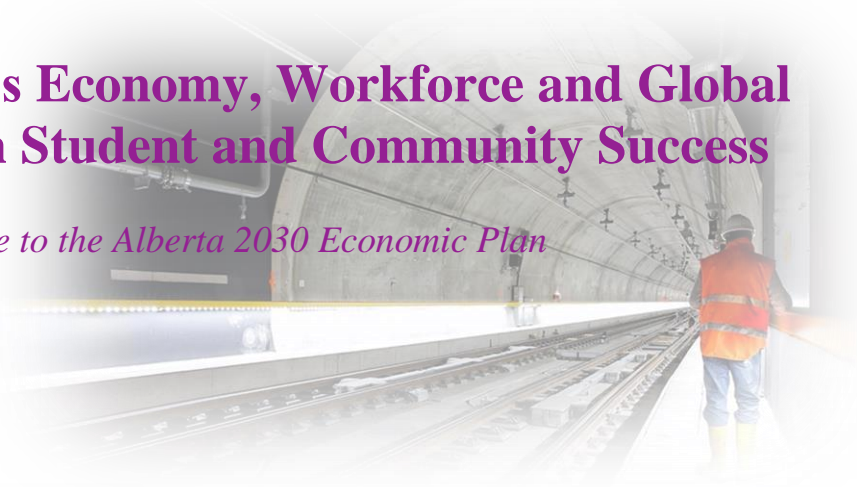




Expanding Alberta's Economy, Workforce and Global Advantage Through Student and Community Success

A Market Analysis in Response to the Alberta 2030 Economic Plan



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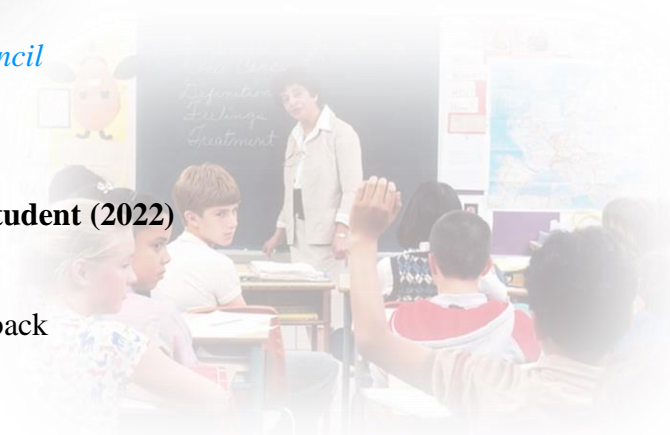


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BACKGROUND

This report reviews the Alberta 2030 Economic Plan and the educational curriculums and systemic changes taking place in Alberta to progress the provincial agenda. The discussion follows a methodical and logical approach where connections and differences between the global labour market shifts and Alberta's economic strategy are analyzed for purposes of reviewing the potential likeliness of anticipated economic success in Alberta with respect to legislation changes. The report later breaks down the educational systemic changes taking place in Alberta through comparison and connections to global educational frameworks and reviews the alignment of Alberta's legislation changes to educational frameworks that have been encouraged to yield positive results in the economy and students' lives, globally. Furthermore, the educational frameworks discussed situate students' best interests at the heart of priorities and how Alberta's changes affect long-term student success, quality of life and aspirations.

In addition to students' best interest, there is also an analogy of anticipated economic prosperity in Alberta through legislation changes and whether provincial mandates have taken into consideration global market needs and shifts. The report prioritizes both students' best interests and provincial economic prosperity equally, also addressing connections between the two that complement and aid the success of both areas in the future. Studies show that ensuring student success through a deep analysis of current students and workforce needs along with the creation of robust curriculum outcomes, will require the provision of a diverse and broad education that encompasses and gives equal importance to areas of social inclusion, sciences, social sciences, and arts; this will yield the utmost results in the economy.

This report suggests that providing low-income students with financial aid not just in 'high-demand' areas like technology, financial services, agriculture, and aviation [13] but also in arts, social sciences, humanities, and more subjects, will allow students to reach their full potential and fulfill their own aspirations that may also contribute to the innovation and creativity within the province. Innovation and creativity are listed as a priority in the Alberta 2030 plan [13] and are also a listed requirement in the global market. [2] This suggests that harboring student success by putting them first is beneficial for the provincial economy and may be a stronger and more efficient alternative than steering the education system and legislation amendments toward the Government's economic and fiscal agenda.

INTRODUCTION

Global Labour Market Outlook

The needs of the workforce and labour market around the globe are changing. The implementation of a virtual work environment, automation, and A.I. has built the greater requirement for an advanced skillset due to the pandemic. Based on market research, the majority of the workforce, in the future, will be required to have higher levels of intellect and a diverse skills basket to maintain their influence and position in the economy. [1] Furthermore, there is a larger demand for health-related roles and STEM (science, technology, engineering, mathematics) based roles due to the increased implementation of artificial intelligence (A.I.) and automation within many less-skilled roles. This implies that low-wage workers would have to reskill and advance in either higher education or polytechnic training such as apprenticeship programs and technology-specific training to make a shift into higher-wage brackets. [2] Given the new behaviours of remote work and virtual education and training programs, the habit of 'convenience' is more likely to stick. This calls for the public sector to advance their incentives

Leadership Skills	Personal Characteristics	Technical Skills
Managing	Analytical Thinking	Technology Use and Control
Advising	Innovation	User experience
Decision-Making	Active Learning	Systems Analysis
Reasoning	Complex Problem Solving	Technology Design and Programming
Communicating	Critical Thinking	
Interacting	Creativity	
Social Influence	Resilience	
Persuasion and Negotiation	Stress Tolerance	
	Originality and Initiative	
	Evaluation and Analysis	
	Service Orientation	
	Emotional Intelligence	

Table 1. Skillset Requirement for Future High-Wage Jobs¹.

into upskilling at-risk, low-income, and displaced workers as well as providing additional safety nets for those amidst career transitions and those who are unemployed. [2]

A study based in the United States demonstrated that the jobs that temporarily or permanently closed in areas such as Retail, Food Services and those identified previously, affects young professionals looking for a stepping-stone to catapult their careers into high quality jobs. [2] While this was specific to the United States, given its large economy, this can still be applied to young professionals in Canada. This means that, young professionals may have to reroute and take larger leaps to transition into high quality roles which will require upskilling and development training. The World Economic Forum (2020) suggests that there is currently a large opportunity for the public sector to engage in policymaking that “alleviate[s] the impact on workers” in order to “bridge societal inequalities” and intervene so wages are not “polarized” (2, p. 24).

Differences in education credentials between workers also implies employability discrepancies. Those with a basic education remain unemployed at a larger rate than those with tertiary and post-secondary education; followed by a larger reduction of jobs in the Arts, Entertainment, Accommodation, Food Services, and Recreation sectors, post-pandemic. [2] This implies that attaining educational credentials and pursuing post-secondary education is *still* a crucial step in career success and maintaining sustainability during economic downturns. McKinsey & Company (2021) suggest that Governments may want to consider extending benefits and protections to workers, in order to allow them to build their skills and knowledge mid-career. [1]

Skills Of Tomorrow

Multiple data and reports show that the following skillsets (see **Table 1.**) will allow humans to have a comparative advantage over automation and artificial intelligence in the coming years. [2] Furthermore, it is also recognized that these skills will aid individuals in further reskilling and redevelopment at later times due to the applicability of these skills into multiple disciplines. [3] This is supported by research showing that high-performing minds show a diverse array of personal, leadership, and technical skillsets to comprehend complex systems and knowledge. [3] Thus, the futuristic economy is to be led by greater complexity in knowledge through roles that require higher education, upskilling, and re-development within individuals.

¹ Data is extracted from multiple sources, please see [World Economic Forum \(2020\)](#), Report by [McKinsey & Company \(2021\)](#), The [Alberta 2030 Plan](#) and [Stronger BC Economic Plan](#) for specific details on particular skillset requirements and matching industries.

Hence, in addition to artificial intelligence and automation, it is necessary for individuals to harbour skills shown in *Table 1* to contribute to the workforce and attain high-wage roles. [1] It is also interesting to note that the number of skills required in the ‘personal characteristics’ department is the total sum of leadership and technical skills required. This suggests that the current labour workforce will have to work towards training their own mental capacity and self-development, along with technical and leadership skill training, to offer a robust skills package for high-wage roles. This skillset basket will then form a comparative advantage over artificial intelligence and economic downturns.

Research suggests that the purpose of A.I. is to complement high productivity and automate “brain force” rather than replace the workforce. [4] Where roles that use coding, data entry, or administrative tasks get automated so humans can step up to a higher level and see the bigger picture faster. [4] This then supports the data showing that high-wage jobs will be more in demand in the future as opposed to low-wage jobs, as the diverse and complex skills package will be required to complement A.I. and understand the ‘bigger picture. In these areas, skillsets such as relationship building, critical thinking, creativity, and emotional intelligence will be required skills to perform these jobs. Building and finding individuals with these ‘personality characteristics’ will be the *real* challenge. Currently, only technical skills and some leadership skills are taught and harbored in higher education and/or polytechnic institutions. Yet, the development of personality characteristics is not part of most curriculums. Studies highlight that while humanities, arts, and social science courses build skills like critical thinking, empathy, and curiosity, STEM courses do not have these offerings. [5] Yet, STEM courses lead to high-demand roles in the current labor market. [2]

Implications and Discussion

These findings suggest that there is a large agreement on the need for redevelopment, upskilling and higher education credentials within the current workforce. Yet, there is a large gap in the ways these needs build a qualifiable skills package for an individual, to *innovatively* perform high-wage and in-demand roles in the future. Where innovation and creativity are required to sustain a strong workforce and economic prosperity. [6] There is then a discrepancy between curriculums where certain skills are not developed within the individual through the institution or other training programs and hence the individual may be disadvantaged *regardless* of upskilling and redevelopment. The above discussion poses a central question about what kind of education, training, and curriculum needs to be developed for the Alberta workforce and students in order to aid them in sustaining and maintaining a strong position in the future of work. Where A.I., automation, and high-wage jobs will replace the aging workforce and low-wage jobs. [1] This also poses the issue of how displaced workers, low-income families, and marginalized populations fit into Alberta’s economic policies and programs based on the changes taking place globally.

Case Study: Alberta Start-ups and Transferrable Skills

Alberta has become a hub for technology start-ups and earned itself a positive reputation in the financial services and technology sector within the past few years. Some start-ups include One Vest which focuses on financial technology to enhance and ‘reinvent’ wealth management. The company relies on artificial intelligence embedded within the wealth management platform to make financial services simpler and faster for a variety of audiences who are investing their wealth. Offering clients with information on what and where to invest. [7] Currently, OneVest serves other start-ups, digital banks and financial institutions. [8] Another start-up is SamDesk located in Edmonton, using artificial intelligence towards ‘situational awareness’, using multiple media sources and outlets for clients to know what is happening in the world in relation to their business, and area of expertise. [9] SamDesk is known as a global disruption monitoring tool which is faster than social media and the news.

Both of these companies employ A.I. within their products enhancing the use of technology and reaching out to multiple and diverse clientele, globally. The CEO of OneVest Amar Ahluwalia holds a Bachelor’s degree in Economics and the CEO of SamDesk did not attend post-secondary education². This suggests that these start-ups primarily arose from experience in the industry and innovative thinking considering the LinkedIn profiles of both CEOs and their passion for the industry. Looking at these examples, it can also be inferred that the value of experience, innovation and creativity are infinite for economic prosperity within the province and globally. It is interesting to note that the CEO of SamDesk has been in the field of media and communications since high school and pursued research in social media search engines until they founded SamDesk³. This demonstrates that high interest and experience in a specific discipline leads to creative thinking and innovation.

ALBERTA ECONOMIC OUTLOOK

Labour Market Needs

Due to pandemic Alberta experienced a major drop in oil demand and increased unemployment rate of 15%. This was followed by a participation rate decline of 68.6% in 2020. [10] It is also noted that industries that were better able to transition to remote work, had higher wages. The effects on jobs mirrored those of the global market, where retail, accommodation and food services industry experienced the highest decline, also causing higher layoffs. [10] Much of the job losses in construction were related to the state of the oil and gas industry, the agriculture sector experienced the same result.

Alberta’s labour market is expected to grow to 1,206,000 jobs due to expansion and demand with 1,160,800 new job seekers, being new immigrants, graduates, re-entrants. [11] It is also expected that most job openings will be replacement of workers as opposed to expansion, and the larger market of labour would be migration coming in Alberta (66.7%). There is also an expectation of labour imbalances in the future, where job seekers and job opportunities criteria will not match where there will be more job opportunities than job seekers. Other changes include: [11]

- Retirement being one of the leading drivers behind labour shortages and is expected to grow from 15% to 22% by 2025.
- Factors influencing labour markets include demographics, technological changes, and consumer behaviour where participants re-entering the workforce have decreased.

² Please see LinkedIn profiles of [Amar Ahluwalia](#) and [James Neufeld](#) for their professional history.

³ Please see video of [SamDesk and operations](#) for more information.

- A shortage of workers is anticipated with an approximate figure of 45,800 workers in 2030. From this, the cumulative imbalance which is the ratio of job opportunities to job seekers will increase.
- The shortage of workers is in areas of STEM (science, technology, engineering and mathematics) as well as healthcare. Other areas of shortage include general office support, educators, and business development.

It is also interesting to note that many young workers are migrating from Alberta to neighbouring provinces (e.g., British Columbia) for job opportunities and to enhance their ‘quality of life’. [12] International immigration is based on federal policies, however, interprovincial migration “is driven by individual preferences, values and economic opportunity” (12, p.5). Research data shows a smaller portion of the young population remains in small cities and rural areas throughout Alberta. [12] This is a setback for Alberta as the current population will age and replacements for workers are already required and will worsen in the future. With a lack of young talent, employers will experience a shortage of qualified labour workforce. [12]

Since 2014, more young people have moved to British Columbia from Alberta, this information suggests that Alberta’s policies, values, and economic opportunities are not speaking to the interests of the young. Current studies show that young talent is moving out of Alberta due to its lack of diverse job opportunities and acceptance of diversity in people as they do not feel welcome due to a lack of inclusion. [12] This study shows that quality of life and social inclusion are important factors in retaining a young labour workforce along with diverse opportunities that offer a breadth of jobs in distinct sectors.

The Alberta 2030 Plan

To address the above market needs as well as global labour market changes, the Alberta 2030 plan has taken strategic action to improve and develop educational programs that cater to technology, financial services, agriculture, and the aviation fields. [13] While this does not address all of the skills necessary in the future labour market, it does address some major streams such as the technology sector, financial services, and the importance of innovation in those fields. Strategies from the economic plan focus on the following objectives for the next 10 years: [13]

- Incorporate work-integrated learning models into post-secondary programs and offer experience-based learning in conjunction with curriculum delivery.
- Align post-secondary education with labour market requirements to provide students with the skills and training necessary for ‘high-demand’ jobs in technology, financial services, agriculture, and aviation.
- Support ‘innovation’ in the technology, financial services, aviation, agriculture, and scientific research disciplines through an expansion of market input in post-secondary decision-making.
- Encourage ‘internationalization’ by opening post-secondary doors to the private-sector model of training talent and attracting international students and investment.

- Tackle fiscal pressures faced by post-secondary institutions by outsourcing funding and investments to the private sector and expanding the private sector's role in post-secondary curriculums and program agendas.

Alberta 2030 also indicates the demographics highlighted in previous studies, showing, an aging workforce and a slow population growth, recognizing the need to retain and train young talent. Overall, the Government of Alberta (GOA) believes that through the involvement of the private sector in the post-secondary education system and by developing immediate skill-related curriculums for the 'high-demand' areas, Alberta can work towards strengthening its workforce and retaining young talent. Strategies to deliver these results include: [13]

- Support innovation by strengthening post-secondary commercialization potential and creating 'new knowledge'.
- Strengthening systemic governance in higher education through 'modernization', which refers to a mixed model of the private and public sector involvement through council members and a strategic direction board advising the Minister.
- Institutions are given the 'autonomy' to generate their own revenue rather than public sector funding. This would indicate that private investments would increase as their role in post-secondary increases.

The innovation here is assumed to be the product of commercialization which refers to managing an institution or an organization through a for-profit company that focuses on net profits and the interests of the market. The purpose of autonomy is defined as providing post-secondary institutions to reach out for private sector investment. This implies that investments from the private sector will also complement the curriculum delivery and training programs to match market needs as identified by the Alberta 2030 plan. Modernization is referred to a governance style that encourages collaboration in decision-making with the private sector, and an economy that aligns its systems with global market movements. Furthermore, Budget 2022 aligns foundational studies from K-12 with the market requirements of high-demand roles by focusing on delivering educational programs that have a higher focus on trades, science, technology, and financial literacy. [14] This means that children from an earlier age will be encouraged to specialize in a specific sector.

Budget 2022

Budget 2022 has also been aligned with the Alberta 2030 plan and economic strategy. The funding has been allocated to target sectors that clearly highlight the priorities of the Government. Some funding initiatives include: [14]

- \$171M allocated towards advanced education in the next three years and targeted towards achieving high enrolment in areas of technology, agriculture, financial services, and aviation programs.
- 1200 new work-integrated learning opportunities with \$80M towards micro-credential programs targeted towards re-entrants in the workforce for upskilling and reskilling.

- \$30M to expand apprenticeship programs within the next three years and offer more private-sector decision-making autonomy in the polytechnic institutions.
- \$25 million in operating funds and \$47 million in capital investments towards *Alberta at Work Plan* inclusive of re-structuring foundational studies in K-12 and offering a ‘smooth’ transition towards targeted post-secondary education programs. [15]

These investments indicate a particular direction taken by the Minister of Advanced Education, Nicolaides where priority is given to four primary areas of study (Technology, financial services, agriculture, and aviation) to complement the skills of the technological and financial services required in the global economy. As well as for the additional agriculture, aviation, and private-sector involvement deemed necessary in Alberta’s economy. Primary programs that are targeted toward redevelopment training include the Canada-Alberta Jobs Grant and the Training for Work Programs. [14] The supports provided for upskilling and reskilling are primarily focused on employers looking to hire more workforce that may need training, [14] this means that the redevelopment features in the economic plan are only for the workforce looking for jobs within the companies that are funded for training programs by the Government. This may be a disadvantage for the actual worker looking for redevelopment and training opportunities solely.

AMENDMENTS TO LEGISLATION

The GOA believes that students will have the training and skills necessary to contribute to the growing economic needs of Alberta. There are some controversies with regards to this strategy given that much of the autonomy the post-secondary system has received will also be geared toward the private sector. In addition to these changes, the foundational education system (K-12) will also experience changes in its curriculum delivery, school choice, and overall public education systemic changes. Changes made to the public education system are included in amendments to the *Education Act* as well as the introduction and debate around *Bill 74*, the *Advanced Education Statutes Amendment Act*. These changes address the overall values of public education in Alberta and the purpose of higher education.

Education Act

The Act commits to principles and values defined by Alberta as the primary purposes of pursuing public education and providing students with the foundational skills necessary to move towards their aspirations and careers. In addition to the curriculum delivery and programs delivered by Alberta education for students from K-12, the delivery of these programs is aligned with the values identified by the *Education Act* and all public schools including private school options must align their program delivery with the *Act*. The following principles and values are summarized to provide an overview of the scope of K-12 education in Alberta, (the asterisk* denotes amendments): [16, p.11]

1. Education is the foundation for a democratic and civil society.
2. Through education, students are inspired to ‘discover and pursue their aspirations and interests’ cultivating a love for lifelong learning.
3. Education holds the role of developing engaged thinkers who learn to employ critical thinking creatively and demonstrate democratic ideals through respect and teamwork.

4. *Developing an entrepreneurial spirit in order to face challenges with ‘resilience, adaptability’ and follow through with ‘bold decision-making’.
5. *The Government of Alberta recognizes the need to ‘smooth the transition for students’ within public education and higher education to develop qualifying skills within the workforce.
6. Education is a shared responsibility and requires collaboration, engagement, and empowerment between all partners within the system allowing students to reach their full potential.
7. Students are entitled to ‘welcoming, caring, respectful and safe learning environments’ respecting diversity to ‘nurture a sense of belonging’ and build confidence.

The *Education Act* values the best interest of the child regarding decisions about education delivery. With respect to the legislation, students must be placed at the top of education program priorities and the curriculum must ensure inclusivity by honouring diversity in schools. The additions marked with an asterisk signify current amendments. These incorporations include valuing the ‘entrepreneurial spirit’ and identifying pathways to transition children smoothly into post-secondary and later into the workforce. [16]

These additions align with the Alberta 2030 economic plan to increase privatization in the education sector as well as *Budget 2022* where funding towards targeted disciplines has expanded. This suggests that the ‘entrepreneurial’ spirit compliments the private sector integration in the education system and the ‘smooth transition’ into post-secondary refers to aligning students’ curriculums with the four high-demand disciplines in technology, financial services, agriculture, and aviation. Hence, while the best interests of students are valued, there is also an emphasis on encouraging the provincial agenda within the education system.

Bill 74

Bill 74 denotes amendments made to the *Advanced Education Statutes* that determine the strategic direction, purpose, and program organization of higher education within Alberta. Primarily the amendments occur towards the *Post-Secondary Learning Act* and the *Skilled Trades and Apprenticeship Education Act* to align with the Alberta 2030 economic plan. [17] The Act is marketed as ‘removing red tape’ which implies greater private sector involvement and deregulation in terms of post-secondary curriculum and program decision-making. Deregulation here refers to the strategic direction of the Alberta 2030 plan to provide post-secondary institutions with more autonomy to outsource funding through the private sector. [13] Specific changes include: [17]

- The Minister holds the authority to establish a Minister’s Advisory Council on Higher Education and Skills (MACHES).
- MACHES provides the Minister with advice on strategic goals, direction, performance metrics, and other matters related to public post-secondary and independent academic institutions throughout Alberta.
- Administrates only two categories of post-secondary institutions known as either universities or polytechnics and colleges.

- Board of governors holds the authority to set apprenticeship tuition costs for students and also provides the board with autonomy to set certification standards.
- Allowing post-secondary institutions more autonomy in setting curriculum, learning outcomes, and classroom instructional delivery (Bill 67).

Both Bill 74 and Bill 67 have received royal assent as of December 2, 2021, and June 17, 2021, respectively. [17] This means that both are underway to becoming official legislation by late 2022. The overview of key changes suggests that metrics of performance will be amended according to MACHES which would be a council that is a mix of the private sector and public sector professionals. [18] This Act also ‘deconsolidates’ the post-secondary system to provide the autonomy desired by the Alberta 2030 plan. [19] Deconsolidation refers to institutions setting their own regulations, metrics, and curriculum delivery in this situation.

Foundational Studies K-6

Minister of Education, LaGrange has implemented an expansion of charter schools and alongside made changes to the course outcomes, curriculum delivery, and purpose of public education in public schools. The expansion of charter schools has been funded with a \$72 million investment with no indication of funds being allocated towards public education. [20] Studies show that parents’ preference for charter schools is due to reasons of greater choice in learning strategies and outcomes for students, greater chance to find other parents who are ‘like-minded’ and they feel a greater sense of belonging within the school community. [21]

With the expansion of charter schools, there is also the introduction of three draft K-6 curriculums that replaces the prior curriculums for foundational studies in Alberta public schools. The three subjects updated are Science, French First Language and Literature, French Immersion Language Arts and Literature. [22] There will also be new K-3 English Language Arts and Literature, Mathematics and Physical Education, and Wellness curriculums that have been implemented through the 2022-23 school year. All updates are expected to be completed by September 2024. [22] These implementations have been contentious due to claims that many stakeholders were not involved in the decision-making process and some families, schools, and teaching professionals have objected to the curriculum as well. [23] Summary of ventures towards the K-6 curriculum and programs include: [24]

- A 12-member Curriculum Implementation Advisory Group for the best interests of the education system holistically.
- \$59 million investment for the 2022-23 Fiscal Year (Budget) towards K-6 curriculum implementation which includes resources, professional development for teachers, and a portion (\$14.8 million) retained by Alberta Education for ‘resource purchasing, licensing and development’.
- Enhancements to the content in areas of mental health, consent, nutrition, safety, and physical fitness and courses such as mathematics dive into diverse numeric content to advance competency level at an earlier age.
- Introducing creative and critical thinking with digital literacy in English Language Arts.

CONCERNS AND CRITIQUES

Theories of Education

Sir Ken Robinson was a phenomenal figure in the field of education; working with governments, education systems, agencies, and non-profit organizations to encourage creativity within the education system⁴. They believed that children had an ‘infinite capacity to learn’ and that the education system should engage with the child’s inner world. [25] The inner world of a child is the center of creativity where children learn and create connections, perceptions, and basic foundations. [26] Early on, the education system misleads students’ into believing that academic success is equivalent to high intelligence. [25] Ken Robinson envisioned an education system that would serve as a foundation for children to understand the world, find their own place in it, and find their passion (see footnote 4). Their perception of education was not limited to economic prosperity, globalization, net profits, and increasing university enrolment rates.

Together Sadhguru⁵ a Yogi and Sir Ken Robinson an intellectual, encouraged the implementation of an education system, on a global scale, that prioritizes a broad curriculum focusing on expansion and expanding the individual self to develop ‘physical, spiritual and cognizant intelligence’. [25] The purpose of this is to give individuals the freedom to develop their own sense of the world and this way hone intelligence in conjunction with academic learning. It is postulated that this will harbour a sense of confidence within students that will not be tied with accumulations of accomplishments and academic rewards. [25] This notion of thought encourages broad curriculums based on spiritual, physical, and emotional development that enhance an individual’s consciousness and self-awareness through holistic competence. This theory is also believed to yield a higher level of intelligence and innovation in students. [25]

Elliot Eisner’s Theories of Connoisseurship and Criticism support the above statements by demonstrating the importance of engaging students in continuing to explore themselves through foundational education. [27] Eisner’s theory discourages using education as a commodity for ‘training’ purposes for jobs and encourages the delivery of education to students as a life experience. Through this theory, the academic institution is encouraged to form an intellectual identity where discovery, surprise, and the ‘imaginative side of life’ take precedence. [27] Through this it is suggested that the quality of the environment around which education is delivered must be strategized around the development of staff, resources allocated and the overall strategic direction of the classroom.

Bill 74 Debates

The caucus debates around *Bill 74* demonstrated the complexity of the subject matter and also the differing perspectives on the fundamental purpose of education. Current issues include a potential increase in tuition costs as a default consequence of the post-secondary funding cuts being made in light of providing the institutions with more ‘autonomy’. [28] This implies that the cuts in funding would come out of students’ already reduced pockets and private investment would provide the industry with a larger say in educational matters. These shifts are considered controversial regarding academic freedom. [28] Furthermore, student aid for low-income

⁴ Please see [Ken Robinson official website](#) for details, past projects and bio.

⁵ Sadhguru is a yogi and mystic from India who focuses on transformational changes in life through yogic sciences for contemporary minds. For more information, please visit the [official website](#).

students is tied to programs prioritized by the Government. This will prevent students from pursuing their own aspirations and interests that fall outside the fiscal agenda.

Further issues arise within the *Amendment* that redefine the nature and purpose of education on a systemic level. MLA Kathleen Ganley, during the second reading, raised concerns on the foundations that *Bill 74* rests on. This includes the pressures to prioritize STEM-based (science, technology, engineering, mathematics) subject matter with the neglect of social sciences, humanities, and arts-based disciplines. [18] This places the latter faculties at a lesser importance level than the STEM programs and makes further assumptions about the relevance of social sciences, humanities, and arts in the economy and university. Ms. Ganley argues that the fundamental concern here is about placing only those programs at a higher priority that yield direct job prospects. [18]

This implies that the sole purpose of education is to yield a directly related job or role in the industry. This undermines the importance of critical thinking, learning theories, concepts, and the social value of education in the university and community overall. Consequently, this assumption then misunderstands how the formation of skills such as creativity, critical thinking, and the ability to evaluate evidence, understand logical argumentation, and perform complex problem solving occur altogether. MLA Ganley herself is a lawyer and believes that all areas of study are equally important as they inform the student of a broad knowledge base and form a worldview. [18] This supports the theories of Sir Ken Robinson, Sadhguru, and Elliot Eisner, where forming an appropriate orientation of the world and provision of quality education would develop more intellectual values and creativity as opposed to the ‘commodity-based’ values currently promoted through *Bill 74*. [27]

K-6 Draft Curriculum Review

The Alberta Teachers’ Association (ATA) recently published a report that reviews the draft curriculum in detail and identifies major gaps in the curriculum delivery as well as its potential negative impacts on students. The ATA stated that Minister LaGrange did not provide representatives of ATA an appropriate time to discuss the implications of the draft curriculum and many stakeholders and teaching staff including the ATA organization were not consulted. [29] This suggests a lack of transparency throughout the decision-making process and not upholding the values of the Education Act (p. 9, point 6) by not collaborating with a major partner such as the ATA on the curriculum changes. The primary concerns outlined in the report include: [29]

- The curriculum does not represent a ‘rich’ variety of ideas and viewpoints, therefore, there is a lack of respect shown for Alberta’s diversity, pluralistic society, and a larger reflection on Eurocentric ideology.
- There are four themes identified within the curriculum: Literacy, Numeracy, Citizenship, and Practical Skills – These are said to be narrowly defined and do not fit in with the current globalized state of the world.
- The ATA believes that certain philosophies of the curriculum will not prioritize the skills needed in the 21st century, such as critical thinking, problem-solving, and understanding of content rather than ‘acquisition’ of content.

- The ATA fears that certain learning outcomes within the curriculum will create vulnerable situations for students of different cultures, races, and religions of different socioeconomic groups.
- The curriculum does not address natural ways of learning for children. The learning outcomes hence are reduced to summative assessments and numerical measurements.

Many of these concerns highlight the misaligned priorities of the purpose of education and the curriculum delivery from K-6. The ATA also states that the draft curriculum does include an open and rich worldview of ideas and perspectives. [29] This is detrimental to the increasing diversity in Alberta. Furthermore, The draft curriculum undermines public education by offering a curriculum of study that is not inclusive of all perspectives. The report highlights that the curriculum must undergo an expert review by the Canadian Human Rights to pass some of the content that is displayed in the curriculum. [29] While specifics of these violations were not provided by the ATA, it is suggested that the curriculum reflects Eurocentric ideologies and contains explicit content that does not respect the pluralistic society in Alberta. [29]

These concerns highlight many issues with the draft curriculum that potentially misinforms children and will restrict their worldview as they go through the education system in Alberta. There is a change in the philosophy behind education where students may not develop empathy, a sense of belonging, and acceptance of diversity amongst each other. [29] This also opposes the economic strategy of Alberta which is inclusive and respectful to diversity in Alberta and aspires to attract global attention. [6] If the foundational public education system does not align with the global market outlook and develops the skills needed in the future, as previously discussed, it will not provide a smooth transition to post-secondary education that is prioritized in the Alberta 2030 plan.

There is a gap between the curriculum studies of K-6 and the overall provincial agenda discussed in previous sections. In consideration of Alberta's labour market needs and the global shifts after the pandemic, the curriculum must support diversity, social inclusion, broad knowledge, and critical thinking as discussed in the 'Theories of Education' section of this report. Without these considerations, many students will be forced to move towards charter schools, which are already burdened by high enrolment. [21] While increasing the number of charter schools can be a possible solution to this, charter schools further separate students from differing contexts and create a greater gap between diverse backgrounds given their specified mode of delivery.

DISCUSSION OF IMPLICATIONS

The *Education Act* values and the theories of Sir Ken Robinson, Sadhguru, and Elliot Eisner all have common traits that place the students' development, learning, engaged thinking, and respect at the center of educational purposes. It is clearly understood that the success of a student's overall career is dependent on the education they receive and the development of their mind throughout the years. However, Bill 74 amendments as well as the foundational studies draft curriculum do not support these values and theories. The result of this would be that students would not be able to build developmental skills such as empathy, a sense of belonging, critical thinking, and complex problem resolution from an early age.

Furthermore, with a lack of experience in diverse contexts students will not be able to navigate through different social contexts in their adult lives, which would make it difficult for them to retain jobs that require an understanding of diversity. Using education as a commodity rather

than an experience violates the students' ability to build transferrable skills that were previously identified as necessary in the global world to participate in the high-demand jobs (p. 3, Table 1). As a result, this will lead to a mismatch in the skills of the workforce and the available job opportunities. This is a current concern for the Alberta labour market as identified previously, where job availability does not match the skillset of the workforce. [11] With a misaligned education system, this concern will only be exasperated even further.

In addition to the mismatch, the lack of focus on global diversity in foundational education is also an indication of Alberta's unwelcoming environment towards current youth as identified in previous studies. [12] The mentioned study showed reasons for youth migrating to other provinces were primarily due to lack of diversity in Alberta, lack of job opportunities, and a decrease in quality of life. [12] It is interesting to note that all of these issues are highlighted by the ATA in the foundational draft curriculum of K-6. These issues were again raised by MLA Ganley during the second reading of *Bill 74*. The education system, whether it be K-6 or higher education is connected to the community as the university and academic sector have always been in previous generations. [29] This suggests that it must be appropriately aligned with the needs of the community as opposed to ideologies or the financial agenda. Consequently, this not only affects the retention of young talent in Alberta in the future but also affects the workforce and the overall economic prosperity of Alberta.

CONCLUSION

The Government of Alberta (GOA) has done its job in understanding the global market needs and shifts, post-pandemic. They further analyzed the type of workforce required in the future to ensure Alberta is meeting its market needs. This required the GOA to take an economic view and inform Albertans on labour market needs. However, gaps exist in the understanding of workforce needs and how those needs are to be fulfilled through the education and training of the future workforce. Further research and data collection are required to understand the connections between skills and training required and how the education regime should be transformed or developed to help students and re-entrants build those skills.

Section 'Skills of Tomorrow' (p. 4) addressed that personality characteristics must be given high importance where training and development occur. Thus, providing students with a commodity-based educational experience will result in a decreased ability to develop those characteristics. Because this will give less importance to areas of studies such as arts, humanities, and social sciences in conjunction with STEM courses, that will lead to broad knowledge as argued by MLA Ganley. [18]

Sir Ken Robinson points to an intelligence-based education system that allows children to harness their own sense of self and worldview [25]. Studies show that this method actually harbours creativity and innovation, [3] which are highly desired in the current global economy including Alberta's start-up economy. [2] This information combined suggests that education that provides broad-based knowledge and gives equal importance to all subject areas allows children to explore their own interests and aspirations harbouring their sense of creativity. [31]

The **Case Study** on page five showed that experience and interest in a discipline anchors innovation. Combining the experiences of current start-up successes in Alberta with the theoretical frameworks discussed in previous sections, it can then be postulated that prioritizing the best interests of students and providing them with appropriate development opportunities and experiences aligned with their own interests will lead to greater innovation, as opposed to other

alternatives. This is supported by Sir Ken Robinson's theory of allowing children to find their passions and fostering higher intelligence. [25]

RECOMMENDATIONS

Current legislation amendments and the economic agenda should be reviewed to ensure students' success and community awareness is placed at the center. These are crucial aspects of Alberta's economic prosperity as well as establishing a positive outlook of Alberta for the global market. The following recommendations are provided to follow up with the addressed issues in this report:

- Ensure the K-6 curriculum allows children to understand their own heritage in a positive light as well as under their own interests and diverse perspectives currently existing in Alberta.
- Higher education systemic changes must provide a competency-based style that is designed to build foundational skills and aptitudes of students, which will be required in not only their relevant jobs but also throughout their careers. [31]
- Create work-integrated learning opportunities in a larger range of areas, not only for trades and STEM courses.
- Encourage employers to hire and retain young and diverse talent to provide more job opportunities and market Alberta as a place the youth can call home.



“Innovation happens when people are free to think, experiment and speculate.”

MATT RIDLEY

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