# Recruitment and Retention of Teachers and Professional Staff in Rural and Northern Alberta: Perspectives from School Leaders

Colin Walker, Ph.D.

September 2024



#### **Executive Summary**

This study reviews challenges and possible solutions to recruitment and retention of teachers and professional staff in northern and rural school jurisdictions in Alberta. Historically, school jurisdictions within Canada operated in balance. Teachers who were unable to find employment in one province could typically find employment in another. However, with rising competition from the private sector and teaching opportunities abroad, it has become increasingly difficult for school leaders to fill vacancies. School jurisdictions are operating in 'survival mode', relying on non-teaching staff and noncertified teachers to fill positions (Rachini, 2024). In British Columbia, there was nearly a three-fold increase in the number of uncertified teachers (Bernard, 2024). In Quebec, there were more than 8,500 teaching vacancies yet to be filled in 2023-24, of which approximately 2,000 were full-time positions (Jonas, 2024). These recent reports align with earlier studies that anticipated an impending teacher shortage (Brandon, 2015; Clandinin et al., 2015; See et al., 2020a, See et al. 2020b). This crisis is not unique to Canada. By 2030, it is anticipated that an additional forty-four million primary and secondary school teachers will be needed to fill vacancies from retirements and attrition across the world (UNESCO, 2023).

This dramatic shift in the labour market has resulted in school leaders (i.e., Superintendents, Deputy Superintendents, Associate Superintendents, Assistant Superintendents, Human Resources Directors), university education programs, and policy makers in government to innovate and experiment with alternative solutions to address this shortage. The Government of Alberta has committed \$1.7 million for training fifty-nine teachers in rural and remote communities (Paradis, 2024). The Government of Newfoundland and Labrador is funding a think-tank to understand the challenges and come up with possible solutions (Kennedy, 2023). The Government of Quebec promised a lump sum payment of \$12,000 to teaching staff eligible for retirement if they volunteered to remain on the job full time or return to the classroom (Jonas, 2024). The Government of British Columbia (2024b) promised \$400,000 towards teacher-recruitment incentives, which includes \$4,000 up to \$10,000 per teacher to fill critical vacancies in rural and northern communities. There is also an increase in fast-tracked teaching degrees (CBC News, 2024), such as Cape Breton University's eight-month online program (Pottie, 2023) and the University of British Columbia's (2024) eleven-month program.

These interventions to address the shortage of teachers show much promise, yet less is known on how or the extent to which they are being applied in northern and rural school jurisdictions in Alberta. Research on the challenges of attraction, recruitment, and retention primarily focuses on teachers, but rarely, if ever, includes the hiring of professional staff. This is significant for rural and northern jurisdictions because they find filling these positions are equally challenging to staff. Professional staff for this study include chartered accountants, communications staff, psychologists, mental health therapists, social workers, registered nurses, occupational and physical therapists,

speech and language pathologists, senior IT staff, and skilled trades (e.g., carpenters, mechanics). These personnel are often in short supply because school jurisdictions compete against other private industries.

This report aims to address these gaps. Twenty-two school leaders from rural and northern school jurisdictions in Alberta generously offered their time to complete a survey. The data was carefully analyzed, coded, counted, and presented in a series of bar graphs that illustrate perspectives on school leaders pertaining to challenges and possible solutions of recruitment and retention in rural and northern school jurisdictions. Analysis of the data generated several key findings:

- For both teachers and professional staff, the majority of school leaders typically receive less than five applications in a recruitment cycle, yet they would like to receive more than twenty applications.
- For recruitment methods, school leaders use a variety of well-known websites, such as 'Apply-to-Education', Facebook, and LinkedIn, which are common websites that can reach a broad audience.
- The majority of school leaders mentioned the challenges of an uncompetitive salary, the lengthy process for teacher certification, and limitations of centralized bargaining as significant obstacles to recruitment and retention. Other challenges that come with living and working in rural and northern regions include limited amenities and access to affordable housing, social and geographic isolation, competition from urban and other jurisdictions, and travel/commuting costs.
- The majority of school leaders are active in promoting their school culture, supportive work environment, and opportunities for professional development to prospective teachers and professional staff. Many of the school leaders sought to promote their jurisdiction's relative competitive advantage, which varied from region to region. Some school leaders promoted their jurisdiction's natural beauty, while others promoted a relatively low cost of living.

These findings add to a growing body of literature and media reports highlighting the severity and concern over the shortage of teachers and professional staff in rural and northern school jurisdictions.

Addressing this crisis requires coordination and partnership among school leaders, policy makers in university programs, and government.

• The government can increase funding to university education programs that would expand community-based education programs, which would enable prospective teachers to complete their studies in their home communities. The government can partner with universities to shorten education programs, which could help broaden the applicant pool to include, for example, red-seal trades people and people with graduate degrees. Letters of permission can be granted, yet require school leaders to complete documentation and other tasks that consume time and resources. Shortening or condensing post-secondary education programs and expanding

- community-based education programs will reduce this administrative burden on school leaders and expand the applicant pool of prospective teachers.
- Offering term-based financial incentives has proven to be an effective mechanism for recruitment (See et al., 2020b) and is beginning to be used in some Canadian provinces (Bernard, 2024). Revisiting the topic of centralized bargaining and allowing school leaders to have more autonomy to offer financial incentives linked to years of service could help address challenges in recruitment and retention.
- The majority of school leaders align with best practices in recruitment and retention. This includes offering opportunities for promotion and professional development, promoting a positive and supportive work environment, partnering with university education programs, and attending career fairs.
- School leaders may wish to consider using other social media platforms, such as Snapchat, X (formerly Twitter), and TikTok (if possible). They may also wish to partner with other town councils and economic development authorities, which may present opportunities to pool resources and create economies of scale. Additionally, school leaders can consider hiring subject matter experts in communications or contract recruitment agencies, so that their efforts in marketing reach their intended audience to the fullest extent.
- Lastly, the Government of Alberta may wish to reinvest in the workforce action plan.
  This can ensure that investments in addressing recruitment and retention
  challenges are tracked and monitored. This can help define roles and expectations
  on the part of school leaders and produce data so that future decisions on
  investment are based on evidence and best practice.

These recommendations derive from best practices in recruitment and retention that have proven to be effective. There is no single solution that will resolve all challenges in recruitment and retention of teachers and professional staff in rural and northern school jurisdictions in Alberta. Rather, addressing this challenge involves a concerted and coordinated effort from both school leaders and the Government of Alberta in partnership with other interested parties including university education program directors and other stakeholders.

#### **Background and Context**

Historically, the supply and demand of teachers has been balanced in Canada with one area having an excess of teachers and another area having a shortage. However, recent headlines have indicated strong evidence that demand is far exceeding supply.

- Data in British Columbia showed a near-threefold jump in uncertified teachers working in the province (Kshatri, 2024). The deficit of teachers "is known to be acutely felt in Northern B.C., where some unqualified instructors make up half the staff in some schools" (Bernard, 2024, para. 3). Eighteen percent of teaching positions in 2022-23 were filled by uncertified instructors in the Peace River South School District, B.C. (Bernard, 2024).
- In Quebec, the "2023-24 school year started with more than 8,500 teaching vacancies yet to be filled including nearly 2,000 full-time vacancies" (Rachini, 2024, para. 4). The Quebec Education Minister, Bernard Drainville, says there will be a lot of unqualified teachers due to a severe shortage of educators across the province. Drainville says a newly hired teacher would ideally have a bachelor's degree, but it's not a requirement (Jonas, 2024).

Schools are in 'survival mode,' relying on non-teaching staff and non-certified teachers to address the shortage (Rachini, 2024).

The concern over teacher shortages is not something new. It was previously noted that the supply of teachers in Alberta does not meet the demand because only 75% of the yearly education graduates become teachers in the province, which means there are serious teaching shortages in the rural and northern parts of the province (Brandon, 2015). Clandinin et al. (2015) noted attrition is a concern with approximately 40 percent of new teachers leaving the profession within their first five years of teaching. Kitchenham and Chasteauneuf (2010) anticipated a huge teacher shortage after 2020 with the most severe impacts in historically underserved northern and rural areas.

Staffing shortages have a profound adverse effect on student learning, which "is maximized when each learner is sufficiently challenged and supported to reach just above their existing level and capacity [...] assessment and instruction work together to ensure that learning goals are transparent and learners receive substantial, regular, timely, specific, meaningful feedback to improve learning" (Brandon, 2015, p. 155). When a teacher is present, engaged, and invested in their practice consistently over the course of the school year, they can identify their students' strengths, gaps in their learning, and recommend strategies for improvement. Conversely, when students are taught by multiple teachers over the course of a term due to staffing shortages, it becomes challenging to foster a positive learning environment and meet the Teaching Quality Standard (TQS) (Government of Alberta, 2024).

School leaders (i.e., Superintendents, Deputy Superintendents, Associate Superintendents, Assistant Superintendents, Human Resources Directors) do their best to adapt. Vacancies are being filled with uncertified teachers, which further impacts

student learning outcomes (Barley & Beesley, 2007). School leaders may also ask staff to teach extra classes, which contributes to employee burnout, leading to time away from work and added costs to the employer (Hamm, 2015). The challenge is compounded by shortages in professional staff. These positions include chartered accountants, public relations or communications staff, psychologists, mental health therapists and social workers, registered nurses, occupational and physical therapists, speech and language pathologists, and senior IT staff. These positions are expensive to staff and are often in short supply due to higher salaries being offered in private industry.

School jurisdictions are attempting to work more creatively within the parameters of budgets, collective agreements, and work contexts to attract, recruit, and retain teachers. However, there comes a time when they rely on policy and governments to assist as well. Governments and Universities in Canada are responding to the call for assistance over the concerns.

- The Government of British Columbia (2024b) launched teacher-recruitment incentives in 2023 with \$400,000 in funding to address the immediate need for teachers in the north, part of which was used to provide hiring incentives of \$4,000 up to \$10,000 per teacher.
- The Government of Newfoundland and Labrador created a think-tank in early 2024, to figure out what could be done to support teacher recruitment and retention efforts (Kennedy, 2023).
- The Government of Nova Scotia assessed proposals for fast-tracked teaching degrees from four universities (CBC News, 2024). Cape Breton University launched two fast-tracked programs for teachers in March 2024, including an eightmonth online program (Pottie, 2023).
- The Government of Quebec promised a lump sum payment of \$12,000 in May to teaching staff eligible for retirement if they volunteered to remain on the job full time or return to the classroom (Jonas, 2024).
- The Government of Alberta announced \$1.7 million for training 59 teachers in rural and remote communities (Paradis, 2024).

This report intends to create informed, actionable strategies that address recruitment and retention challenges so that relevant stakeholders can work towards long-term, sustainable solutions that will provide a positive learning environment for teachers, professional staff, and the communities they serve.

#### Best Practices in Recruitment and Retention: A Literature Review

The topic of recruitment and retention of teachers has generated an expansive body of literature. Several scholars have approached the topic, aiming to understand incentives, conditions, and drivers that can yield practical and sustainable outcomes in matching the number of qualified teachers to the number of positions available in school systems. As a challenge riddled with nuance and complexity, there is no one single solution. Rather,

addressing staffing shortages require school leaders and governments to strategize and align with industry standards in human resources.

#### Financial Incentives

Financial incentives include higher salaries relative to urban or competing jurisdictions, forgiving student debt, or allowances subsidizing cost-of-living, geographic isolation, travel, and resettlement expenses. They are commonly used in recruitment and retention, premised on the assumption that people who are well compensated will be attracted to and remain in the profession (Niklasson, 2020). See et al. (2020b) provided an extensive review of the literature on recruitment and retention. Although the search initially included a sample of over 500 studies, only twenty passed through a quality assessment for methodological rigor and trustworthiness. Most studies came from either the United States or the United Kingdom and involved financial incentives.

Some of the more noteworthy studies included stipulations based on years of service. Steele et al. (2010) investigated the Governor's Teaching Fellowship in California, which included a \$20,000 incentive to attract and retain new teachers in low performing schools. Teachers were required to commit for four years. If this requirement was not met, teachers had to repay \$5,000 for each year they did not honour their commitment. There were twice as many teachers enrolled in the program prior to the intervention, though there was no difference in rates of retention (75% over four years). Glazerman et al. (2013) examined the Talent Transfer Initiative, which incentivized high performing teachers with \$20,000 over two years to transfer to low performing schools. Findings indicate that this incentive appeared to be effective: 88% of the vacancies were filled compared to 44% the year prior (the control group was 71%). After one year, retention was 93% (the control group was 51%).

Findings from these studies indicate financial incentives are an effective mechanism for recruitment, but they alone, are less effective for retention. Longitudinal studies are rare in academic research, which might explain why "few studies have examined to what extent recruitment strategies enhance teacher retention" (Van Nuland et al., 2020, p. 164). Survey findings from other students suggest that teachers are motivated to stay in schools that have supportive leadership and good working conditions (Fullbeck, 2014; Goldhaber et al., 2010; Waters-Weller, 2009). In Alberta there is no ability to offer financial incentives as a mechanism for recruitment because collective agreements are managed through the Teachers' Employer Bargaining Association. The ability to offer financial incentives for specific work locations is severely limited unless it is already established in a collective agreement.

# **Bridging Programs and Community-Based Education**

Bridging programs are designed for students who do not meet the standards for entry into a traditional four-year education program. This can appeal to foreign teachers who do not meet language requirements but are still granted entry into remedial courses while working towards entry into regular four-year education programs. Once they complete their schooling, they still must apply for a work permit or become a permanent resident and apply to Alberta Education for certification. In order for foreign applicants to get a work permit, they must show that they have a job offer for permanent employment, which is difficult and confusing for school leaders to navigate since teachers must complete probation before being offered permanent employment.

Community-based education programs focus on ways to get members of the local population to become certified teachers. Some school jurisdictions in Alberta incentivize members of their local community to enroll in the community-based program by paying for all or part of their university program and assuring them a teaching position at the end of their program. Community-based education programs often run in partnership with post-secondary institutions, who reserve seats specifically for rural applicants and make accommodations so students are able to complete a portion of their studies in their communities. This type of programming operates on the assumption that people who have social roots in the area are more likely to stay. Examples include the Nunavut Teacher Education Program (NTEP), which has a partnership with the University of Regina, and the University of Calgary's Four-Year Community-Based Bachelor of Education, which restricts eligibility to students geographically residing in rural or remote communities. In order for community education to be successful, financial barriers have to be removed (either via sponsorship or subsidies), learning has to be offered online or in the community, and students must be provided with alternative pathways for admission and certification (Landertinger et al., 2021).

# Mentoring, Professional Development, and Orientation Programs

Mentoring is a nurturing process in which a more skilled or experienced person serves as a role model, providing guidance, encouragement, and counsel to less skilled or less experienced people for the purpose of fostering their professional development. In northern Alberta, less experienced or novice teachers attend intense, late-summer orientations that include a series of workshops and training sessions (Brandon, 2015). The mentoring program is framed around four key elements: mentorship by trained teachers, adjusting the teachers' assignment consistent with training and experience, providing opportunities for reflection and follow up with mentees, and scheduling time for mentees to visit and team-teach with experienced staff (Alberta Education, 2009).

Mentoring and orientation programs have been used in provinces throughout Canada and operate on the assumption that teachers are more likely to stay in the profession if they receive timely support, feedback, and encouragement. Mentoring and orientation

programs tend to be less used as a mechanism for recruitment and more towards retention, at least in theory. See et al. (2020b) explains, "given the often complex or multifaceted nature of induction/mentoring programmes, it can sometimes be difficult to understand which of the mechanisms or 'ingredients' within them are likely to drive any impact on retention" (p. 50). Professional development aims to improve a teacher's skill and has been linked to increased teacher satisfaction (Coldwell, 2017). This has led some to intuit that professional development may serve as a mechanism to enhance teacher retention through mentoring and orientation programs, though there is little empirical evidence to indicate its impact (Van Nuland et al., 2020).

# Social Media and Advertising

Social media has been increasingly used as a tool for recruitment across various professions. This includes LinkedIn, Facebook, Instagram, YouTube, Snapchat, TumbIr, X (formerly Twitter), Reddit, and Pinterest. Picardi (2019) explains that a social media strategy can "be beneficial in creating brand awareness within different demographic groups or in geographic areas that had not been part of any prior recruitment activity, facilitating the development of a pipeline of skilled, qualified job candidates located anywhere around the world and in any field or industry" (p. 24).

In interviews with twelve school leaders, Crisuolo (2020) reported Facebook, LinkedIn, and X to be the most commonly used platforms among a small sample of school leaders in Pennsylvania. Yet, aside from this, little is known on how school leaders use social media as a tool for recruitment. If school leaders are able to use the same social media platforms used by their target demographic applicants, presumably college graduates in their 20s, then there becomes limitless possibilities to attract potential applicants through effective marketing and promotion. This involves knowing the needs and preferences of potential applicants, messaging that differentiates from competitors, and school branding (Picardi, 2019).

#### **Expedited Degree Programs and Emergency Substitutes**

At the University of British Columbia, the West Kootenay Rural Teacher Education Program is an example of an expedited after degree program that enables teachers to complete courses and the practicum in less than a year. Below is an example of their course schedule for 2024-25.

Term	Course Work	Practicum	Total
1	September 3 – December 13, 2024	November 12-22	13 weeks of classes + 2 weeks of practicum
2	January 6 – June 6, 2025	March 31-June 6	11 weeks of classes +10 weeks of practicum
3	June 9 – July 18, 2025	Community Field Experience (CFE): June 9-20	4 weeks of classes +2 weeks of CFE

The program is intensive and has a strong focus on rural and small school settings, placing emphasis on learning with strong ties to local communities and school districts (University of British Columbia, 2024). Cape Breton University (2024) is offering two accelerated Bachelor of Education (B.Ed.) programs to help meet the needs of growing communities in Nova Scotia. Students complete the same requirements of the current 15-month B.Ed. program in both the 8-month and 12-month programs. They are also offering an 8-month online B.Ed. pilot program. People who complete condensed or attenuated education programs outside of Alberta may be required to complete additional upgrades in order to apply for certification to teach in Alberta.

Some provinces have provisions on the use of emergency substitute teachers in circumstances where it is not possible to hire licensed teachers due to challenges in recruitment and retention. The Government of British Columbia (2024a) allows school leaders to apply for a 'Letter of Permission'. The application is initiated by school leaders and completed by both the school leader and applicant. The school leader must provide evidence that they made every attempt to hire a licensed teacher. School leaders must disclose the location and duration of where the advertised the job, which applicants (if any) they interviewed, and reasons why they were not hired. Elsewhere, in Newfoundland, the use of emergency teachers increased by 500% in two years (Canadian Broadcasting Corporation, 2024). As a result, provisions had to be written into collective agreements that provided guidance on the use of emergency teachers:

A School Board which has been unable to hire a substitute, replacement, or term contract teacher in accordance with the provisions of this Article may employ a teacher with less than a Certificate III as a substitute, replacement or term contract teacher with the written consent of the Minister of Education. (The Newfoundland & Labrador Teachers' Association, 2024)

In order for emergency substitutes to be employed, school leaders must demonstrate that they have exhausted all options to find licensed teachers.

#### Methodology

The purpose of this research was to better understand the barriers and possible solutions to recruitment and retention of teachers and professional staff in northern and rural communities in Alberta. The survey questions were formulated by taking ideas from the literature review and consultation with the Executive Director of the Public School Boards' Association of Alberta. The research design for this study was guided by Merriam's (2009) approach to case study methodology. This study involved a survey comprised of three close-ended questions and fourteen open-ended questions. Through this pragmatic approach, decisions on participants, data collection and analysis, and research instruments are guided by what is possible and what works (Bernstein, 2010).

All participants were members of the Public School Boards' Association of Alberta. There were several guidelines for participation in this research. First, participants must work in a high-ranking administrative position for at least five years or longer so that they would be able to competently answer big picture questions on recruitment and retention. Second, participants must have worked for a public school board in a rural and/or northern jurisdiction, a context that is provincially legislated through labour standards, collective agreements, and the Government of Alberta's Education Act (Government of Alberta, 2023). Including school jurisdictions that are outside of Alberta, therefore, would not be appropriate. Public school boards in urban centres were also excluded as they tend to have more expansive resources and different approaches to recruitment and retention that are unfit for rural and northern settings.

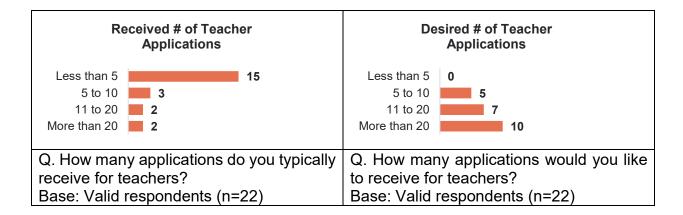
There was a total of twenty-two responses from public school board executives who responded to the survey. Each of the twenty-two participants held various positions that had the authority and experience to answer the research questions in this study. Sixteen of the twenty-three participants were either a Superintendent, Deputy Superintendent, Assistant Superintendent, or Associate Superintendent. Others held high-ranking positions, such as 'Director of Human Resources' or 'Human Resources Coordinator'. All data was entered into an Excel spreadsheet. Each of the participants' responses were reviewed and assigned up to five codes. Next, the codes were counted to identify recurring themes.

#### **Findings**

The purpose of this research was to better understand the barriers and possible solutions to the recruitment and retention of teachers and professional staff in northern and rural Alberta. Guided by the theoretical framework and methodology, the data was arranged into broad themes. The first section provides an overview of recruitment practices and volumes of applications for teachers and professional staff vacancies. The second section reviews the challenges and barriers to recruitment and retention. Finally, the third section offers suggestions and potential solutions to address these challenges and in turn have a positive impact on student learning.

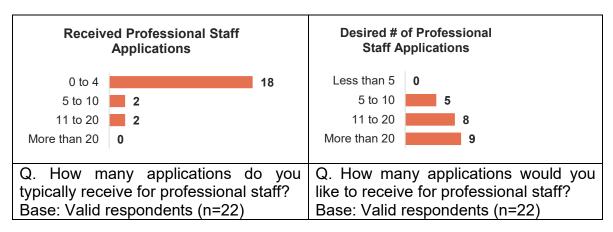
#### Recruitment: Current Landscape and Challenges

The literature identified significant shortages in the number of teachers and professional staff in various parts of Canada. Findings from this study are consistent, evidenced by the number of applications school jurisdictions receive compared to the desired number of applications they would like to receive.



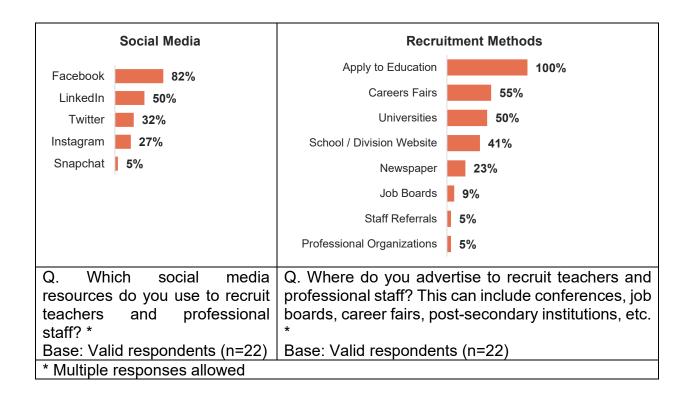
Over 80% of school leaders (18 of 22) reported that they received ten or fewer applicants for teachers per year. In contrast, nearly 80% of school leaders (17 of 22) reported that they would like to receive more than ten applications per year. These findings are consistent with UNESCO's (2023) latest report on teacher shortages and further substantiates recent publications in news media (Rachini, 2024; Wong, 2024). Of the four school leaders who reported that they received eleven or more applications, three of them were from jurisdictions that share a boundary with a major urban centre. This indicates that jobs advertised close to urban centres receive significantly more applications, perhaps suggesting that teacher applicants may prefer to be closer to an urban or more populated environment. This preference puts school jurisdictions in rural and northern locations at a disadvantage.

Similar to teaching staff, the number of applications for professional staff were below the desired levels.



These findings indicate that school leaders are capable to post, interview, and hire more professional staff. School leaders typically recruit professional staff through recruiting websites, such as Linked In, Glassdoor, and Indeed. Some school leaders also may reach out to professional associations, post in local newspapers or radio broadcasts. Positions that are most challenging to staff are those that offer higher salaries in the private sector or other agencies. These positions include mental health therapists and social workers, occupational and physical therapists, psychologists, speech and language pathologists, and senior IT staff. Over 80% of school leaders (18 of 22) reported that they receive less than five applicants for professional staff positions per year. In contrast, nearly 80% of school leaders (17 of 22) would like to receive eleven or more applications for professional staff per year. Similar to the number of teacher applications received, the two participants who received 11 to 20 applications share a jurisdictional boundary with a large urban centre.

All of the participants use Apply to Education, a website dedicated to connecting employers with credentialed teachers and support staff. One school leader mentioned that Apply to Education has features built in that will automatically post job advertisements to recruiting websites such as Glassdoor, Indeed, and LinkedIn. For school leaders, the efficiency of using Apply to Education is appealing. It is inexpensive to post a job and has potential to reach a broad audience of prospective teachers and support staff, yet it comes with the challenge of immense competition from other school jurisdictions in Alberta and beyond. At the time of this writing, there were 814 job postings in Alberta, 1605 job postings in British Columbia, 1055 job postings in Ontario, in addition to hundreds of job postings in the United States and abroad. Major urban school boards in Alberta do not post many if any teaching jobs on Apply to Education or another public facing site. Therefore, this indicates that the number of teaching vacancies in Alberta is likely greater than the numbers reported above.

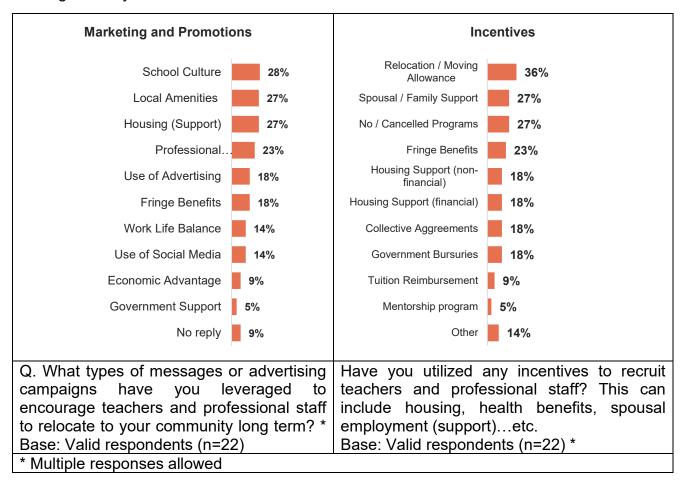


School leaders engage in more targeted recruitment methods by attending career fairs, posting at universities, and on their school division website. The challenge with this is that the demand for teachers and professional staff still far exceeds supply. Publishing job advertisements locally is less likely to reach the audience of college graduates, but may appeal to school jurisdictions aiming to develop members within the local population to become licensed teachers, perhaps through community based education or bridging programs.

Over 80% of school leaders use their school jurisdiction's Facebook page to advertise job postings to prospective applicants. Facebook is also used as a means of communication for updates on school events, and other information. Half of school leaders use LinkedIn to advertise job postings. Considerably less represented in places where leaders use social media includes X (formerly known as Twitter) at 32% and Instagram at 27%. This may represent a gap. Prospective teachers and professional staff fresh out of university lack experience, and consequently, maybe less inclined to create a profile on LinkedIn, while some school leaders acknowledged that Facebook may be outdated to more newer forms of social media, such as Instagram, Snapchat, and TikTok.

For marketing and promotion, school leaders tended to focus on aspects specific to their jurisdiction. Twenty-eight percent of participants referenced school culture (e.g., high teacher retention rate, dynamic learning environments, mentorship opportunities, high teacher satisfaction, and school reputation), local amenities (e.g., skiing, hiking, fishing, festivals, community events,..etc.), and housing support (e.g., teacherages, discounted

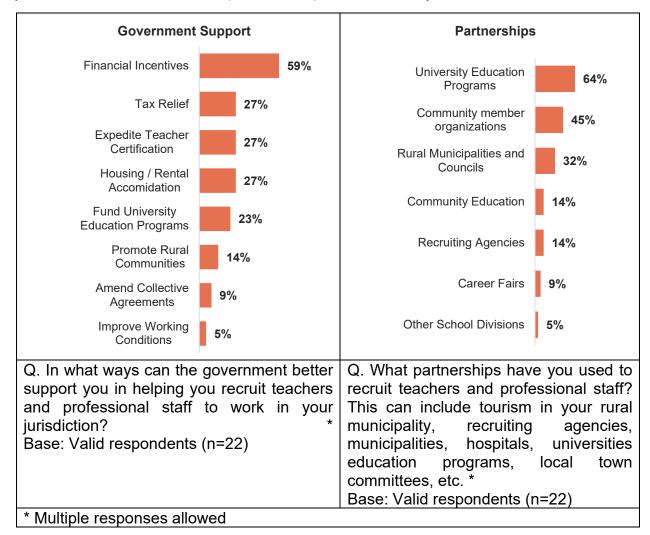
rates for realtors, subsidized housing). Slightly less than one-quarter mentioned professional development opportunities (e.g., tuition reimbursement, paid time off work). Just 18% commented on how they used advertising (e.g., video productions, radio campaigns, posters) and fringe benefits (e.g., health and wellness and resettlement allowances). Slightly less than 10% opted not to reply. One school leader remarked, "We have not created an advertising campaign to draw teachers to our division. We try to encourage them by describing the benefits of our division as well as the geographic areas we encompass". This may represent a gap. School leaders are in competition for teachers and professional staff. Consequently, there is a need to market and promote living and working in their jurisdiction.



Responding to the question on government support, nearly 60% of school leaders suggested that recruitment could be improved through financial incentives. This includes student loan forgiveness, cost-of-living allowances, and/or increasing the amount for travel or relocation allowances. Twenty-seven percent of school leaders suggested that tax incentives or providing housing/accommodation could also incentivize teachers to relocate. The same amount mentioned that expediting the teacher certification process would also be helpful. One school leader mentioned that current collective agreements and the process of immigration makes it near impossible to recruit teachers from outside

of Canada. School leaders cannot complete immigration forms without offering permanent employment. At the same time, school leaders cannot offer permanent employment until teachers complete a probationary period. Foreign teachers can apply for a work permit through the Federal Government of Canada's International Experience Canada (IEC) Program, yet this program is competitive and restricted to a limited number of countries and people who are between the ages of 18 to 35. School leaders may also have to submit a Labour Market Impact Assessment, which requires a significant investment in time and resources.

Twenty-three percent of school leaders mentioned the need to increase funding to university education programs, so that more teachers can enter into the system. Nine percent suggested the need to amend collective agreements, so that rural and northern jurisdictions can be more competitive compared to school jurisdictions in urban centers.



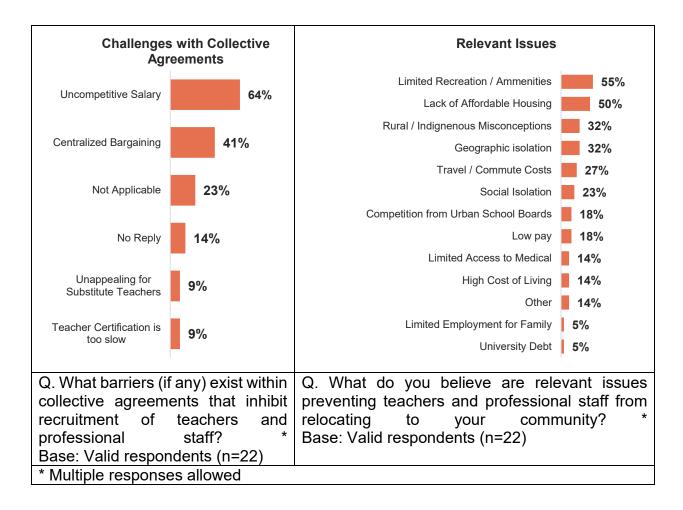
Sixty-four percent of school leaders partner with universities to recruit prospective teachers, which usually takes place during the practicum phase of their studies. Slightly less than half (45%) of school leaders work with community organizations (e.g., Economic

Development Committees), while just over 32% partner with rural municipalities and town councils. Fewer commented on community education (14%), career fairs (9%), and partnering with other school jurisdictions (5%). One school leader commented, "We have not used partnerships to recruit, other than describing the beauty of our area in our advertisements." Creating partnerships with economic development committees, town councils, and other community partners can generate efficiency and create a win-win outcome for others in the community.

The Alberta Teachers' Association negotiates collective agreements with the Province of Alberta's Ministry of Education. Referred to as 'centralized bargaining', this encompasses teachers who work in both urban and rural jurisdictions. Nearly two-thirds (64%) of school leaders said that salaries for rural and northern jurisdictions are uncompetitive, while just over four-fifths (41%) reported that they are unable to negotiate monetary or other incentives for teachers and professional staff to work in rural and northern jurisdictions. As one school leader remarked,

Due to central bargaining local tables no longer have the ability to negotiate on any monetary values which is a hardship on rural divisions. Central bargaining needs to take into consideration further incentives for rural boards. When monetary incentives are the same across all boards it makes it very difficult for rural boards to recruit against large urban boards.

Perhaps due to the political sensitivity that is inherent in collective bargaining, 23% of school leaders responded to this survey question stating that it was not applicable while 14% chose not to reply. Nine percent of school leaders said that the collective agreement makes it difficult to find substitute teachers, while the same amount mentioned that the teacher certification process is too slow.

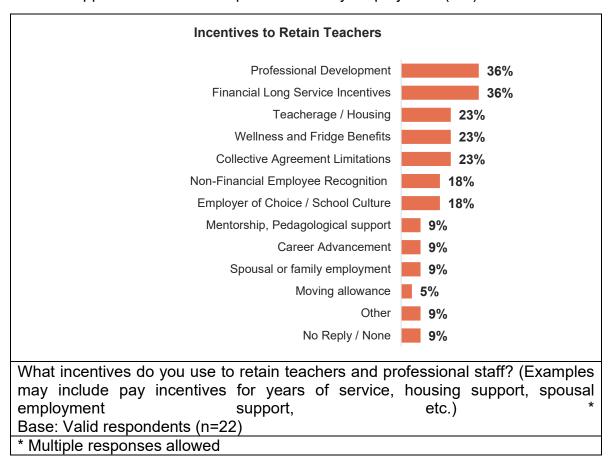


Centralized bargaining does not account for the challenges that are inherent in working in rural and northern jurisdictions. School leaders commented on a lack of recreation / amenities (55%), geographic isolation (32%), travel and commuting costs (27%), misconceptions of rural and/or indigenous communities, and social isolation (23%). Half of the school leaders also commented on a lack of affordable housing (50%) and the relative high cost of living (14%). This is consistent with literature that documents challenges in living and working in rural regions (Landertinger et al., 2021; Kitchenham and Chasteauneuf, 2010; See et al., 2020a; Van Nuland et al., 2020).

At one point in time, employment in some northern and rural jurisdictions had a lower cost-of-living relative to urban centres. However, this appears to be changing with recent increases in inflation. School leaders are also facing increasing competition from urban school boards and find it especially challenging to recruit substitute teachers: "When the Calgary Board of Education can hire 600 teachers in the month of September, which is more teachers than we have in our entire division, it illustrates the challenge we face to recruit".

# **Retaining Teachers: Challenges and Solutions**

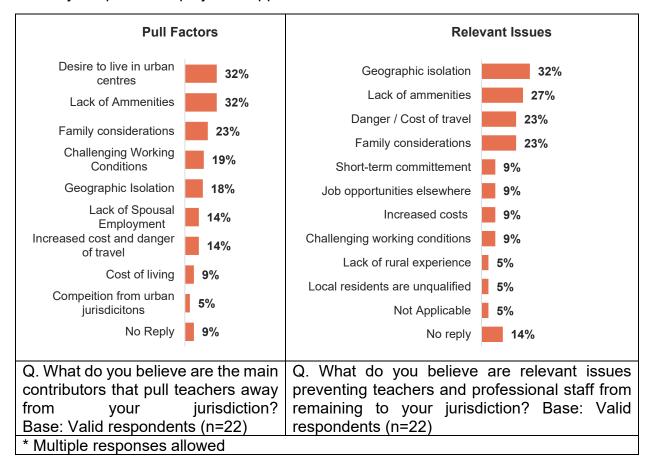
To incentivize teachers and professional staff to stay in their jurisdictions, 36% of school leaders mentioned that they offer financial incentives for years of service. Just over 23% of participants mentioned that they provide housing or housing support (i.e., teacherages). The same amount mentioned wellness and fringe benefits. Slightly more than one-third of school leaders mentioned professional development (36%), which includes paid time away from work or financial reimbursement. Other mentions include non-financial employee recognition (18%), promoting their school culture / employer of choice (18%), mentorship and pedagogical support (9%), career advancement (9%), and various supports to assist with spousal or family employment (9%).



Just over one-fifth (23%) of school leaders commented on limitations within the collective agreement: "Over the years our Board has recognized the value of negotiating a generous Collective Agreement for teachers. Central bargaining has limited our ability to use the collective agreement as a strategy for retention". This might explain why others chose not to reply (9%) or offered comments categorized as 'other' (9%). One school leader raised concerns over the fairness of using incentives: "Housing supports over time has been used in minimal fashion – the problem is that teachers who are established in the area

(and not moving) want similar benefits which is not possible given the present funding allocations."

School leaders commented on several factors that serve as pull factors away from employment in rural and northern regions. Thirty-two percent commented on how teachers and professional staff prefer to live in urban centres. The same percentage of school leaders mentioned a lack of amenities, which includes entertaining, recreation facilities, businesses, and things to do. Nineteen percent reported issues with work fatigue and challenging learning environments such as high class sizes and varied student abilities. Eighteen percent of school leaders mentioned geographic isolation. Others mentioned family considerations, stating that it is difficult for new teachers to settle down and start a family. Similarly, teachers who have families may be pulled away due to a lack of family or spousal employment opportunities.



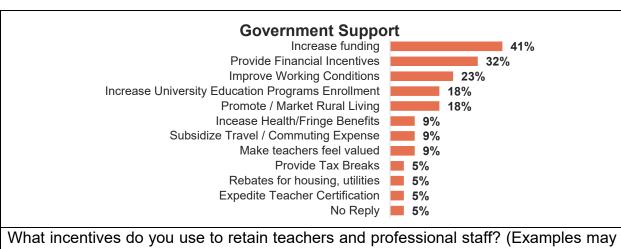
School leaders identified several challenges that come with living in rural and northern regions. Thirty-two percent of school leaders mentioned geographic isolation, while 27% commented on a lack of amenities. Twenty-three percent mentioned the increased danger or cost of commuting. The same percentage mentioned family considerations. In today's economy, participants mentioned that it is challenging for young graduates to afford a house in addition to mounting student debt out of university. As a result, more graduates

are opting to stay closer to family is a way to address financial hardship. Similarly, some applicants may avoid employment in rural and northern jurisdictions due to limited employment opportunities for their spouse.

For government support, 41% are asking for the provincial government to increase funding to their jurisdictions. School leaders commented that this could be used to hire more support staff, increase salaries, expand programming, or be used to subsidize cost-of-living and travel expenses. As one participant mentioned,

The major issue in many opportunities is funding. [We] need to come up with new funding opportunities that meet the needs of divisions-school uniquely, independently rather than collectively as a whole. We are experiencing significant increases in student needs, mental health and behavioural challenges. We need to increase the supports in the classroom to address these ever increasing needs.

Slightly fewer (32%) suggested providing financial incentives tied to employment in rural communities and/or for long-term service: "Fund incentives for years of service in a rural community" and "Provide retention bonuses for teachers that stay within a school division for a determined number of years. Provide rural school divisions additional grants that could be used to retain teachers (i.e. daily or weekly rate or allowance to drive X kilometres to work)".



What incentives do you use to retain teachers and professional staff? (Examples may include pay incentives for years of service, housing support, spousal employment (support),

etc.)

Base: Valid respondents (n=22)

\* Multiple responses allowed

Just over one-in-five school leaders (23%) mentioned the need to improve classroom working conditions. Examples include reducing class sizes and hiring more educational assistants, psychologists, and other support staff. Slightly fewer than one-in-five (18%) mentioned the need to expand enrollment in university education programs, while others (5%) mentioned the need to expedite the teacher certification process. Others mentioned

the need to promote or market rural living (18%). Slightly less than ten percent mentioned the need to increase health/fridge benefits, and/or subsidize travel expenses.

#### Recommendations

This section offers suggestions and possible solutions based on findings from this study and best practices reviewed in the literature. To address the current teacher and professional staff shortages, it is recommended that the government initiate collaboration with school districts, and other stakeholders to develop a strategic plan. With Alberta Education initiating the collaboration to develop, implement and assess the plan it will increase the possibility of success. The challenge of staffing shortages in rural and northern Alberta persists as a dynamic problem that will benefit from a long term collaborative commitment to finding solutions.

#### School Leaders: Recruiting and Retaining Applicants

School leaders can take on an active role in addressing recruitment. This involves marketing their jurisdiction's competitive advantage. Below are some of descriptive examples from two school leaders.

Thoughtful and compelling messages that highlight our community's unique environments, location, culture, benefits, opportunities, and most importantly the people that make up our community. We emphasize career advancement and development, educational opportunities, while promoting a work-life balance with our health & well-being benefit programs for many of our positions.

Rural experience; close proximity to urban center; family atmosphere within working environments; welcoming communities for families; opportunities to be involved in community events, festivals; access to activities for children (community sports, outdoor experiences); access to amenities (pools, fitness centers, ice arenas, curling rinks, parks); access to natural areas (hiking, camping, fishing, hunting, walking/running trails), ice fishing, snowmobiling, golfing, cross country and downhill skiing); local experiences.

An expansive range of options can increase the likelihood of attracting a diverse pool of applicants. Other competitive advantages can include support for housing, a relative low cost of living, school reputation, work-life balance, connection to northern and/or indigenous communities, and spousal or family employment opportunities. Promoting the schools within the jurisdiction should also be included. Messaging can include mentorship and expedited career advancement, professional development, fringe benefits, and perhaps testimonials from teachers and support staff.

Marketing and advertising should also be used in areas that is accessible to their target audience, which can include internal and external strategies. Internal strategies, used by

some school leaders, include word-of-mouth referrals, posting vacant positions on school websites, advertisements in local newspapers and radio stations. This may be particularly effective for community-based education, the process of subsidizing members within the local community to become licensed teachers. External strategies involve recruitment of personnel outside of the school leader's jurisdiction, such as recruitment of university education students, which involves posting on Apply To Education, (university) career fairs and job boards, and recruiting websites. Investing in targeted adds on Google and social media is also worth considering. This could involve utilizing social media platforms that are more commonly used by a younger target audience, such as Snap Chat and Instagram, whereas LinkedIn and Facebook tend to be used by generations who are more established in their careers. Some school jurisdictions staff positions solely dedicated to advertising and marketing. Personnel in these roles produce promotional videos, brochures, managing social media accounts, coordinating with media outlets.

Some school leaders do not have personnel to design and implement marketing strategies, while others may lack experience or subject matter expertise. In this case, marketing agencies could be contracted perhaps, or funding could be set aside for marketing internships for university students. Partnering with town councils or economic development committees offers opportunities to save costs on travel expenses in attending career fairs and recruitment for other jurisdictions. Continuing to partner with universities can help school leaders develop relationships with potential applicants and help bring branding and awareness to their jurisdiction. Recruiting agencies and professional associations may also be helpful options, particularly in recruiting individuals with finance or accounting backgrounds.

Retaining teachers involves strategies that appeal to both novice and established teachers. For novice teachers, this should begin with a carefully designed on-boarding and orientation plan. In northern Alberta, Brandon (2015) identified the benefits of a late summer, three-day on-boarding retreat for new teachers. Workshops and seminars followed the Framework of Effective Teaching for Learning (FETL) designed by the Alberta Association of Deans of Education (AADE), which aimed to help teachers (a) design academically and intellectually engaging learning; (b) engage students in meaningful learning experiences; (c) assess student learning to guide teaching and learning; (d) foster supportive learning relationships; and (e) collaborate to enhance teaching and learning (Brandon, 2015, p. 154). Pairing novice teachers with experienced teachers enables the novice teacher to reflect, ask questions, seek advice and guidance. For this to happen, school leaders should allocate time for mentors and mentees and could provide with them with guiding questions or discussion prompts aimed to develop the novice teacher's competence and confidence in the classroom. Provincial support is necessary to provide the appropriate incentives for established staff members to become mentors to novice staff. One school offers up to 80% of tuition reimbursement, though the majority of school leaders avoid financial incentives: "Our collective agreement prohibits us from providing such incentives. We do offer a substantial professional development fund and years of service recognition which includes awards rather than cash incentives".

When a student in rural or northern Alberta is interested in becoming a teacher or applicable professional staff, they could be offered financial incentives in return for service. For instance, perhaps by paying tuition for four years of post-secondary schooling, school leaders could receive eight years of service in return. By that time, the employees are likely well established in the community and are less likely to relocate. When school leaders have the ability to offer financially linked incentives in exchange for a set number of years of service, studies such as Steele et al. (2010) and Glazerman et al. (2013) have demonstrated this to be an effective practice in improving recruitment and retention.

Community education programs have also shown promise (Landertinger et al., 2021). If student summer employment programs could be expanded so that school boards could offer summer positions within the school board, this would assist the student in remaining connected to the community. For students in Education, they could be placed in the classrooms for May and June so they get hands-on experience in addition to their practicums, and similarly for the other professions working directly with the departments that they would eventually join once they have completed their degrees and/or designations.

For established teachers, there were several ways in which school leaders can foster high retention. Employee recognition and long service awards acknowledge teacher service and can help promote a positive school culture. Several school leaders offer support for professional development, either through paid days off or reimbursement to attend conferences or enroll in courses online. School leaders who foster relationships with their staff and provide feedback on their professional development can create opportunities for career advancement into leadership positions. This helps create a positive learning environment and school culture, which can improve or enhance a school's reputation. Some school leaders mentioned that they use the same incentives to retain teachers as they do to recruit teachers. This should be avoided as teachers' motivations can vary depending on where they are at in their careers. Therefore, school leaders are encouraged to use a variety of strategies identified above.

#### **Government of Alberta: Supporting Recruitment and Retainment**

Findings from this study identified several reasons for these challenges such as limited access to medical care, amenities, geographic and social isolation, competition from urban jurisdictions, limited opportunities for spousal or family employment, and travel costs. These challenges, coupled with mounting university debt, shortages in affordable housing, and widespread inflation, has resulted in more college graduates opting for employment locations closer to home. While it is unlikely to resolve all challenges in all regions, the Government of Alberta can play an instrumental role in offering support and creating conditions to improve recruitment and retention in rural and northern jurisdictions.

The Government of Alberta's (2010) Workforce Framework for Action offers a helpful starting point on how to support school leaders and their jurisdictions. Framed around attracting, developing, and retaining Alberta Education's workforce, there are several action items that can be monitored, researched, and analyzed to inform school leaders and key decision-makers in government. For example, various tools, such as Microsoft PowerBI, could be used to analyze statistics on geographic distribution, school size, staffing capacity, in relation to attrition. Surveys could be distributed to fourth-year university students in Education to better understand their needs and preferences in relation to what is currently being offered. At the time of its publication, the Government of Alberta's Workforce Planning division had forecasted shortages in teacher recruitment. The impact of these shortages has proliferated with increases of population in recent years. Reinvesting in a workforce strategy can help ensure efficient use of resources to address staffing deficits in rural and northern Alberta.

There is also a need to reduce barriers to become a teacher in Alberta. Currently, teacher certification requires applicants to complete accredited education programs through a full four-year program or two-year after degree program, which excludes a diverse audience of talent who could bring great value to Alberta's education system. Skilled trades people, especially in rural and northern regions, could be hired to teach courses in automotive mechanics, the culinary arts, cosmetics, carpentry, plumbing, and/or electrical engineering. Currently, the only automotive mechanics program available is at the University of Alberta. This indicates that demand far exceeds supply. Ambitions to expand programing at other post-secondary institutions involves significant time to develop and would require partnerships with institutions that have existing programs in place, i.e., partnerships with a polytechnic such as SAIT and NAIT that can accredit individuals in the skilled trades areas. A more practical solution would be to offer expedited teacher certification to Red-Seal certified journeymen who would just need to acquire and formalize their skills in teaching. Several school leaders in this study also commented on the need to hire teachers in the math and sciences. Expediting teacher certification for people who have graduate degrees in these fields or teachers who acquired their training experience outside of Canada could address staffing shortfalls in these subjects.

In some circumstances, school leaders can grant a Letter of Authority to fill vacant positions. However, school leaders must document and demonstrate that they have exhausted their recruiting efforts, and they may be limited in the number of letters they are able to grant. It would be worthwhile for the Government to reexamine policies around the Letter of Authority provision. This would provide more flexibility as one school leader commented:

We need quicker turnaround on letters of authority or teacher certification approvals. We have had some success getting a Red Seal chef who is not teacher-approved to teach food to our students. We would like more arrangements that are similar to this one for our construction teachers, fabrication teachers, and music teachers.

The Government may also want to create avenues for expedited certification for qualified applicants to receive certification. Instead of a full four-year or two-year after degree program, perhaps the Government can introduce a one-year expedited program for teacher certification reserved specifically for subject areas that are in high demand, such as those in STEM (Science-Technology-Engineering-Math) and the skilled trades.

Another suggestion would be to find innovative ways to expand the applicant pool. Some school leaders commented on the idea of recruiting foreign trained teachers. Government support in the form of grants or bursaries could help offset the costs for foreign trained teachers to complete university course upgrades and other fees associated with teacher certification. Several school leaders are asking for government support to increase the number of seats in university education programs and provide options for distance learning. For example, one school leader commented, "Satellite year 1 and year 2 programs in communities so finances are less of a barrier. For rural students looking to teach they face years of living in an expensive city while paying increasing tuitions and increasing fees". Increasing the number of seats in university programs and expanding options for community-based education where students can complete their studies and practicums in their home communities increases the likelihood that they will stay long term.

The applicant pool could also be expanded by promoting rural living and marketing teaching as a desirable profession. School leaders commented, "We believe it is important to recruit locally and would benefit from support to entice local students to become teachers and/or professional staff", and the "government could consider a full push to promote rural opportunities across all sectors. This is not just an education issue." Shortages in other professions, such as certified family physicians, in rural communities has been well documented (Curran et al., 2008; Global News, 2024; Pinsky, 2017; Walsh et al., 2011). Investing in a marketing campaign to promote rural could not only help address shortages in teaching but may also address gaps in recruiting and retaining professional staff as well as other vacancies in rural and northern communities.

The topic of financial incentives was another recurring theme. Several school leaders voiced concern over centralized bargaining and their inability to offer higher salaries relative to teaching positions in urban jurisdictions. The Government of Alberta could engage with the Federal Government of Canada to reexamine policies on northern living allowances, particularly those in isolated communities, far from urban jurisdictions that lack amenities and other critical infrastructure. Several school leaders are asking for increases to salary to off-set cost-of-living, or perhaps reimbursement for travel to teachers and professional staff who have to commute long distances between schools. Other financial investments could include investing in housing or teacherages, possibly on provincially owned land. School leaders also suggested providing tax rebates or forgiving a portion of student loan debt to work in rural and northern communities. These financial incentives, which are becoming common recruitment strategies in the United States, could be tied to years of service in order to enhance retention. This is standard

procedure in other government agencies, such as the Canadian Armed Forces, whereby recruits are financially penalized if they leave their military occupation before honouring their years of service commitment. Utilizing a range of strategies suggested in this section provides school leaders with options and can help level the playing field with urban jurisdictions, while at the same time, creating more fairness and equity among the rural and northern school jurisdictions themselves.

Strategist and key decision makers in government could partner with other professional organizations to promote living and working in rural communities, while leveraging subject matter expertise of talent recruitment agencies, marketing firms, and communications experts, especially those knowledgeable and trained on social media platforms. Peace Collaborative Services (2024) is a prime example of how five northern boards have worked together to address recruitment and retention. This model should be expanded to other areas of the province if provincial support is provided, being able to look outside of the traditional requirements of each board having their own staff.

#### Conclusion

Drawing from the perspectives of twenty-two school leaders in rural and northern Alberta jurisdictions, this study examined the challenges and possible solutions to recruitment and retention of teachers and professional staff. While each jurisdiction differs, there is considerable overlap in the challenges school leaders must confront in ensuring adequate levels of staff to provide students with a safe and prosperous learning environment. Challenges identified in this study include social and geographic isolation, cost of living and financial challenges, a lack of amenities and infrastructure (including access to health care), and increased competition from urban jurisdictions among other challenges.

Reading the comments from the surveys might leave one with the impression that these school leaders are industrious, dedicated professionals committed to doing everything within their means to address staffing shortages. Several school leaders commented on creative marketing campaigns to promote their communities, welcoming and on-boarding programs to make new teachers feel welcomed, and recognizing staff for their accomplishments and years of service. They establish relationships with community leaders within their jurisdictions, provide opportunities for mentorship and professional development, and have, in some cases, allowed for people in the skill trades to teach on Letter of Authority provisions. They operate within the limits of collective agreements and are asking the provincial government for support.

A starting point would be to reinvest in the Government of Alberta's (2010) workforce action plan, which can help define needs and reallocate resources accordingly. Expanding the applicant pool to include other professionals, such as Red Seal certified skilled trades journeymen, foreign-trained educators, and people with university graduate degrees could help address staffing shortages in subjects where there is a pressing deficit. This may involve revisiting provisions around the Letter of Authority to enable

school leaders with more flexibility and creating education certification courses that can be completed online in one year or less. Financial incentives are an effective mechanism for recruitment but appear to only work well in the short term. The government could implement tax rebates or financial incentives based on years of service in order to encourage retention. The government could also create marketing campaigns that promote the benefits of living in rural and northern communities. These actions could be done in partnership with other professionals such as marketing and advertising agencies, talent recruitment firms, and experts in communication, particularly those experienced in social media. In partnership with these professionals, the Government of Alberta and school leaders can make a positive difference in addressing staffing deficits and help level the playing field with urban jurisdictions, while at the same time, creating more fairness and equity among the rural and northern school jurisdictions themselves.

#### **Bibliography**

- Barley, Z., & Beesley, A. (2007). Rural school success: What can we learn? *Journal of Research in Rural Education*, 22(1), 1–16.
- Bernard, R. (2024, March 18). B.C. relying on uncertified instructors to teach in elementary, secondary schools. https://vancouver.citynews.ca/2024/03/17/bc-teachers-shortage-uncertified-instructors/
- Bernstein, R. J. (2010). The pragmatic turn. Polity.
- Brandon, J. (2015). Excellent teachers for northern and remote Alberta schools. In N. Maynes & B. Hatt (Eds.), *The complexity of hiring, supporting, and retaining new teachers across Canada* (pp. 150–168). Canadian research in teacher education: A polygraph series (Vol. 5) [eBook].
- Canadian Broadcasting Corporation. (2024). *Use of emergency supply substitute teacher skyrocketed after onset of pandemic: documents*. https://www.cbc.ca/news/canada/newfoundland-labrador/nl-emergency-supply-teachers-1.7202594
- Cape Breton University. (2024). *Bachelor of Education Program*. https://www.cbu.ca/academics/programs/bachelor-of-education/
- CBC News. (2024, March 11). N.S. assessing proposals for fast-tracked teaching degrees from 4 universities.
- Clandinin, D. J., Long, J., Schaefer, L., Downey, C. A., Steeves, P., Pinnegar, S., & Wnuk, S. (2015). Early career teacher attrition: Intentions of teachers beginning. *Teaching Education*, 26(1), 1–16.
- Coldwell, M. (2017). Exploring the influence of professional development on teacher careers: A path model approach. *Teaching and Teacher Education*, *61*, 189–198.
- Criscuolo, D. (2020). School Personnel Managers' Perceptions of the Use of Social Media for Teacher Recruitment in Southeastern Pennsylvania. Immaculata University.
- Curran, V., Hollett, A., Hann, S., & Bradbury, C. (2008). A qualitative study of the international medical graduate and the orientation process. *Canadian Journal of Rural Medicine: The Official Journal of the Society of Rural Physicians of Canada*, 13(4), 163–169.
- Fullbeck, E. (2014). Teacher mobility and financial incentives: A descriptive analysis of Denver's ProComp. *Educational Evaluation and Policy Analysis*, 36(1), 67–82.
- Glazerman, S., Protik, A., Teh, B., Bruch, J., Max, J., & Warner, E. (2013a). Transfer incentives for high-performing teachers: Final results from a multisite randomized experiment. *National Center for Education Evaluation and Regional Assistance, Institute of Education Sciences, US Department of Education*.

- Glazerman, S., Protik, A., Teh, B., Bruch, J., Max, J., & Warner, E. (2013b). Transfer incentives for high-performing teachers: Final results from a multisite randomized experiment. *National Center for Education Evaluation and Regional Assistance, Institute of Education Sciences, US Department of Education*.
- Global News. (2024). Rural and remote doctors are burning out. What will it take to help them?
- Goldhaber, D., Destler, K., & Player, D. (2010). Teacher labor markets and the perils of using hedonics to estimate compensating differentials in the public sector. *Economics of Education Review*, 29(1), 1–17.
- Government of Alberta. (2010). *Education Sector Workforce Planning: Framework for Action*. https://open.alberta.ca/dataset/dfe94205-af04-4689-8a3b-88bf3765e9ed/resource/73241c07-e0df-4ec9-b96c-c1640b581f57/download/5375455-2010-education-sector-workforce-planning-framework-for-action.pdf
- Government of Alberta. (2023). *Education Act*. https://kings-printer.alberta.ca/1266.cfm?page=E00P3.cfm&leg\_type=Acts&isbncln=9780779846450
- Government of Alberta. (2024). *Alberta Education Teaching Quality Standard*. https://open.alberta.ca/dataset/4596e0e5-bcad-4e93-a1fb-dad8e2b800d6/resource/75e96af5-8fad-4807-b99a-f12e26d15d9f/download/edc-alberta-education-teaching-quality-standard-2018-01-17.pdf
- Government of British Columbia. (2024a). *Letter of Permission*. https://www2.gov.bc.ca/gov/content/education-training/k-12/teach/employer-support/letter-of-permission
- Government of British Columbia. (2024, October 27b). Fifty new teachers recruited to work in rural B.C. classrooms. https://news.gov.bc.ca/releases/2023ECC0077-001666
- Hamm, L. (2015). Hiring and Retaining Teachers in Diverse Schools and Districts. In N. Maynes & B. Hatt (Eds.), *The Complexity of Hiring, Supporting and Retaining New Teachers Across Canada* (pp. 40–73). Canadian Association of Teacher Education.
- Jonas, S. (2024, August 18). *Teacher shortage has staff across Canada working "in survival mode.*" https://www.cbc.ca/news/canada/montreal/teacher-shortage-5000-quebec-1.6940252
- Kennedy, A. (2023, December 14). *N.L. think-tank aims to find ways to support, recruit and retain more teachers in 2024*. https://www.cbc.ca/news/canada/newfoundland-labrador/nl-nlta-think-tank-1.7059555
- Kitchenham, A., & Chasteauneuf, C. (2010). Teacher Supply and Demand: Issues in Northern Canada. *Canadian Journal of Education*, *33*(4).

- Kshatri, S. (2024, March 22). *Data shows near-threefold jump in uncertified teachers in B.C.* https://www.cbc.ca/news/canada/british-columbia/reliance-on-uncertified-teachers-in-b-c-1.7147270#
- Landertinger, L., Tessaro, D., & Restoule, J.-P. (2021). "We have to get more teachers to help our kids": Recruitment and retention strategies for teacher education programs to increase the number of Indigenous teachers in Canada and abroad. *Journal of Global Education and Research*, *5*(1), 36–53. https://doi.org/10.5038/2577-509x.5.1.1066
- Merriam, S. B. (2009). *Qualitative research: A guide to design and implementation*. Jossey-Bass.
- Niklasson, L. (2020). Suggestions from national-level actors on how to handle retention and attrition of teachers: A case study from Sweden. In T. Ovenden-Hope & R. Passy (Eds.), *Exploring Teacher Recruitment and Retention: Contextual Challenges from International Perspectives* (pp. 210–220). Routledge.
- Paradis, D. (2024, May 14). \$1.7M announced in Alberta for training teachers in rural and remote communities. https://www.aptnnews.ca/national-news/1-7m-announced-in-alberta-for-training-teachers-in-rural-and-remote-communities/
- Peace Collaborative Services. (2024). Why PCS Was Created? https://www.gppsd.ab.ca/pcs/peace-collaborative-services/why-pcs-was-created
- Picardi, C. A. (2019). *Recruitment and Selection: Strategies for Workforce Planning and Assessment* (1st ed.). SAGE Publications, Incorporated.
- Pinsky, W. W. (2017). The Importance of International Medical Graduates in the United States. *Annals of Internal Medicine*. https://doi.org/10.7326/m17-0505
- Pottie, E. (2023, December 1). *Nova Scotia to offer new fast-tracked teacher training from Cape Breton University*. https://www.cbc.ca/news/canada/nova-scotia/nova-scotia-to-offer-new-fast-tracked-teacher-training-from-cape-breton-university-1.7046820
- Rachini, M. (2024). *Teacher shortage has staff across Canada working "in survival mode."* CBC News. https://www.cbc.ca/radio/thecurrent/teacher-shortage-has-staff-across-canada-working-in-survival-mode-1.7140253
- See, B. H., Gorard, S., Morris, R., & El-Soufi, N. (2020a). How to recruit and retain teachers in hard-to-staff areas: A systematic review of the empirical evidence. In T. Ovenden-Hope & R. Passy (Eds.), *Exploring Teacher Recruitment and Retention: Contextual Challenges from International Perspectives* (Issue 2017, pp. 148–162). Routledge.
- See, B. H., Morris, R., Gorard, S., Kokotsaki, D., & Abdi, S. (2020b). Teacher recruitment and retention: A critical review of international evidence of most promising interventions. In H. S. Beng & R. Morris (Eds.), *Teachers Matter: Improving Recruitment, Retention and Development of Teachers* (pp. 47–92). MDPI: Education Sciences. https://doi.org/10.3390/educsci10100262

- Steele, J., Murnane, R., & Willett, J. (2010). Do financial incentives help low-performing schools attract and keep academically talented teachers? Evidence from California. *Journal of Policy Analysis and Management*, 29(3), 451–478.
- The Newfoundland & Labrador Teachers' Association. (2024). *Hiring of Substitutes*. https://www.nlta.nl.ca/hiring-of-substitutes/
- UNESCO. (2023). Global report on teachers Addressing teacher shortages. In *International Task Force on Teachers for Education 2030*.
- University of British Columbia. (2024). West Kootenay Teacher Education Program. Https://Teach.Educ.Ubc.ca/Bachelor-of-Education-Program/Wktep/. https://teach.educ.ubc.ca/bachelor-of-education-program/wktep/
- Van Nuland, S., Whalen, C., & Majocha, E. (2020). Teacher recruitment and retention in Canada: Programmes for teacher selection, support and success. In *Exploring Teacher Recruitment and Retention: Contextual Challenges from International Perspectives* (pp. 163–175).
- Walsh, A., Banner, S., Schabort, I., Bowmer, M., & Granata, B. (2011). International Medical Graduates Current Issues. *Members of the FMEC PG Consortium*, 1–24. https://doi.org/10.1016/S1569-9056(05)80208-8
- Waters-Weller, C. (2009). Attracting veteran teachers to low socioeconomic status schools: Initiatives and considerations. In *69*. Walden University.
- Wong, J. (2024). *Teacher shortages are leaving educators with no 'good options'* and they say students are paying the price. Canada Broadcasting Corporation. https://www.cbc.ca/news/canada/education-educator-shortages-1.7156002