developers provides approaches for incorporating the C4L in existing programming or build it out as a standalone programming.	
C4L Talent Seeker eGuidebook	An applied eBook PDF guide for talent seekers provides approaches for incorporating the C4L in talent recruitment and assessment.	
Guide to Becoming a Competency based Organization	A six-step guide to the integration of competencies into all aspects of your organization.	
Designing YOU for High School Students	Step by step guide and tools to support designing and implementing a personal and professional mission. This guide is simplified to target those in high school.	
Designing YOU for Advanced Learners	Step by step guide and tools to support designing and implementing a personal and professional mission. This guide is adapted to target those in postsecondary education.	
C4L Teaching Modules	Teaching notes and PowerPoint presentations that can be inserted into existing program and course materials. Assessment tool for instructors to provide feedback to the C4L team.	
C4L Video Short Series	Short videos for the six major clusters of competencies and how they are applied personally and professionally.	
C4L Mini-Podcast Series	Short mini podcasts by visible Calgarians on how enabling competencies impacted their life. Each short is intentionally focused on one of the 25 competencies.	
C4L Quizzes	Support for volunteers to explore their personal and professional goals and how the volunteering experience contributes to their competency development.	
C4L Social Media Templates A how-to-guide for a 7-part series of short-form posts for the C4L model to be a via partner social media platforms.		
C4L Marketing Tools	This tool was created to help promote C4L through Marketing Outreach Articles. This support includes a series of long form articles to be shared internally and externally.	
New Economy Live Webinar	This hybrid event explored the future of Calgary as a city that embraces disruption and is a city that learns its way forward. A city where people seek out continuous learning opportunities to fuel their insatiable curiosity, who have the agility to create shared prosperity from an ever-changing world.	

Pilot Tool Development

In April and May, the team consulted potential partners through workshops and one-on-one meetings on the support tools they would require implementing the C4L pilot. This consultation identified the following guidelines for tool development:

- 1. **Audience Specific:** Tools must be contextualized for each of the three audiences (talent developers, talent seekers, learners).
- Simple Language: Tools must use simple language and examples so they can be used for those whose English is a second language (ESL) and for youth. This includes being very precise on the value of the C4L.
- Applied Examples: The definitions of the competencies needed to be given in multiple contexts to make them more understandable. The examples need to be relatable and personal.
- 4. **Seamless Integration:** Tools must be able to be embedded into existing tools and program supports.
- 5. **Interactive:** Written tools must be supported by more interactive tools, such as videos and podcasts. Similarly, the tools need to be accessible from a variety of platforms (e.g., laptop, mobile devices) supporting diverse audiences.

Based on this process, a series of digital tools and supports were developed by the C4L team. During this process, draft versions of the tools were provided to partners for input and feedback so they could be refined. Refer to Table-6 on the previous page for a profile of the full tool library developed to support the pilot program.

Pilot Evaluation

Two data sources were used to evaluate the pilot outcomes, identify key insights and recommendations for a path forward:

Project Journals

Each project coordinator kept a weekly journal throughout the pilot. The goal of the journal was to reflect on partner experiences and feedback for each week. This timely reflection on partner experiences allowed the project team to synthesize key insights across all partners and stakeholders.

Partner Interviews

From August to November, each of the community partners was interviewed by their project coordinator. For consistency, these interviews used a semi-structured interview protocol to enable partners to provide both feedback on the pilot, and recommendations for a path forward.

Key Insights

Insight 1: Talent as a Systematic Market

The foundation of the *LearningCITY* 2025 model is that there is a systematic talent development market incorporating talent developers, talent seekers and individuals. The currency of this market are competencies.

This pilot confirmed support for a common competency model to support the market and accelerate Calgarian's capacity to adapt in the face of macro-level economic disruption. For this reason, participating talent development partners reinforced the importance that a critical mass of Calgary talent seekers must concurrently adopt the C4L framework to incentivize both talent developers and individuals to invest in this common currency. Thus, the pull of talent seeker demand is critical for C4L success. This insight suggests that the future of C4L is binary. Either a critical mass of the full talent market invests and commits to adopting the C4L, or the market proceeds with the fragmented status quo. A marginal commitment to C4L by players in the market will not achieve the minimum threshold required for the model to succeed.

Insight 2: Influence of a Diverse Talent Development Market

Pilot partners were intentionally identified from across the open talent development market, including certified, non-certified and informal learning partners. In Calgary, this market is composed of an estimated 3,000 certified and non-certified talent development organizations providing 27,000 programs annually.

This diversity of partners was designed to provide insights into the opportunities and challenges facing a broader deployment across the open talent development market. Including partners from across the continuum identified several key insights:

Unstructured Programming

The more unstructured the programming (e.g., arts, sports) the easier it proved for partners to

integrate the C4L into activities. This was because few of these partners had a pre-existing competency model or taxonomy that was being displaced. However, few of these organizations had the incremental resources to customize the supports for their programs. As a result, most of these talent development partners leveraged the turnkey tools and supports for their initiatives.

Structured programming

Certified and non-certified organizations with more structured programming, often embedded a pre-existing competency model or taxonomy. However, we found few partners had a deep commitment to a current model or taxonomy. Those partners that have already adopted a competency model or taxonomy in their programming, valued the support provided to translate their current model to the C4L. This transition was not difficult as most existing models align conceptually to the C4L but lacked consistent terminology. When the C4L team supported the translation of their current model to the C4L, it showed partners that the transition to C4L was not a resource intensive overhaul of programming or existing tools, but rather a realignment to a coherent and consistent framework.

Insight 3: Lack of Enabling Competency Recognition

One of the LearningCITY core principles is the pivotal role of enabling competencies in supporting an individual's adaptive capacity. However, one of the issues identified in this report was a lack of explicit recognition of the development of enabling competencies. The pilot results support this assertion as partners in less structured programming (e.g., recreation) were forced to reflect on their programming and isolate specific C4L that were being developed. In this case, it wasn't that C4L influenced a dramatic change to the delivery of current programming, rather, it created a structured mechanism for talent developers and individuals to reflect on their learning to isolate specific competencies they may possess or are being developed.

Insight 4: Importance of Purpose-Based Talent Development

A foundational principle of *LearningCITY* is the importance of transitioning to a personalized purpose-based talent development anchored in empowerment, mission mapping and experimentation. Purpose-based talent development inverts traditional learning, by putting the individual, not the talent developer, at

the centre. The individual can no longer be a passive passenger in a system fundamentally designed to maximize efficiency. Such a model recognizes that talent development is a result of experience and reflection in a variety of educational contexts. As a result, an individual's development pathway transitions from a generic ladder to a purpose-based model. However, purpose-based talent development requires individuals to develop a comprehensive personal "mission" (i.e., learning plans that lead to an intended outcome), which they will test and refine over time. A mission will empower learners and allow them to measure how their talent development path is serving them as the world changes around them. A mission enables learners to identify and prioritize the skills required for success.

A key component is the development of an individual's "mission map." The mission map can be organized around five components: (a) learning resources, (b) employment experience, (c) community/volunteer experience; (d) contextual experience; and (c) relationships (e.g., professional, and personal mentors).

Given the narrow scope of the C4L pilot, purposebased talent development was incorporated on the periphery to provide additional context to learners on how C4L impacts them personally. However, it became apparent in our early discussions with talent-development partners that tools to support purpose-based talent development were critical to both individuals and partners. These tools provided the incentive for individuals (and the partners supporting them) to invest in selfexploration and establish broader life and career goals and identify associated competency gaps. Without being integrated as part of a broader purpose-based talent development process, the C4L pilot lacked the required incentive for an individual to invest their time in the process.

Based on this, the C4L team spent considerable time adapting existing life and career planning tools (originally designed for postsecondary students) to support different audiences, including youth and ESL. In summary, to have maximum impact, the expansion of C4L must be integrated into a broader program to support the navigation of purpose-based talent development.

Insight 5: Operational Insights

The Importance of Sustained Commitment

The adoption of C4L was accelerated by partners who were intrinsically motivated because they saw

a direct benefit to their organization and clients. As noted, all community partners in April and May demonstrated a high-level of commitment and enthusiasm to the program. This included participating in a workshop and to individual discovery meetings to identify specific programs, audiences and tools who would benefit from the adoption of C4L. This process allowed the C4L team to understand their program, as well as signalling to partners to have confidence experimenting with the integration of C4L. This discovery process provided the C4L team access to real-time feedback, allowing us to update or programming modify for other throughout the pilot. However, as noted, with the accelerated COVID-19 reopening announcement by the provincial government on May 26th, all partners focused their limited resources on their reopening plans. The compressed timeline for the reopening surprised many community partners and led to having them to shift their focus and resources instantly to the priority of reopening. same constraint also impacted the recruitment of talent seeker partners. As a result, few partners allocated the required resources to sufficiently deliver on the goals of the pilot. For this reason, it must be acknowledged that COVID-19 will continue to impact the operational capacity of all community partners, and therefore, must continue to be factored into potential future phases.

Organization Culture

Organization culture played an important role in the deployment of the pilot. Many organizations in this sector lack either a culture of experimentation or the resources to experiment, and therefore sought a "plug and play" model to seamlessly adopt. However, the pilot was designed to be iterative and experimental and encourage partners to test the value of different approaches. Those organizations that possessed this experimental culture, refined their executions throughout the pilot to optimize it for their audience.

A Final Balance

The pilot highlighted a balance between partners wanting to adapt the C4L for their needs, without having them dilute the consistency at the core of C4L. This is because every partner integrated C4L into their programming in unique ways that aligned to their program goals and audiences. For example, though not part of the original pilot scope, numerous partners choose to deploy the model to youth (age 12-16). In many cases, these

partners chose not to use the full C4L model, rather instead focusing on a narrower set to allow youth to understand its applicability in their lives. If C4L is deployed to the full market, this balancing act will be amplified with an increasing range of partners and audiences. As a result, we recommend future deployment be phased with partners from targeted clusters (e.g., new Canadians, creative, recreation). This will ensure C4L tools and supports are developed to meet the unique needs of this cluster. Moreover, it will provide a natural support network for "like" partners to benefit from shared learning.

Impact of Seasonality

Program and resource seasonality is a significant factor for many talent development partners. A consensus of partners was that summer is a very difficult time of year to introduce new programming. Most partners recommend that a broader deployment allow each partner to identify the timing that aligns best with their programming and resource availability.

Insight 6: Essential Role of Verification

The pilot was designed to test the value and operational process for adopting a common taxonomy for enabling competencies. This scope excluded the development and introduction of mechanisms to assess and verify the existence of the C4L. However, it became apparent during the development phase of the pilot with community partners that assessment was an essential requirement to understanding and applying the C4L. Through the consultation process, talent development partners asked for specific applied examples of how a competency was used for different tasks. However, to provide even the most basic examples, required the development of a three-tiered model to demonstrate how the continued development of a competency contributed to high-order task completion.

For the C4L to meet a critical mass threshold of the talent market, any future investment in the C4L must incorporate a rigorous assessment and verification mechanism. Verification may be presented in the form of awarding of a community-based micro-credentials related to one or more of the competencies. A community-based micro-credentials (CBMC) are micro-credentials that accelerate the development of competencies aligned to the economic development priorities of a region or city. As they are rooted to the community, CBMCs are not proprietary or restricted to a single talent development

organization but can be offered by a variety of talent developers to accelerate the awareness and value of CBMCs by talent seekers.

This assessment and verification model would require sufficient flexible to be deployed in two primary contexts:

- The mechanism must allow those who currently possess a given competency to have it assessed, verified and be awarded the CBMC. This would be similar to the prior learning assessment and recognition (PLAR) mechanisms commonplace in many institutions, trades, and professions.
- The mechanism must be flexible to be embedded into programming designed to develop this competency. Completion of the program would require the assessment, verification and awarding of the CBMC.

Where the deployment of C4L CBMCs will vary from other models is its scale. The narrower assessment and verification mechanisms standard in trades and a professional context (e.g., Project Management Professional certification), do not face the scale and scope required for C4L. C4L assessment and verification to achieve the critical mass required to become recognized and accepted, must ultimately assess, verify and awarding of CBMCs in hundreds of thousands of Calgarians. However, the risk is that if this mechanism is not rigorous, the C4L CBMCs will lack legitimacy and dilute its value as an essential common currency in the talent market. LinkedIn endorsements are an example of a mechanism that lacks both assessment and verification, and as a result, play no credible role in the market. A C4L mechanism at scale would incorporate a peer assessment mechanism, where individuals would be accredited to assess, verify and award C4L CBMCs.

Insight 7: Scaling through Digitization

A scaled deployment of C4L will be required to shift from a largely manual process adopted in the pilot, to a process that is largely digitized and turnkey. Based on the results of the pilot, we recommend this incorporate three-phases of support.

Phase 1 - Discovery: The first phase is the discovery phase as discussed earlier. The goal of this phase is for partner candidates to evaluate whether they are an optimal fit for C4L. We anticipate this process can be largely digitized and incorporate a self-assessment process. At the

conclusion of this phase, C4L candidate can choose to apply to become a C4L community partner.

Phase 2 – Onboarding: The next phase is a structured onboarding process including advising partners on how to best adapt the C4L for their unique program or audience. We anticipate onboarding delivered through an asynchronous C4L onboarding module. We recommend onboarding be in structured cohorts and include optional live webinars focusing on key themes. The live webinar model enables community partners to ask questions and receive support in identifying best practices to integrate the C4L into their program. Webinars will be recorded and available asynchronously in the resource centre. Based on the pilot, potential webinars may include:

- Integrating C4L into youth programming
- Integrating C4L for ESL
- Integrating C4L to improve employment outcomes
- Integrating C4L into the arts
- Integrating C4L into sports and recreation
- How can learners promote their C4L?
- Integrating C4L to improve recruitment and retention

Phase 3 – Support: The final phase is ongoing support. The pilot demonstrates that once a partner has completed the onboarding phase, the required ongoing support is limited.

This should be designed as a scalable digital platform that enables individuals to explore professional, personal and learning pathways with curiosity and intentionality. This platform must be institution agnostic and enable individuals to consolidate a variety of forms of verification, including institutional verification (e.g., education; professional); evidentiary verification (e.g., portfolio, CBMC); advocacy verification (third-party assessments).

A Path Forward

Based on the insights of the pilot project, the C4L project team proposes two recommendations.

Recommendation 1: Establish a Calgary Talent Backbone

The pilot identified both an interest in, and a need for an efficient, city-wide talent market requires high-level coordination between many stakeholders. For this to happen, there must be intentional processes to advance harmonization, collaboration and shared learning across the full talent market.

As a result, we recommend establishing the *Calgary Talent Backbone*, a backbone entity accountable for developing, acquiring, retaining and mobilizing talent to deliver on the goals of *Calgary in the New Economy* (Refer to Figure-4).

This recommendation is foundational transitioning from a city that considers competencies at an organizational, not systemlevel. In its backbone role, this body will facilitate alignment on a competency demand forecast, and a system-level strategy to meet this demand. This will transition Calgary from a city currently defined by fragmented organization-level initiatives, to prioritizing initiatives (e.g., C4L) aligned to shared system-level goals. For this reason, recommend this body be structurally independent of any existing talent developer or civic body to ensure it has the autonomy to focus on systemlevel solutions. To expand capacity and efficiency we recommend that the *Calgary Talent Backbone* be staffed by secondments from both talent developers and talent seekers.

In summary, we propose that the *Calgary Talent Backbone* focus on four priorities:

1. Future Focused

- The backbone will be responsible for conducting annual competency market supply – demand forecasts. This will provide essential guidance to talent developers on emerging priorities and allow them to maximize their capacity.
- Facilitate collaboration and harmonization across the talent market to deliver on demand forecast and other market dynamics.

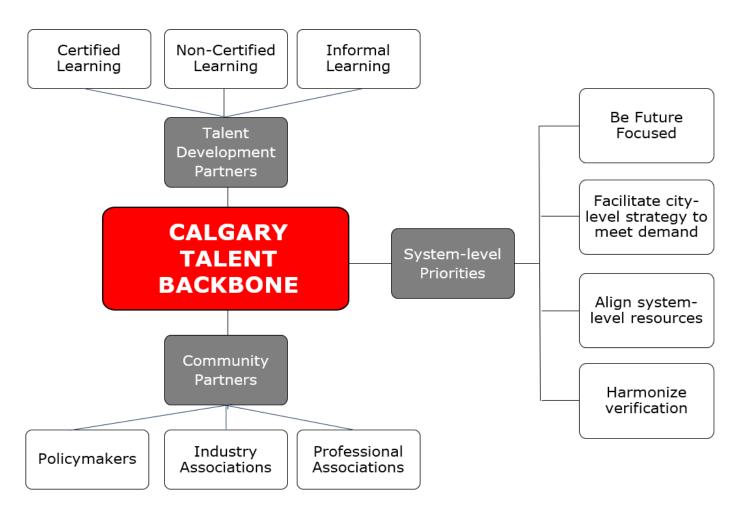


Figure-4: Calgary Talent Backbone

 Introduce structures to accelerate the exponential expansion of experiential learning across the full market.

2. Facilitate System-level Strategy

 Facilitate and manage a multi-year strategy to deliver on competency forecasts across all certified, non-certified and informal talent developers.

3. Align System-level Resources

 Harmonize the resources of the commercial, social, and public organizations to deliver on the competency forecast. Scope includes city-level initiatives related to talent attraction, retention and development.

4. Harmonize Verification

 The C4L pilot highlighted the essential role of competency verification as part of a broader city-level competency strategy. (Refer to recommendation 2).

Recommendation 2: Harmonize Competency Assessment and Verification

The pilot confirmed that harmonization of the talent market is anchored in talent seeker demand. In other words, if a critical mass of talent seekers demand X, the talent developer and individual talent will adapt to meet this demand.

This second recommendation proposes piloting the introduction of C4L CBMCs as a harmonizing mechanism designed to achieve the critical mass essential to incentivizing talent developers and individuals to adopt the C4L. The CBMC pilot will test the following questions:

- 1. What role do different forms of evidence play in the competency verification process?
 - o Evidence-package
 - Social verification
 - Assessment/ testing verification
- 2. How can diverse talent developers collaborate in a shared C4L CBMC model?
 - o Certified talent developers
 - Non-certified talent developers
 - Role of informal talent developers
- 3. How can CBMCs be integrated into existing talent development programming?

- Stacked into summative credentials (e.g., certificate>diploma>degree).
- 4. Who should be able to certify the competencies required to grant C4L CBMCs?
 - How will certifying organizations be trained?
 - How will certifying organizations be rewarded?
 - How will certifying organizations be included in CBMC development and CBMC competency identification processes?

APPENDIX-1: TALENT MARKET

Talent Development Cluster	Talent Development Domain	Example	Service Provider
Certified Learning	Primary education	Elementary school	Calgary Board of Education
Structured and organized training, education or professional development experiences that are provided through an educational	Lower secondary education	Junior high	Calgary Catholic School District
institution, in the workplace, or by a professional accrediting body. It is institution-bound and time-bound and results in formal	Upper secondary education	High school	Calgary Board of Education
certification by some formal institution, professional body, or sanctioned certifying agency.	Bachelor or equivalent	Bachelor of Business Administration	Mount Royal University
	Master or equivalent	Accelerated MBA for Business Graduates	Queens University (in Calgary)
	Doctoral or equivalent	PhD	University of Calgary
	Accredited short-cycle tertiary education (e.g., microcredentials)	Pivot-Ed	Bow Valley College
	Professional certification	Project Manager Professional	Project Management Institute
Non-Certified Learning Organized or systematic educational, training, or professional development activities delivered by a variety of institutions,	Early childhood education. Refers to educational programming for children before they enter Grade 1. ECS includes both Pre-Kindergarten programming dedicated to children who require additional supports and Kindergarten	Montessori Preschool	Calgary Montessori
community organizations, or training agencies. This type of learning requires registration but does not result in an accredited certification by a government or	Postsecondary non-tertiary education	Dale Carnegie Sales Training: Winning with Relationship Selling	Dale Carnegie of Southern Alberta and Saskatchewan
professional body. The service provider may provide individual certificates, independent of government or a professional body.	Non-accredited short-cycle tertiary education (e.g., professional development. Language training)	Arts Combo for Adults	Wildflower Arts Studio
Informal Learning The process of acquiring knowledge, skills, and values from daily experiences at home, in the community, or at work. The process may appear unorganized and unsystematic, but it is not necessarily unintentional in that people	Curriculum-directed experiential learning. Inclusive of Applied Research Projects; Apprenticeship; Co-operative Education alternating and co-op internship models; Entrepreneurship; Field Placement; Internships; Mandatory Professional Practicum/Clinical Placement; Service Learning; Work Experience	Web development practicum embedded in the web-developer certificate	SAIT

may seek out these experiences to enhance their individual or collective learning.	Self-directed paid employment	Summer job	Self-directed
	Self-Directed volunteering	Volunteering	Self-directed
	Self-Directed general interest activities inclusive of hobbies, household activities, recreational sporting activities, arts, culture etc.	Go to the Zoo	Calgary Zoo
	Self-directed professional development. Inclusive of communities of practice; Peer to Peer learning; Coaching/Mentoring; Networking events	Business after-hours	Calgary Chamber of Commerce
	Self-directed learning resources. Inclusive of Video; Podcast; Internet search; Books; social media	"Own the Room" Film	National Geographic

APPENDIX-2: C4L DELIVERABLES

Action	Description		
Pilot Partner Identification	Identify a representative sample of talent market partners to enable the testing of the prototype C4L.		
Refine C4L	Refine the C4L. Explore pathways to measuring and assessment.		
Prototype Model Scope	 What is the minimum viable product required for executing the pilot of the Calgary Mode? For the pilot we focused only on embedding the definitions of the 25 competencies in the C4L. This first pilot excluded introducing competency levels, assessments, micro-credentials or governance. How can we ensure the investment made in developing supports for the pilot could be leveraged for future scaling? 		
Pilot Research	Research the tools that are used to deploy and embed competency modes. 1. Tools for talent seekers? Tools for job seekers? Tools for talent development partners? 2. What mediums are most effective? (Digital vs. Print vs. Other). 3. Tools to support purpose-based talent development and mission mapping. 4. What evidence is there that these tools worked? 5. What does innovative and great look like?		
Develop Communications Strategy	Revisit stakeholder goals to determine the strategy, consider a content calendar and the communications roles of partners involved - how can it work together for maximum reach and impact?		
Develop Program Tools	Design tools and supports based on outcome from above research and strategy.		
Training	Conduct training sessions for all program partners.		
Program Evaluation	Conduct comprehensive evaluation from all partners to identify impact of program and paths to improve and scale.		
Prepare Final Report	Prepare report on pilot findings and a potential path to scaling the principles of the C4L.		

APPENDIX-3: ORGANIZATIONAL ROLES & RESPONSIBILITIES

Role	Responsibilities
Calgary Economic Development	 Accountable to CED and City Council for overall program. Manages internal CED administration. External CED student contractors report directly to the program champion on internal CED administration.
C4L Advisory Committee	The C4L advisory committee includes diverse representatives from across the talent market, including educators, administrators, community partners, and talent seekers. The advisory committee provided guidance to the project director in areas related to project scope, structure, implementation, and scaling.
C4L Project Team	 Recruiting project partners. Identifying partner needs to support the implementation of the pilot. Developing partner tools and supports to enable the implementation of the pilot. Developing a scaling strategy if the pilot was determined to be a success. This included identifying areas for refinement. Facilitating an evaluation of the pilot and preparation of a final report for submission to CED.
Talent Development Partners	 Identifying existing program(s) they offer that best align to the testing the goals of the pilot. Partners may also have the option of choosing to develop and pilot a new program as part of C4L. Work with the project team to conduct a competency development audit of the pilot programs relative to the 25 discrete enabling competencies included in the C4L being utilized for the pilot. Partners had the option of delegating this competency audit to the project team. Work with the project team to identify the tools and supports required to support the implementation of the pilot within their defined program(s). Partners had the independence to identify the level of support they would like from the project team to support the successful implementation. Identify program participants who may be optimal individual "job seeker" candidates. If applicable, introduce the project team to talent seeker partners they may currently collaborate with. Work with the project team to conduct an ongoing evaluation of the pilot and identify opportunities for real-time or future refinement.
Talent Seeker Partners	 Identifying existing roles (s) that best align to the testing the goals of the pilot. Work with the project team to conduct a competency audit of the selected roles. Pilot programs relative to the 25 discrete enabling competencies included in the C4L being utilized for the pilot. Partners had the option of delegating this competency audit to the project team. Work with the project team to evolve the job description/ recruitment posting to align to the terminology included in the C4L. Work with the project team to conduct an ongoing evaluation of the pilot and identify opportunities for real-time or future refinement.
Individual Job Seekers	 Work with a talent development partner and/or the project team to conduct a competency audit of themselves relative to the 25 discrete enabling competencies included in the C4L. Work with a talent development partner and/or the project team to align their employment tools (e.g., resume, LinkedIn profile) to the terminology and competencies included in the C4L. Work with a talent development partner and/or the project team to conduct an ongoing evaluation of the pilot and identify opportunities for real-time or future refinement.

APPENDIX-4: PROJECT TEAM ROLES & RESPONSIBILITIES

Role	Responsibilities
C4L Program Director	Reports to CED program champion.
	 Supervises C4L program manager. Support C4L development coordinator, and communications coordinator.
	Lead partner recruitment.
	Oversee student team and development of all supports and tools during the development phase of the project.
	 Host program development (April/ May) and evaluation (August/ September) workshops Development of C4L and associated supports (April/ May) Development of program evaluation tools Participate in weekly C4L project meetings. Lead evaluation and development of final report based on conclusions of program (Fall 2021).
C4L Program Manager	Report to C4L program director.
	 Responsible for managing the overall critical path, team, partners, and budget. Chair weekly project team meetings. Facilitate logistics and partner support. Ensure partners are on task. Based on market mapping, identify a representative sample of talent market partners to
	enable the testing of the prototype C4L. This must include:
	o Talent development partners: Certified, non-certified, and informal.
	 Talent seeker partners: Partners who are actively recruiting employees. The goal would be for these partners to embed enabling competency terminology in their recruitment collateral.
	 Job seeker partners: Individual Calgarians pursuing employment. The goal would be for this job seeker to embed enabling competency terminology in their resume and terminology.
	Set goals for the number of talent seekers involved and the number of positions that would be included. Talent seekers would be smaller organizations that the anchor institution may or may not have links with.
	Coordinate training sessions for all program partners.
	Provide daily support for assigned community partners.
	• Coordinate comprehensive evaluation from all partners to identify impact of program and paths to improve and scale.
	• Coordinate report on pilot findings and path to potential path to scaling the principles of the C4L.
Model Development	Day to day reporting to program manager. Content oversight by program supervisor.
Coordinator	Refine the enabling competencies in the C4L. Evaluate based on leading YYC NOC codes.
	Explore pathways to measuring and evaluation. Key questions to be considered:
	What is the minimum viable product required for executing the pilot?
	Does the prototype C4L require all five dimensions of a competency model?
	o Define Task: The demand to complete a discrete activity in a role (e.g., managing staff).
	 Define Competency: The skills and knowledge and attributes required to complete this task.
	 Define Levels: The ability to evaluate the level of proficiency of a competency to complete the task (e.g., basic vs. advanced).
	 Assessment: The process to evaluate proficiency.
	 Governance: The C4L must be part of a broader recognized workforce development framework that prioritizes and legitimizes competencies.
	Is assessment or verification of competency relevant for the pilot?
	Do domain-specific competencies play a role in the C4L?
	 How can we ensure the investment made in developing supports for the pilot could be leveraged for future scaling?
	Conduct C4L training sessions for all program partners.
	Provide daily support for assigned community partners.

	• Support comprehensive evaluation from all partners to identify impact of program and paths to improve and scale.				
	• Support report on pilot findings and path to potential path to scaling the principles of the C4L.				
	Engage targeted stakeholders across the market to explore pathways to scaling.				
	Refine based on YYC NOC codes.				
	Pathway to refining and aligning on the components of the C4L. Including				
	o Defined scope of tasks in C4L				
	o Defined scope of competencies in C4L				
	o Defined levels in C4L				
	o Scope of assessment mechanisms in C4L				
	o Governance of C4L				
	Identify stakeholder clusters with lowest barriers to adoption.				
Pilot Communications	Day to day reporting to program manager.				
Coordinator	Evaluate stakeholder goals to determine the strategy, consider a content calendar and the communications roles of partners involved - how could it work together for maximum reach and impact?				
	Research the tools that are used to deploy and embed competency models.				
	o Tools for talent seekers? Tools for job seekers? Tools for talent development partners?				
	 What mediums are most effective? (Digital vs. Print vs. Other). 				
	 Tools to support purpose-based talent development and mission mapping. 				
	o What evidence is there that these tools worked?				
	What does innovative and great look like?				
	 Design tools and supports based on outcome from above research and strategy. 				
	Conduct C4L training sessions for all program partners.				
	Provide daily support for assigned community partners.				
	Defining the tools required to activate purpose-based talent development. Examples may include:				
	o Consistent mission mapping templates and tools				

Consistent digital verified talent portfolio model through from secondary to postsecondary to enable the LearningCITY model.

Path to enabling a city-level blockchain talent verification system.

APPENDIX-5: PARTNER INSIGHTS AND IMPLICATIONS

Partner	Key Insights	Implications
Antyx	 The competencies were easy to understand, but difficult to integrate into the programming, specifically as the lessons become more tailored to the competency, which is not ideal for their type of youth programming. A resume/cover letter workshop was held and the competencies were useful for making the skills the youth learned from the programming sound more professional. Would be ideal to have a children's or youth competency schematic to help tailor learning to their needs and level. 	Consider how the C4L model can be introduced to younger audiences to begin the reflection process sooner.
Calgary Public Library	 Need to communicate alignment with other competency models (e.g., With the federal government's Skills for Success). Even if C4L is more in-depth, a federal government model currently has more pull and support. Talent seekers must be involved in developing any verification system. Individual learners have limited time, so they can only do workshops or programs that add value and will be recognized. The C4L model is practical as a starting point for participants to think about their careers and assess their skills. However, seeing more actual programming that works towards developing each skill instead of just talking about it would be beneficial. For people who have English as a second language, understanding and applying the C4L language to their lives can be difficult. The development of a simplified guidebook for ESL support was effective. 	 A simplified guidebook was created for ESL individuals or anyone wanting a quick introduction to the C4L model. Consider providing translated versions of the more in-depth guidebooks. Create mechanism to incentivize talent seekers to want to use the C4L model. It is essential to invest to build C4L brand awareness.
Centre for Newcomers	 The language must be simple and consider doing translations for that people who have English as a second language. Talent seekers need to be involved otherwise a verification system won't go far. Individual learners have limited time, so they can only do workshops or programs that add value and will be recognized Once understood, the C4L model is a helpful tool to help individual learners with skill development and their success with working in the Canadian workforce. Talent seekers are hesitant to incorporate the model because of the potential of a large workload to do so. Verification of competencies would provide significant incentive to adopt. 	A simplified guidebook was created for ESL individuals or anyone wanting a quick introduction to the C4L model Create mechanism to incentivize talent seekers to want to use the C4L model. Communicate how incorporating the C4L model into talent seeker organizations has significant benefits in the long run. It is essential to invest to build C4L brand awareness.
ChangentYYC	 With younger audiences, it's difficult to get them to understand what the competencies mean, so various activities and examples were required. Having the individual learners do journals of what they experienced and learned allowed them to personally reflect on how competencies play a role in their lives. Volunteers found they also learned more about their competencies through working with the individual learners, so the model goes full circle. 	 Consider how the C4L model can be introduced to younger audiences to begin the reflection process sooner. To have people commit, they need to see how it will support them personally.

Genesis	 Specifically target those who run programs so they can incorporate the language (e.g., education systems and temp agencies) If this model was successful, it would be very beneficial to help individual learners starting in the workforce articulate all their skills Talent seekers and talent developers need a universal language so that individual learner's skills are recognized, and they understand what is being asked of them 	If talent developers and talent seekers can agree on a universal language, then talent in the city can be strengthened and will be adaptable
Legends Basketball	 Participants who went through the camps built around the C4L model gained confidence in their personal and professional selves. The podcasts and information in general on the website need to be more easily accessible for users. A social media presence would be largely beneficial to help spread the message of what the C4L model is and where individual learners can find the information. The verification system could be viewed similarly as the martial arts belt system. For example, belt colours are universally recognized, credible, and have integrity. They give an aspiration to want to move up to the next level. 	 Ease of access to information is important for all audiences. It is essential to invest to build C4L brand awareness. A successful verification system could grow beyond the city and allow for stronger opportunities for individual learners.
Livingstone School District	 There is value with getting individual learners to start considering how competencies play a role in their life at a younger age. Incorporating the C4L model into CALM curriculums would help high school students recognize what areas they need to work on developing. If simplified and less post-secondary focussed, <i>Designing YOU</i> would be a great conversation starter tool for high school students on what they want to do following graduation. There is an almost even split of teachers who would want a step-by-step process given on how to incorporate the C4L model into their lessons, but others would want the freedom to incorporate it how they feel it works best for their students. 	Consider how the C4L model can be introduced to younger audiences to begin the reflection process sooner Designing YOU now has two versions, with one more specific to the high school audiences, but still needs to be opened to consider options outside of post-secondary
Trellis	 The deployment of the project was very, which didn't allow for agencies time to effectively review. The original <i>Designing YOU</i> is targeted for those in postsecondary and had limited value to those in high school as the language is advanced. There needs to be a community of practice created to support the integration of this work and for it to be continually shared within different sectors. Create a simplified one pager to advertise what the C4L model is and why stakeholders should adopt it. A universal language and understanding would help youth with navigating job descriptions and building their confidence. 	 Designing YOU now has two versions, with one more specific to the high school audiences, but still needs to be opened to consider options outside of post-secondary. It is essential to invest to build C4L brand awareness. Create a system where talent developers and talent seekers can share how the C4L model has been incorporated into their organizations.
WinSport	 C4L model aligns to the Canada Sport for Life model, which is worth considering seeing how they could align. It takes a lot of time and energy to incorporate this type of model into pre-existing programs, so time of year and the pandemic are significant barriers. 	Spring and summer tend to be the busiest time of the year for most organizations, so incorporating the C4L model over the fall or winter allows for more flexibility

ENDNOTES

¹ The City of Calgary. (2020). Calgary and region economic outlook 2020-2025. https://www.calgary.ca/cfod/finance/Documents/Corporate-Economics/Calgary-and-Region-Economic-Outlook/Calgary-and-Region-Economic-Outlook-2020-Spring.pdf

² Refer to:

Calgary Economic Development. (2020, July). Why Calgary? Our Economy in Depth. https://calgaryeconomicdevelopment.com/dmsdocument/22

Statistics Canada, CMA Population, July 1, 2018, and Canadian Business Counts, December 2018

1 to 49 Employees (Per 1,000 Population) as found in Vital Signs 2019 Report: Research Indicators

- ³ Pike, H. (2019, March 1). Calgary must 'fix the talent pipeline' to attract high-tech business, says economic development boss. CBC. https://www.cbc.ca/news/canada/calgary/calgary-economic-development-moran-report-2018-1.5038592
- ⁴ Calgary Economic Development (2019). Calgary in the New Economy. Retrieved from https://calgaryeconomicdevelopment.com/the-new-economy/
- ⁵ Refer to Skilled by Design: A Blueprint for Alberta's Future Workforce (June, 2018) by the *Business Council of Alberta.https://www.businesscouncilab.com/wp-content/uploads/2020/06/BCA_Skills-Training_TaskForceReport_FINAL-1.pdf*
- ⁶ World Economic Forum (2018). Future of jobs report. Retrieved from https://www.weforum.org/reports/the-future-of-jobs-report-2018
- ⁷ Right Management (N.D.) *Flux and the future. Counting the cost of five years of change*. Retrieved from https://www.hrreview.co.uk/wp-content/uploads/Right-Management-Infographic-The-Flux-Report.png
- ⁸ Refer to Skilled by Design: A Blueprint for Alberta's Future Workforce (June, 2018) by the Business Council of Alberta.https://www.businesscouncilab.com/wp-content/uploads/2020/06/BCA_Skills-Training TaskForceReport FINAL-1.pdf
- ⁹ Rudolph, Lavigne & Zacher, 2017; Staber & Sydow, 2002.
- ¹⁰ Resiliency is a highly debated construct across multiple disciplines. For additional information, refer to Martin (2012).
- ¹¹ Glaeser, E. L., & Saiz, A. (2003). The rise of the skilled city (No. w10191). National Bureau of Economic Research.
- ¹² Bimrose, J., Brown, A., Barnes, S. A., & Hughes, D. (2011). The role of career adaptability in skills supply. Refer to: http://www.warwick.ac.uk/fac/soc/ier/publications/2011/bimrose_ca_main.pdf
- ¹³ Refer to Sado, A. Cannon, E., & Jenkins, T. (2017). Work-integrated learning provides students with the skills to prepare them for the changing labor market. *Policy Options*. Retrieved from https://policyoptions.irpp.org/magazines/march-2017/linking-the-classroom-and-the-workplace/

Rafferty, A. E., Jimmieson, N. L., & Armenakis, A. A. (2013). Change readiness: A multilevel review. *Journal of Management*, 39(1), 110-135.

Mitchell, C., Ray, R. & van Ark, B. (2019). C-Suite Challenge™ 2019: The Future-Read Organization. *New York: Conference Board of Canada*. Retrieved from https://www.conference-board.org/publications/publicationdetail.cfm?publicationid=7691

¹⁴ Refer to: Powley, R., & Childs, E. (2005). Council of Ministers of Education, Canada Research Report.

UNESCO Institute for Statistics. (2012). International standard classification of education: ISCED 2011. Montreal: UNESCO Institute for Statistics.

- ¹⁵ Based on NAIC code analysis of categories incorporating accredited educational institutions.
- ¹⁶ Powley, R., & Childs, E. (2005). Council of Ministers of Education, Canada Research Report.
- UNESCO Institute for Statistics. (2012). International standard classification of education: ISCED 2011. Montreal: UNESCO Institute for Statistics.
- ¹⁷ Based on NAIC code analysis for categories including non-certified learning.
- ¹⁸ Powley, R., & Childs, E. (2005). Council of Ministers of Education, Canada Research Report.
- UNESCO Institute for Statistics. (2012). International standard classification of education: ISCED 2011. Montreal: UNESCO Institute for Statistics.
- ¹⁹ Caffarella, R. S., & Baumgartner, L. (2007). Learning in adulthood: A comprehensive guide. Jossey-Bass.
- ²⁰ Gawad, N., Allen, M., & Fowler, A. (2019). Decay of Competence with Extended Research Absences During Residency Training: A Scoping Review. *Cureus*, *11*(10). Accessed on March 1, 2020 from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6874279/pdf/cureus-0011-00000005971.pdf
- Zhang, X., Ryan, S. D., Prybutok, V. R., & Kappelman, L. (2012). Perceived obsolescence, organizational embeddedness, and turnover of its workers: an empirical study. *ACM SIGMIS Database: the DATABASE for Advances in Information Systems*, 43(4), 12-32.
- ²¹ Conference Board of Canada. (2019) Building Skills Connections Series: Skills for a Prosperous Alberta Retrieved from https://www.conferenceboard.ca/focus-areas/education-skills/building-skills-connections-series?AspxAutoDetectCookieSupport=1
- ²² Yuen, P. (2018, September). The 7 forces that will change the way you work. *World Economic Forum*. Retrieved from https://www.weforum.org/agenda/2018/09/here-are-seven-ways-your-job-will-change-in-the-future/