Reporting on Class Size and Complexity, Aggression, and Artificial Intelligence (AI) in Alberta's K–12 Schools (Fall 2023)

ATA Pulse Rapid Research Study
Pulse Survey (December 1–12, 2023)

The Alberta Teachers' Association

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Contents

Overview

In December 2023, the Alberta Teachers' Association (ATA) conducted a pulse rapid research study through surveying 2,148 teachers and school leaders in Alberta.

This report offers a comprehensive analysis of the current challenges faced by teachers and school leaders in Alberta, drawing on qualitative and quantitative data gleaned from the survey responses to highlight critical issues in Alberta's educational landscape. The insights presented are based on direct feedback from teachers and school leaders and reflect the realities of the postpandemic classroom.

The following key findings underscore the need for immediate and sustained action to address significant challenges in Alberta's education system.

KEY FINDINGS

Increasing Class Sizes

Of the teachers surveyed, 61 per cent reported increased class sizes in the 2023/24 school year compared with 2022/23. Among these, 39 per cent reported having over 30 students in their largest class, with class sizes ranging from 32 to 37 students, on average. Teachers identified classes in Grades 4–6 and junior and senior high school classes in science, English language arts and mathematics as among the most crowded. They reported high school physical education classes as having the largest class sizes, sometimes with over 50 students.

Rising Complexity and Diversity of Student Needs

A significant majority of teachers and school leaders (nine in ten) reported an increase in the complexity and diversity of student needs this school year. Teachers reported the greatest levels of complexity in the areas of social-emotional issues (83 per cent), behavioural challenges (78 per cent), cognitive needs (63 per cent), English as an additional language (EAL) (50 per cent), socioeconomic factors (32 per cent) and linguistic diversity (24 per cent).

Decline in Supports and Resources for Students with Exceptionalities

Over half (57 per cent) of teachers and school leaders reported a decrease this school year in the supports available for students with exceptional needs compared with 2022/23.

Unreasonable Wait Times for Specialized Assessments

About half (53 per cent) of teachers reported having requested specialized assessments (such as speech therapy, occupational therapy or psycho-educational evaluations) for their students this school year. However, more than half (56 per cent) of teachers anticipate that their requests will not be fulfilled by the end of the school year, thus rendering them ineffective.

Aggression in Schools

Regarding aggression in schools, 52 per cent of teachers said that they had experienced bullying or violence in their work environment at some point since the beginning of this school year. The aggression predominantly occurred in person (95 per cent) and was mainly perpetrated by students in teachers' own classrooms (60 per cent).

This data is comparable to a 2019 ATA research study using similar measurement instruments (ATA 2020). However, it appears that lesser categories of aggression (such as remarks or gestures intended to offend, harm or intimidate) have trended upward in 2023. In terms of frequency in the moderate and serious categories of aggression (such as threats, physical aggression or stalking), the 2023 findings are similar to those of 2019, except for personal property damage, which has notably increased.

Culture Wars and Aggressive Exchanges Postpandemic

More than two-thirds (71 per cent) of teachers and school leaders reported that they have observed students making demeaning or hateful remarks toward classmates who have differing views, which has led to hostile exchanges outside the classroom. These remarks have been related to sexual orientation and gender identity (69 per cent), race (63 per cent), COVID-19 policies (50 per cent), and climate change science (31 per cent).

This data indicates a concerning rise in aggression in urban, suburban and rural schools, reflecting the societal and cultural divisions in Alberta communities at large.

Specifically, a significant portion of teachers (64 per cent) and school leaders (68 per cent) reported an increase in aggression in their schools following the COVID-19 pandemic.

Training and Preparedness for Dealing with Aggression

A notable 32 per cent of school leaders and 63 per cent of teachers indicated that they have never received training in their roles to de-escalate potentially aggressive situations. Furthermore, more than half (55 per cent) of the respondents reported that they did not feel comfortable in their ability to effectively de-escalate a situation that has the potential to escalate to aggression. This highlights a significant gap in teacher and school leader preparedness for handling such incidents.

Well-Being and Professional Strain

The survey responses indicate significant fatigue, moral distress and burnout in Alberta's teaching profession. Only 22 per cent of respondents reported feeling somewhat or very happy, whereas a striking 89 per cent reported feeling stressed and 93 per cent reported feeling exhausted at the end of the day over the past week. Additionally, 45 per cent reported that they did not feel hopeful, despite 76 per cent saying that they experienced moments of joy at school each day.

Adoption and Impact of AI in Education

About half (55 per cent) of Alberta's teachers and school leaders reported having used artificial intelligence (AI) tools or systems in the previous six months, either professionally or personally. Respondents were divided in their perceptions of the impact of AI on K–12

education: approximately one-third
(29 per cent) saw AI as having a positive effect,
another third (37 per cent) saw AI as having
a negative effect, and the rest were neutral or
uncertain. The survey responses indicate a
notable concern among teachers and school
leaders (80–90 per cent) about AI's potential
adverse effects, such as the impact on moral
decision making, cognitive atrophy in
students and diminishing trust in the teaching
profession.

Integration and Challenges of AI in the Profession of Teaching

While 40 per cent of teachers and school
leaders reported not being concerned about AI
replacing their jobs, perhaps because of their
insight into the deeply complex and highly
relational nature of teaching, a significant
59 per cent indicated that their schools are not
adequately prepared to effectively harness AI
technologies. Furthermore, respondents had
concerns about inequitable access to AI tools,
with 59 per cent agreeing that uneven access
will widen the existing educational divides
among students.

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Executive Summary

Beyond Capacity: Reporting on Key Stressors and Strained Conditions of Professional Practice of Alberta's Teachers and School Leaders

This report details the results of the ATA's fall 2023 pulse rapid research study, which was conducted December 1–12, 2023, with the goal of helping the ATA better understand Alberta's educational landscape.

The survey focused on three key areas:

- Class size and complexity of student needs

- Well-being and aggression in schools and school communities

- AI in education

The study, which employed a randomly stratified and derived snowball sampling method, resulted in a highly representative data set from 2,148 Alberta teachers (1,934 teachers and 214 school leaders). Given the nature of the data set, the findings hold a considerable degree of reliability, demonstrated by a minimal data margin of error at ±2 per cent, applicable in 95 per cent of instances.

A significant overall finding across several recent ATA research studies has been widespread teacher burnout and overwhelm, with one-third of Alberta's teaching population contemplating leaving the profession.[1] This is attributed to the increased role complexities and demands of teaching in a context of diminishing conditions of professional practice.

The findings outlined in this report highlight the significant challenges teachers in Alberta are encountering as they try to meet the growing diversity and complexity of needs of their students. The rising number of students requiring supports, including those learning EAL and those with various exceptionalities, is a critical issue that has been exacerbated by systemic issues in the education system. The study's qualitative data consistently highlights lack of funding, diminished resourcing, inadequate supports and disconnected senior leadership as major concerns.

The introduction of new curricula and expectations for teachers to do more with less have added to these challenges. Teachers report that they struggle with inadequate preparation time and resources and that they often resort to personally funding teaching and learning materials in the classroom.

All of this has a direct impact on student learning and well-being, leading to significant growth in moral distress among Alberta's teachers and school leaders. Additionally, both teachers and students are experiencing significant mental health challenges, including stress, anxiety, fatigue and feelings of hopelessness.

There is a strong call in this study for structural changes to Alberta's education system in order to manage the growth of complex student needs, including increased funding, more supports and resources for both teachers and students, adjustments to class sizes, and more teachers and educational assistants (EAs). The study also underscores the need to eliminate disparities in educational resources and supports across schools and

communities, as well as the need for improved communication and more-constructive parental involvement in schools.

By understanding and responding to these complexities in our classrooms, Albertans will be able to better support and enhance the educational experience of the next generation and, thus, their own emerging and uncertain futures.

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Class Size and Complexity

This study's findings reveal unsustainable challenges related to large class sizes and increased complexity of student needs in Alberta's classrooms. Larger class sizes are making it difficult for teachers to manage their classrooms effectively, particularly in terms of providing individual attention and managing diverse and complex student needs.

Note that the issues related to class size and complexity are deeply rooted in conditions of professional practice and intertwined with the changing nature of aggression in schools and school communities across Alberta.

KEY FINDINGS

- Well over half (61 per cent) of Alberta teachers have seen their class sizes increase in the 2023/24 school year compared with 2022/23.

- Four in ten teachers (39 per cent) have over 30 students in their largest class (averaging 32–37 students). Overall, the largest class sizes were reported in the following classes:

  - Grades 4–6 classes
  - Science (high school, with 40–50 students in Science 10)
  - English language arts (junior high and senior high)
  - Mathematics (junior high and senior high)

Specifically, the largest class sizes reported, with 50 or more students, were in high school (Science 10 and physical education classes).

- Nine in ten teachers and school leaders (a significant majority) reported that the complexity and diversity of student needs in their classrooms and schools have increased in the 2023/24 school year compared with 2022/23. Teachers reported that they have seen the greatest levels of complexity in the following areas:

  - Social-emotional (83 per cent)
  - Behavioural (78 per cent)
  - Cognitive (63 per cent)
  - English as an Additional Language (EAL) (50 per cent)
  - Socioeconomic (32 per cent)
  - Linguistic (24 per cent)

- More than half (57 per cent) of the respondents reported decreased supports for students with exceptionalities in the 2023/24 school year compared with 2022/23.

- One in two teachers (53 per cent) have requested speech therapy, occupational therapy, physical therapy or psycho-educational assessments for at least one student in the 2023/24 school year. More than half (56 per cent) do not expect these assessments to be completed by the end of the school year.

OVERARCHING THEMES

Increased Class Sizes and Diversity

Teachers are grappling with larger class sizes that also include a more diverse student population. This diversity encompasses a

range of economic backgrounds, varying levels of English-language proficiency and students with special educational needs.

> "The class sizes keep increasing, and the student population becomes more diverse."

Diverse and Complex Student Needs

The needs of students have become more complex, including those related to mental health, behaviour and learning challenges. Beyond the top complexities identified (social-emotional, behavioural and cognitive), teachers and school leaders both noted an increase in students with autism spectrum disorders and students with varying levels of maturity and development. Classes contain students with a range of needs, including those requiring individualized programming and language support. Without Program Unit Funding (PUF), the gaps do not close for these students but, instead, widen as they progress through the K–12 education system.

> "I substitute [teach] in multiple schools across a range of economic communities, and the needs of students are high in all. Multiple mental health issues, behavioural issues, low-functioning students with autism, students below grade level, multiple ELL [English-language learner] students in a class with no support, etc."

Postpandemic Challenges

The COVID-19 pandemic has exacerbated issues associated with diverse and complex student needs. Classrooms have become even more complex following the pandemic. Teachers noted that students are struggling with a lack of social skills, a lack of focus and declining reading abilities.

Diminishing Conditions of Professional Practice

In their qualitative comments, teachers and school leaders expressed challenges related to increasing class sizes and greater classroom complexities, such as preparing for multiple classes with few or even no prep blocks, handling students with diverse needs (including a range of mental health issues, social-emotional complexities and behavioural issues), and dealing with students performing well below grade level without adequate supports at home or school. Several respondents also noted insufficient or inadequate physical space.

Shortage of Supports and Resources

Teachers identified a significant shortage of resources and supports for both students and teachers. This includes limited access to teaching aids, educational materials and support staff, which hinders teachers' ability to provide effective education and individualized attention.

A recurring theme in the qualitative comments was the lack of sufficient human and wraparound supports and services for students with high needs. Teachers across Alberta are contending with growing student and parent aggression, along with complex medical and behavioural needs that demand additional one-to-one support. Teachers expressed concerns about insufficient numbers of EAs.

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"Our class sizes keep getting larger. We are getting more students with significant needs with little or no support. I love what I do, but it is stressful accommodating these needs and learning a new curriculum. I rarely get a break in a day because of supervision and running programs for students. I am worried I am going to burn out."

Emotional and Physical Strain on Teachers and School Leaders

The increased complexity and lack of support are taking a toll on teachers' mental and physical health, and some are considering leaving the profession. Current data across other ATA studies indicates that one-third of Alberta teachers regularly contemplate exiting the teaching profession, leaving Alberta or retiring from teaching.

Teacher Moral Distress and Burnout

The lack of support staff (such as EAs) and resources for students with exceptionalities is leading to a situation in which teachers are unable to provide the necessary attention and care to all students. This has created a dynamic of moral distress. Teachers and school leaders know what they should do, but institutional constraints make it nearly impossible for them to pursue that course of action.

The increasing demands on teachers, coupled with inadequate support, are also leading to high levels of stress and burnout. Teachers are assuming roles beyond their traditional educational duties, including counselling and managing complex behavioural issues.

"Our schools have become agents of social services. Teachers are carrying the entire load. We are parents, counsellors, coaches and everything else. Parents expect us to do their job, and we are not supported by the district or the government. We are devalued more than ever. I used to love this job, and now I hate going to work every day. It's not the actual job. That, I still love. It's everything around it that leaves me exhausted every evening. I am counting the days to retirement."

Standardized Testing and Assessment

Teachers work in an environment where standardized testing and diagnostic assessments are prioritized. Teachers see these assessments as having low value in terms of improving student learning but a high impact on work intensification.

Challenges in Adapting to Curriculum Changes

In this space, new Alberta curricula are being introduced, and teachers see these curricula as being overloaded and developmentally inappropriate. They are also facing difficulties in adapting to new curricula, often with little guidance or PD. This situation is further strained by the rapid implementation of new educational standards and lack of resources.

"There is no acknowledgement of the stress and increased workload the last few years, with complexities and class sizes skyrocketing and the implementation of this terrible curriculum. Also, where has the PD been for the new science curriculum? Very little offered. We also have very little resources for the new curriculum. Terrible. I'm retiring in June at 55 because of the stress and workload."

Smartphones in Classrooms

Three-quarters (75 per cent) of teachers in Alberta believe that smartphones should be turned off during lessons. The Programme for International Student Assessment (PISA) 2022 data (OECD 2023, 230) shows that 30 per cent of students are distracted by digital devices. Longitudinal data shows a precipitous drop in PISA results since 2012, which is when smartphones became ubiquitous in most countries around the world.

Inadequate Support from Administration and Government

Teachers perceive a lack of respect and trust from school administration and government bodies. They feel devalued and overburdened by expectations to fulfill roles outside their scope without adequate supports.

RECOMMENDATIONS

The teachers and school leaders in this study put forward the following short-, medium- and long-term strategic actions to alleviate the challenges associated with class size and complexity.

Reduce Class Sizes

Implement policies to reduce class sizes, enabling teachers to provide more personalized attention and effectively manage classroom dynamics.

Enhance Supports and Resources

Increase the allocation of resources, including specific aids for inclusion, mental health supports and human supports in the classroom (that is, more teachers and EAs), in order to accommodate the diverse needs of the increasingly complex student population.

Strengthen Teacher Support Systems

Develop robust support systems for teachers, including PD opportunities and resources to support student and staff mental health. PD experiences should be embedded within the regular workday of teachers and school leaders and should occur before students with exceptional needs are placed in classrooms or schools.

Facilitate Effective Curriculum Implementation

Provide comprehensive training and resources related to new curricula to ensure that teachers are equipped to adapt to educational changes.

Improve Communication and Respect

Foster a culture of respect and trust between teachers, school leaders, system leaders, parents and government bodies that recognizes the critical role teachers play in shaping education. Resources and supports should be prioritized to focus on frontline teachers and school leaders.

Well-Being and Aggression in Alberta Schools and School Communities

For the purposes of this study, *aggression* was broadly defined in the survey to include bullying and violence, as follows:

- *Bullying* is any nonphysical behaviour that is intended to cause harm to one or more people.

- *Violence* is any threatened, attempted or actual harmful behaviour toward one or more people.

KEY FINDINGS ON AGGRESSION

- One in two (52 per cent) Alberta teachers and three in four (73 per cent) school leaders reported that they had experienced bullying or violence as part of their work since the beginning of the 2023/24 school year.

- Teachers reported that 95 per cent of the aggression they experienced occurred in person.

- The following groups perpetrated the aggression:

    - Students in teachers' own classrooms (60 per cent)

    - Other students in the school (15 per cent)

    - Parents or guardians (11 per cent)

    - Other (combinations, community members, agency staff) (14 per cent)

Categories of Aggression and Violence

Compared with findings from the ATA's 2019 research study on aggression in Alberta schools (ATA 2020), it appears that incidents in the lesser categories of aggression have been trending upward in the 2023/24 school year. With regard to the frequency of incidents in the moderate and serious categories of aggression, the current findings are similar to those of 2019, with the exception of personal property damage, which has increased.

Lesser Categories

- Rude or obscene gestures intended to offend, insult or intimidate (72 per cent)

- Remarks or statements made to others about a teacher with the intention to harm the teacher's reputation or relationships (53 per cent)

- A single behaviour intended to create fear or intimidation (40 per cent)

Moderate Categories

- Continual or chronic activities that might be tolerable on their own but in total are intended to intimidate (35 per cent)

- Threatened physical aggression without a weapon (29 per cent)

- Personal property damage (28 per cent)

- Threatened physical aggression with a weapon (6 per cent)

Serious Categories

- Actual physical aggression without a weapon (25 per cent)

- Attempted physical aggression without a weapon (24 per cent)

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- Actual physical aggression with a weapon (3 per cent)

- Threatened, attempted or actual aggression directed against a teacher's family member (2 per cent)

- Stalking (defined as repeated acts of a threatening or harassing nature that created safety concerns) (2 per cent)

Training in and Comfort with De-escalation

One-third (32 per cent) of school leaders and two-thirds (63 per cent) of teachers reported that they have never received training in their roles for de-escalating a situation that has the potential to escalate into aggression.

Moreover, one in two teachers and school leaders reported that they do not feel comfortable in their ability to de-escalate such situations.

Culture Wars

Almost three-quarters (71 per cent) of respondents reported that they have observed students in their schools this school year making demeaning or hateful remarks toward classmates who hold or express views that challenge their strongly held beliefs. Sadly, 63 per cent reported that these strong differences of opinion among students have prompted hostile exchanges outside the classroom.

Respondents also reported that they have observed students or parents in their school community making negative references or prejudicial comments in the following areas:

- Sexual orientation and gender identity (69 per cent)

- Race (63 per cent)

- COVID-19 policies (such as masking or vaccines) (50 per cent)

- Climate change science (31 per cent)

Pandemic Effect

A significant portion of both teachers (64 per cent) and school leaders (68 per cent) reported that aggressive behaviours in schools have increased following the COVID-19 pandemic. This escalation has been partly attributed to growing societal divisions, increased use of social media, and a decrease in students' social-emotional intelligence and levels of maturity—all of which have bred less empathy and less social awareness.

KEY FINDINGS ON TEACHER AND SCHOOL LEADER WELL-BEING

- Less than one-quarter (22 per cent) of teachers and school leaders reported that they felt somewhat or very happy over the past week.

- A high number (89 per cent) felt stressed.

- Most (93 per cent) felt exhausted by the end of the day.

- Almost half (45 per cent) felt hopeless, yet 76 per cent felt moments of joy at school each day.

- More than half (54 per cent) of teachers and 42 per cent of school leaders reported that they have experienced a decrease (somewhat or significantly) in their school board creating a positive environment for teaching and learning conditions.

OVERARCHING THEMES

Dissatisfaction with Policy Implementation

Inadequate Consequences and Support

Many respondents indicated that the consequences for aggressive behaviour are insufficient and that there is a lack of support for teachers and school leaders dealing with such incidents.

> "Students do not have consequences that teach them anything."

Administrative Inaction

Teachers feel that school and system leaders too often fail to take effective action against aggression by students or parents, leaving frontline teachers feeling unsupported.

> "Administrators often do not follow through with consequences for fear of parent backlash."

Policy That Favours Aggressors

Teachers hold the sentiment that current policies protect the aggressors rather than the victims or teachers.

> "Policies are more about protecting the rights of the child who is violent."

Ineffective Interventions

Teachers believe that interventions are not reducing aggression.

> "Interventions seem to have little to no impact on reducing the aggressive behaviour."

Impact on Teaching

Adjustments to Teaching Approaches

Teachers are modifying their teaching methods to manage aggressive behaviour, often at the cost of instructional time.

> "Much of my time is spent managing behaviours rather than teaching."

Increased Moral Distress and Burnout

The continual need for teachers to address aggression has led to stress and burnout.

> "I am constantly stressed and anxious about going to work."

Impact on School Leadership

Challenge of Balancing Safety and Education

School leaders are finding it difficult to balance maintaining a safe environment and fulfilling educational objectives.

> "As a school leader, it's challenging to ensure the safety of all students."

Strain on Administrative Resources

Dealing with aggression takes up significant administrative time and resources, which has an impact on other areas of school and instructional leadership.

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"A lot of administrative time is taken up in dealing with incidents of aggression."

Changes in Culture and Increased Aggression in Schools

Increased Frequency and Severity

Many teachers and school leaders report an increase in both the frequency and the severity of incidents of aggression.

"Aggressive behaviour has become more frequent and intense."

Changing School Culture

Teachers and school leaders perceive a shift in school culture toward more tolerance of aggression.

"The overall school culture has shifted to be more accepting of aggressive behaviour."

RECOMMENDATIONS

The teachers and school leaders in this study put forward the following actions for mitigating the severity and reducing the frequency of aggression in schools and school communities.

Implement Consistent and Fair Disciplinary Actions

Establish clear and consistent disciplinary protocols that are fairly executed across all student populations.

Improve Parental and Administrative Accountability

Hold parents accountable for their actions, and improve administrative processes to more effectively support teachers and school leaders.

Promote a Supportive Environment for Reporting Aggression

Create an atmosphere where teachers and school leaders feel supported and encouraged to report incidents of student or parent aggression. Teachers and school leaders often face scrutiny over their management of such behaviours. Instead, their reports should be met with understanding and support from senior and system leadership. Teachers and school leaders should never fear that reporting aggressive actions will harm their reputation, professional advancement or security of position.

Prioritize Teacher and School Leader

Safety and Well-Being

Develop strategies to protect teachers' and school leaders' physical and mental health and to ensure a safe working environment.

Develop Specialized Programs for Behaviourally Challenged Students

Create specialized programs and initiatives to accommodate students with severe behavioural issues. This will ensure that they receive an appropriate education without compromising the safety and learning of others.

Enhance Training and Support for All School Staff

Implement comprehensive training programs for all school staff on nonviolent crisis intervention and dealing with aggressive behaviour.

Address Systemic Issues in Education in Alberta

Tackle systemic challenges (such as underfunding, understaffing, and bureaucratic burdens and inefficiencies) to create a more supportive educational environment for all.

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AI in Alberta's Education System

Alberta's teachers are grappling with the ethical, pedagogical and practical implications of artificial intelligence in education. They express a need for more professional involvement in the use of AI, increased access to PD and explicit policy guidance, as well as concerns about the impact of AI on student learning, equity, and teachers' professional reputation and roles.

KEY FINDINGS

- More than half (55 per cent) of Alberta's teachers reported that they had used AI tools, either in their professional or personal lives, over the past six months (June–November).

- Respondents were divided in their perceptions of AI's impact on Alberta's K–12 education system. One-third (29 per cent) said that they believe that AI advancements will positively influence teaching and learning, another third (37 per cent) expressed a negative view of this future, and the final third (33 per cent) were uncertain or neutral.

- The data indicates a correlation between the frequency of using AI tools and a positive outlook on AI's role in K–12 education. However, there is widespread concern (80–90 per cent of respondents) regarding AI's potential negative effects. These negative effects include the potential

for AI to decrease trust in the teaching profession, contribute to cognitive atrophy (such as reduced memory or critical-thinking skills), and breed moral passivity (by negatively influencing human agency and decision-making abilities).

- Interestingly, 40 per cent of teachers are not worried about AI replacing teaching jobs. This sentiment is likely influenced by their experience of the complex, highly relational aspects of teaching and learning. Nonetheless, 59 per cent do not believe that their schools are adequately prepared to effectively harness AI technologies for the benefit of both students and teachers.

- Finally, the survey highlights concerns about inequitable access to AI tools. Well over half (59 per cent) of respondents agreed that uneven access to these technologies could exacerbate the educational divide between students.

PRIMARY USES OF AI

Alberta's teachers and school leaders are pioneering the use of AI in K–12 public education. Their innovative approaches highlight the potential of AI as a transformative element in education. They are facilitating learning experiences that are more interactive and engaging while also preparing students for a future in which AI is an integral part of everyday life.

When asked to share examples of how they have adapted their teaching methods and curriculum to integrate emerging AI tools,

teachers and school leaders shared adaptations in three main areas:

- Enhancing student learning and engagement
- Assisting in administrative and planning tasks
- Engaging ethically and critically with AI

Enhancing Student Learning and Engagement

Alberta teachers have incorporated AI into the curriculum to augment the learning experience. For instance, they have used AI to generate concept art in Shakespeare units, allowing students to visualize and engage creatively with the material. They have used tools such as Grammarly AI to improve students' writing skills and provide tailored learning experiences. They are also using AI to help them create assignments that are more engaging and interactive, such as generating higher-level questions from articles or helping students create study schedules and guides.

Assisting in Administrative and Planning Tasks

Teachers and school leaders say that AI has helped reduce their administrative burden, which has grown over the past few years. They have used AI for tasks such as generating report card comments, creating lesson plans, and developing assignment and assessment rubrics. They also report that AI tools have been instrumental in helping them organize ideas and create unit plans, especially under time constraints. Additionally, AI has helped them with tasks such as translating text; generating multiple-choice quizzes; and even writing e-mails, newsletters and formal reports.

Engaging Ethically and Critically with AI

Alberta teachers are not just using AI for efficiency. They are also insightfully teaching their students about the ethical uses and the limitations of AI. This includes discussions about the ethics of AI and Internet safety, as well as critical thinking about the use of AI in assignments. Teachers emphasize the importance of authenticity in students' work and are exploring tools to detect AI-generated content. This critical engagement will ensure that students understand AI as a tool that can be leveraged responsibly and ethically, rather than extending the risk of moral passivity and cognitive atrophy.

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EMERGING QUESTIONS AND AREAS OF INTEREST

Ethical Considerations and Curriculum Development

Teachers have questions about the ethical implications of using AI in planning and preparing assignments, as well as whether future curricula should assume that students have access to AI (similar to how current curricula consider students' access to calculators).

Impact on Students' Skills and Learning

Teachers have concerns that AI might impede students from learning proper writing skills, particularly in terms of developing their own original voice in their writing, which is a key curricular outcome. Teachers also worry about the potential decline in students' problem solving, critical thinking and creativity as a result of using AI.

Control and Access to AI

Teachers express the need for control over student access to AI in the classroom, highlighting that a one-size-fits-all approach by districts is not sufficient. There's a sense that education is not keeping pace with advancements in AI, forcing teachers into the role of "cheating detectors" rather than instructional leaders.

Training and Exposure to AI

Many teachers feel behind in understanding and effectively using AI in their practice. They highlight a lack of exposure and training, which suggests the need for more PD in this area.

Equity and Accessibility

Teachers worry about the disparity among families in terms of access to technology (such as computers and Internet service) and about certain students being left behind.

Impact on Student–Teacher Interaction and Relationships

Questions arise about how AI use might affect the interaction between students, staff and families and the overall journey of student learning. Concerns also include the potential erosion of positive relationships between students and adults.

Creativity and Originality

Teachers fear that reliance on AI could diminish genuine creativity and students' ability to engage in original thinking and problem solving. This is a significant concern in a world where disinformation and misinformation are a defined and clear global risk in the near future.

Plagiarism and Academic Integrity

The increased difficulty in identifying AI-generated work versus student-generated work is a significant concern, as is the potential for increased cheating on assignments.

Teacher Work Intensification and Professional Judgment

Teachers worry about AI becoming just another trend in K–12 education that will increase their workload without bringing long-term benefits. There are also concerns about AI's impact on teachers' professional autonomy and judgment (that is, AI systems being trusted over human professional wisdom).

Policy and Regulation

Teachers have questions about the lack of clear policies and discussions at the school board level regarding the integration of AI into education.
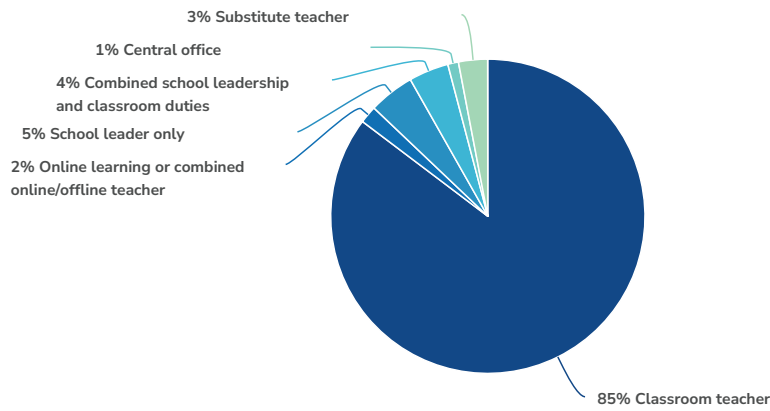
Final Data Set

Respondents

Response Counts

Completion Rate:	**100%**	
	Complete	2,148

Totals: 2,148

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1. Your current assignment

3% Substitute teacher

1% Central office

4% Combined school leadership and classroom duties

5% School leader only

2% Online learning or combined online/offline teacher

85% Classroom teacher

Value	Percent	Responses
Classroom teacher	85.3%	1,832
Online learning or combined online/offline teacher	1.8%	38
School leader only	4.7%	101
Combined school leadership and classroom duties	4.1%	89
Central office	1.1%	24
Substitute teacher	3.0%	64

Totals: 2,148

2. How do you identify?

4% Prefer not to answer

1% Prefer to self describe (please specify):

20% Male
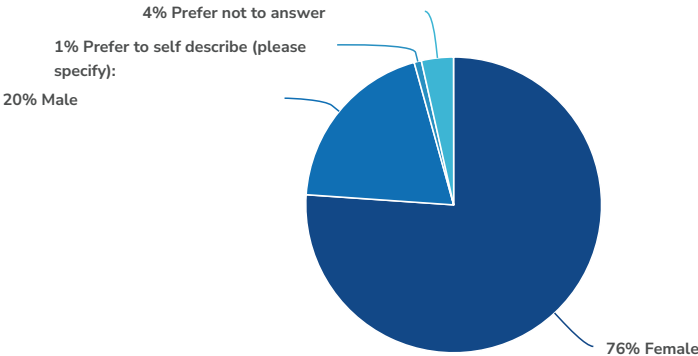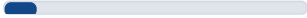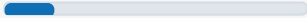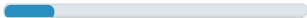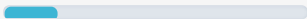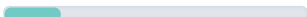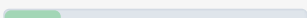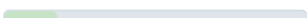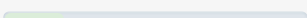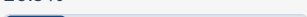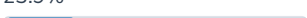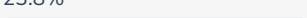
76% Female

Value	Percent	Responses
Female	76.1%	1,415
Male	19.6%	365
Prefer to self describe (please specify):	0.8%	14
Prefer not to answer	3.5%	66

Totals: **1,860**

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3. What grade levels are you currently teaching? (Please check all that apply).
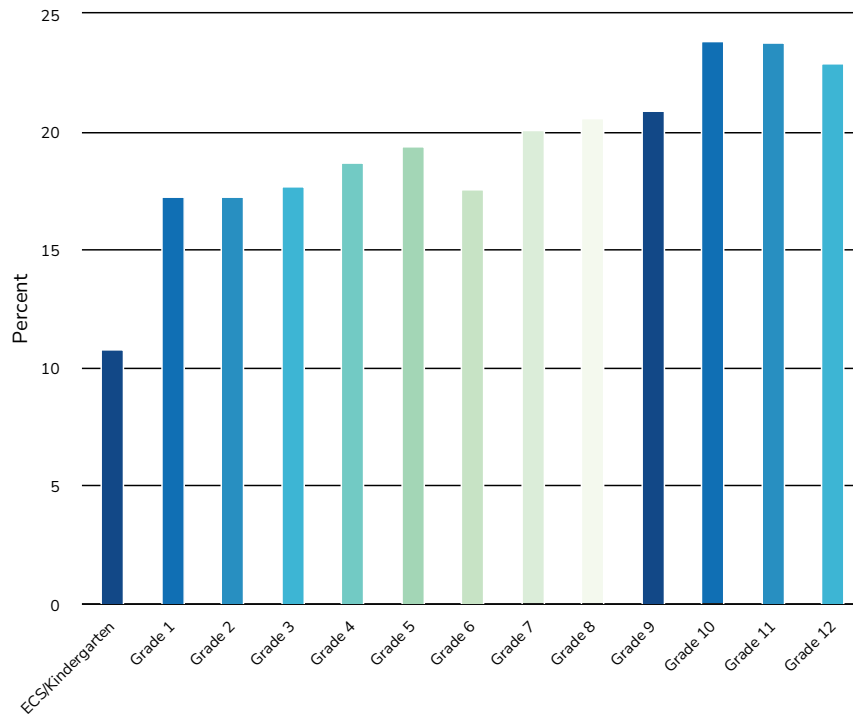
Value	Percent	Responses
ECS/Kindergarten	10.8%	218
Grade 1	17.3%	350
Grade 2	17.3%	350
Grade 3	17.7%	357
Grade 4	18.7%	377
Grade 5	19.4%	391
Grade 6	17.6%	356
Grade 7	20.1%	406
Grade 8	20.6%	416
Grade 9	20.9%	422
Grade 10	23.9%	482
Grade 11	23.8%	481
Grade 12	22.9%	462

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Well-Being

4. Overall Aggregate - How are you feeling?

22% Happy (Very or Somewhat)

41% Unhappy (Very or Somewhat)

37% Neither Happy or Unhappy

Value	Percent	Responses
Unhappy (Very or Somewhat)	41.4%	818
Neither Happy or Unhappy	37.1%	733
Happy (Very or Somewhat)	21.5%	424

Totals: 1,975

5. Thinking about this past week, please identify your level of agreement with the following statements:

	Strongly disagree	Disagree	Unsure	Agree	Strongly agree	Responses
I feel isolated. Count Row %	236 11.1%	897 42.1%	182 8.5%	644 30.2%	174 8.2%	2,133
I feel hopeful. Count Row %	267 12.5%	688 32.2%	482 22.6%	626 29.3%	73 3.4%	2,136
I feel stressed. Count Row %	45 2.1%	116 5.4%	70 3.3%	848 39.7%	1,059 49.5%	2,138
I feel exhausted by the end of the day. Count Row %	39 1.8%	81 3.8%	24 1.1%	547 25.6%	1,447 67.7%	2,138
I feel moments of joy at school each day. Count Row %	37 1.7%	236 11.0%	237 11.1%	1,270 59.4%	359 16.8%	2,139
Totals Total Responses						2139

6. I feel exhausted by the end of the day.

6% Disagree (Strongly Disagree or Disagree)

1% Unsure

93% Agree (Strongly Agree or Agree)
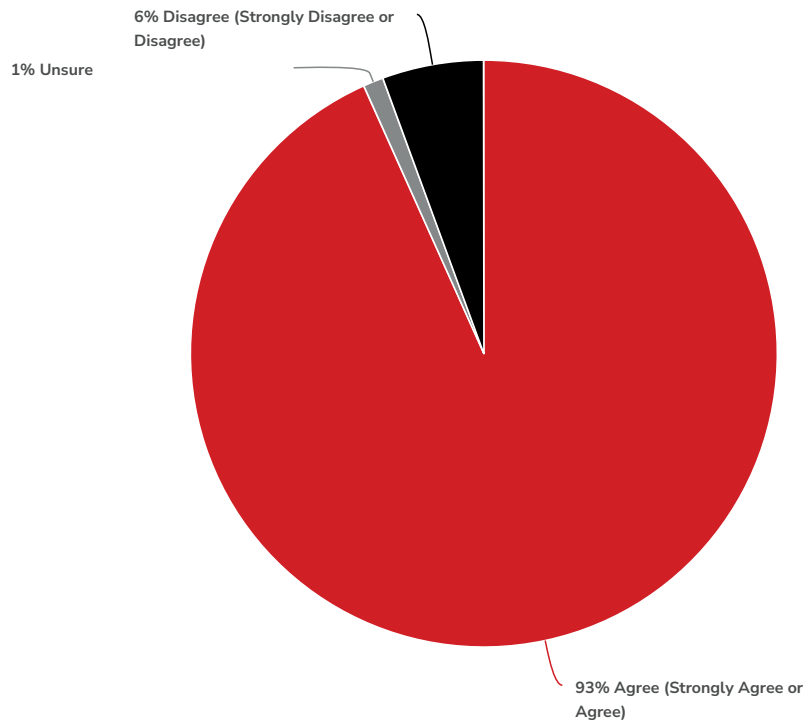
Value	Percent	Responses
Agree (Strongly Agree or Agree)	93.3%	1,994
Unsure	1.1%	24
Disagree (Strongly Disagree or Disagree)	5.6%	120

Totals: 2,138

7. I feel stressed.

8% Disagree (Strongly Disagree or Disagree)

3% Unsure

89% Agree (Strongly Agree or Agree)
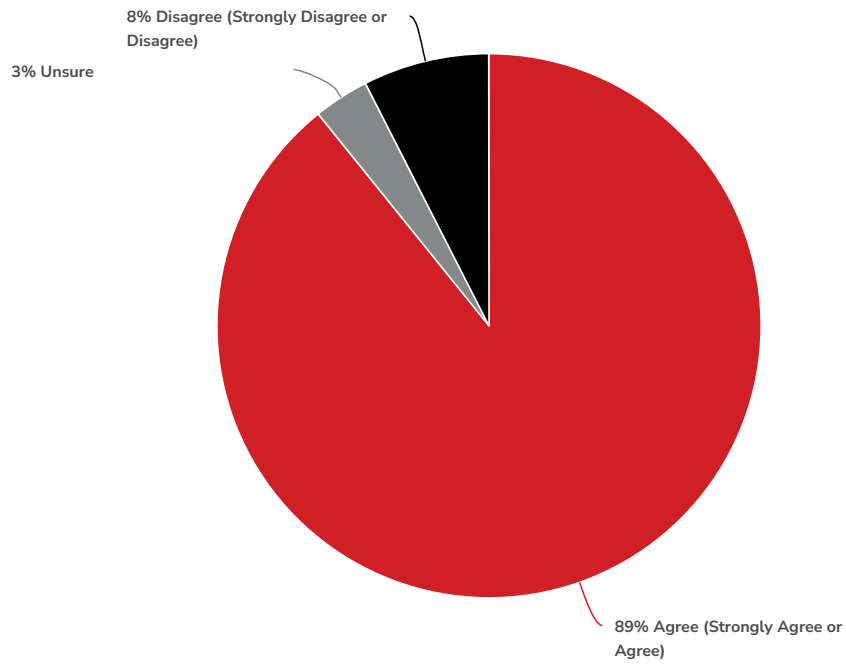
Value	Percent	Responses
Agree (Strongly Agree or Agree)	89.2%	1,907
Unsure	3.3%	70
Disagree (Strongly Disagree or Disagree)	7.5%	161

Totals: 2,138

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8. I feel isolated.

38% Agree (Strongly Agree or Agree)

53% Disagree (Strongly Disagree or Disagree)
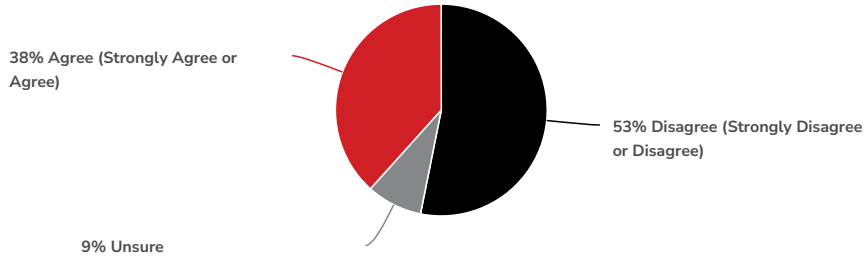
9% Unsure

Value	Percent	Responses
Disagree (Strongly Disagree or Disagree)	53.1%	1,133
Unsure	8.5%	182
Agree (Strongly Agree or Agree)	38.3%	818
		Totals: 2,133

9. I feel hopeful.

33% Agree (Strongly Agree or Agree)

45% Disagree (Strongly Disagree or Disagree)
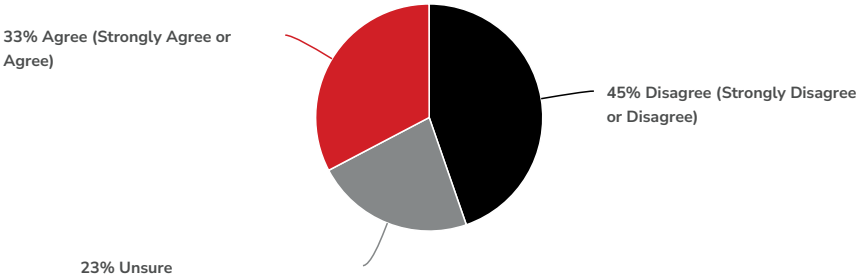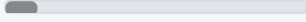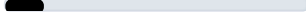
23% Unsure

Value	Percent	Responses
Disagree (Strongly Disagree or Disagree)	44.7%	955
Unsure	22.6%	482
Agree (Strongly Agree or Agree)	32.7%	699

Totals: 2,136

10. I feel moments of joy at school each day.

13% Disagree (Strongly Disagree or Disagree)

11% Unsure

76% Agree (Strongly Agree or Agree)
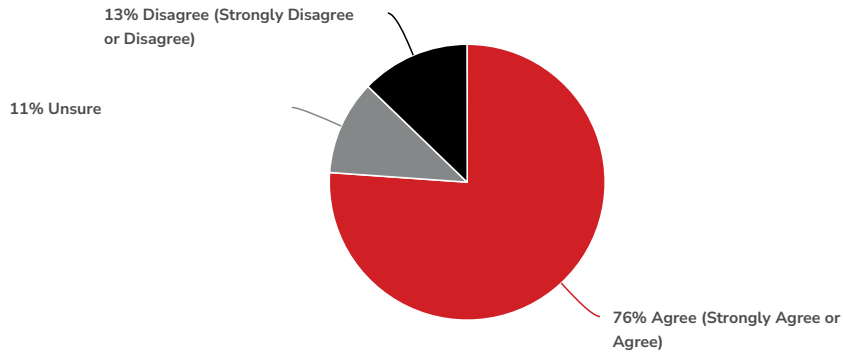
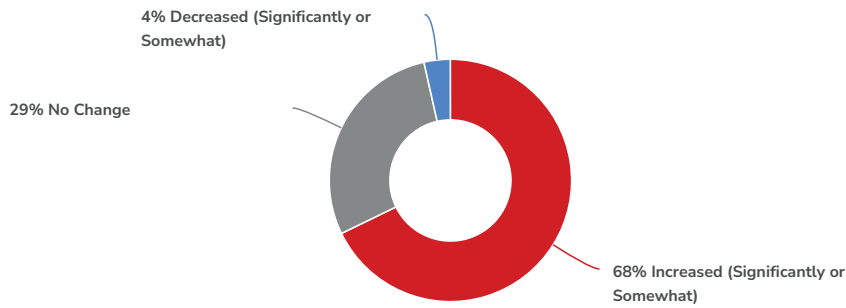| Value	Percent	Responses
Agree (Strongly Agree or Agree)	76.2%	1,629
Unsure	11.1%	237
Disagree (Strongly Disagree or Disagree)	12.8%	273
		Totals: 2,139

Class Sizes

11. Teacher - How have the sizes of your classes changed this year compared to last year?

9% Decreased (Significantly or Somewhat)

30% No Change

61% Increased (Significantly or Somewhat)
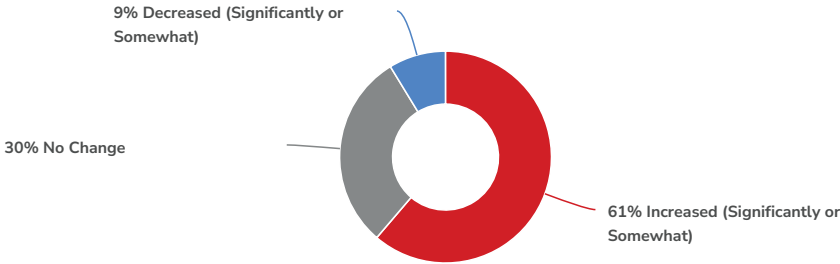
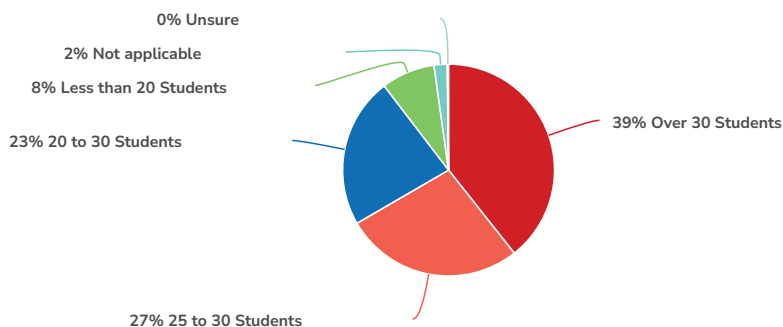| Value	Percent	Responses
Increased (Significantly or Somewhat)	61.2%	1,198
No Change	30.0%	588
Decreased (Significantly or Somewhat)	8.7%	171

Totals: 1,957

12. School Leader - How have the size of classes in your school changed this year compared to last year?

4% Decreased (Significantly or Somewhat)

29% No Change

68% Increased (Significantly or Somewhat)

Value	Percent	Responses
Increased (Significantly or Somewhat)	67.8%	78
No Change	28.7%	33
Decreased (Significantly or Somewhat)	3.5%	4

Totals: 115

13. Teacher Aggregate - The size of the largest class that you are now teaching with students:

0% Unsure

2% Not applicable

8% Less than 20 Students

23% 20 to 30 Students

39% Over 30 Students

27% 25 to 30 Students

Value	Percent	Responses
Over 30 Students	39.4%	744
25 to 30 Students	27.3%	514
20 to 30 Students	23.0%	434
Less than 20 Students	8.2%	154
Not applicable	2.0%	37
Unsure	0.2%	3

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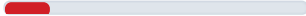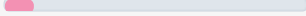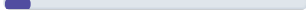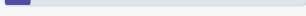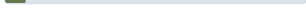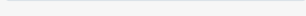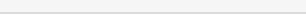
14. How many people are in your largest class with 30 or more students?
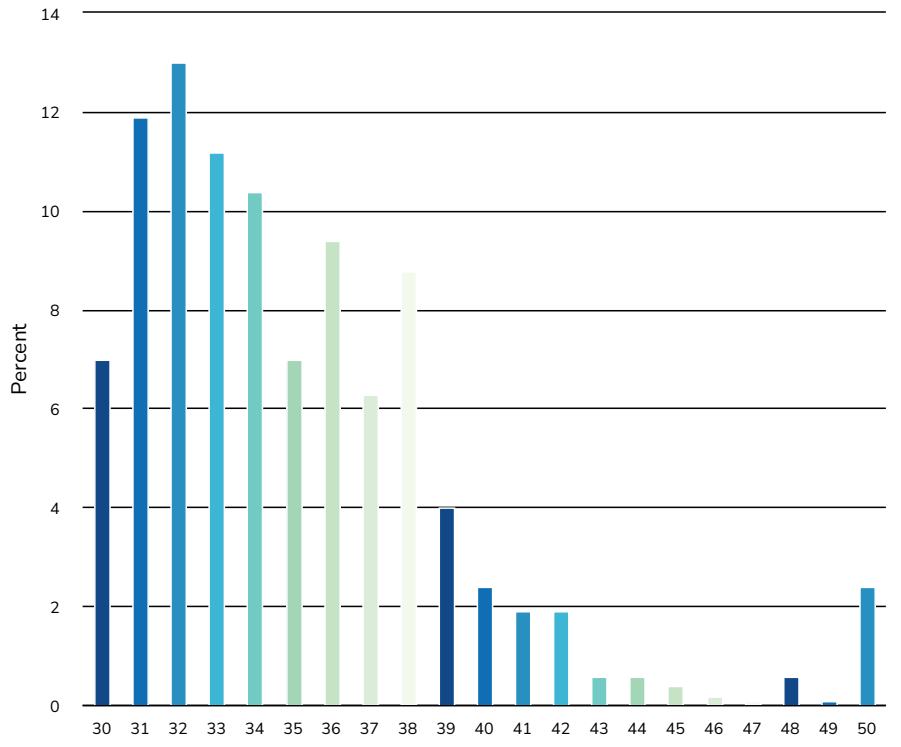
Totals: 848

15. In which program of study is the largest class with over 30 students?

15% Primary Grades (4 to 6)

10% Science (10 to 12)

9% English Language Arts (7 to 9)

9% English Language Arts (10 to 12)

7% Mathematics (10 to 12)

7% Mathematics (7 to 9)

5% Social Studies (10 to 12)

38% All Others

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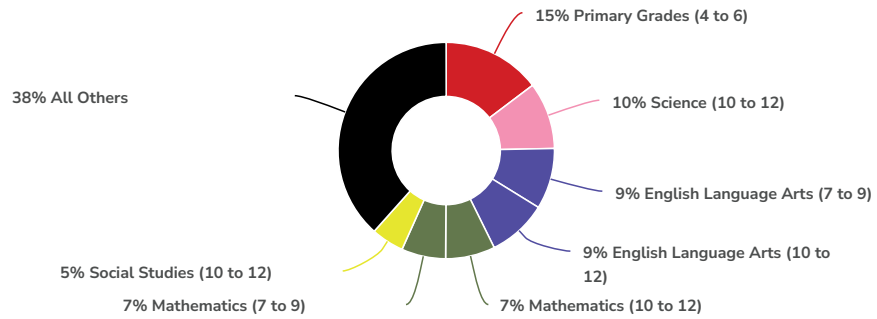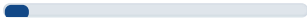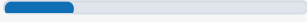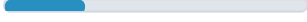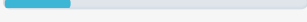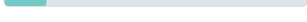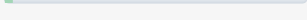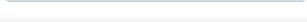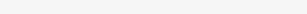
Value	Percent	Responses
Primary Grades (4 to 6)	14.7%	124
Science (10 to 12)	10.0%	84
English Language Arts (7 to 9)	9.1%	77
English Language Arts (10 to 12)	8.9%	75
Mathematics (10 to 12)	7.4%	62
Mathematics (7 to 9)	6.6%	56
Social Studies (10 to 12)	4.9%	41
All Others	38.4%	324

Totals: 843

16. K-12 Teachers - The size of the largest class that you are now teaching with students:

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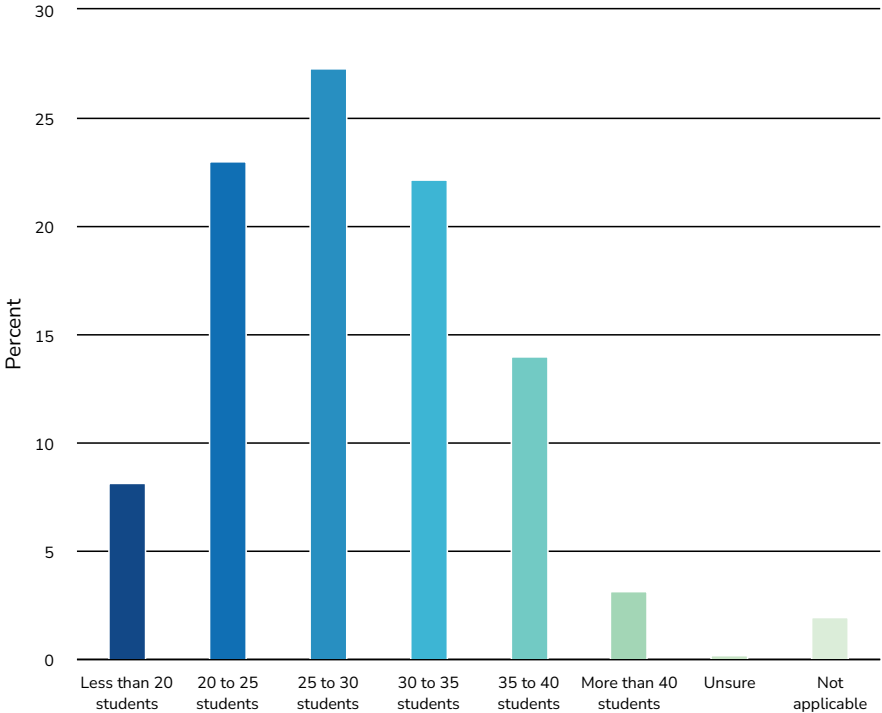
Value	Percent	Responses
Less than 20 students	8.2%	154
20 to 25 students	23.0%	434
25 to 30 students	27.3%	514
30 to 35 students	22.2%	419
35 to 40 students	14.0%	264
More than 40 students	3.2%	61
Unsure	0.2%	3
Not applicable	2.0%	37

Totals: 1,886

Polar Mapping Class Sizes - Divisions I to IV

To read the data that follows in the polar maps, observe from the center to the outer edge to determine the percentage of responses for various class sizes at each Division (I to IV). The closer a segment reaches to the outer edge of the polar map, the greater the proportion of respondents teaching class sizes within that range.

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17. Division I (Grades 1 to 3) Class Sizes - Polar Map

Filter: #4 Question "What grade levels are you currently teaching? (Please check all that apply)." is one of the following answers ("Grade 1","Grade 2","Grade 3")
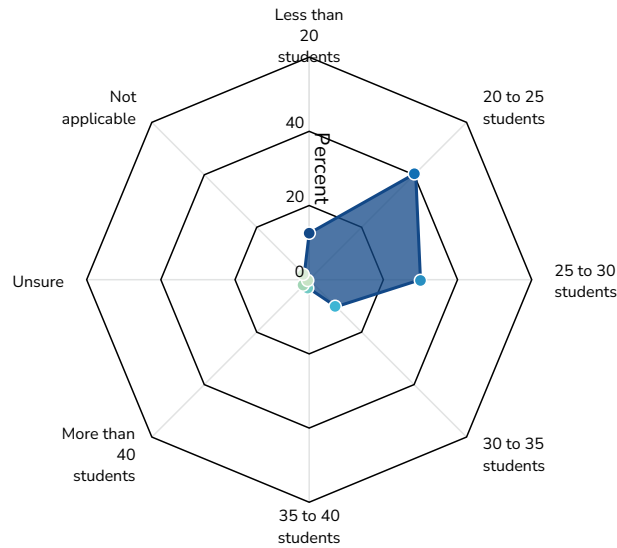
Value	Percent	Responses
Less than 20 students	12.5%	74
20 to 25 students	40.6%	241
25 to 30 students	30.0%	178
30 to 35 students	10.3%	61
35 to 40 students	2.4%	14
More than 40 students	2.2%	13
Unsure	0.3%	2
Not applicable	1.9%	11

Totals: 594

18. Division II (Grades 4 to 6) Class Sizes - Polar Map

Filter: #4 Question "What grade levels are you currently teaching? (Please check all that apply)." is one of the following answers ("Grade 4","Grade 5","Grade 6")
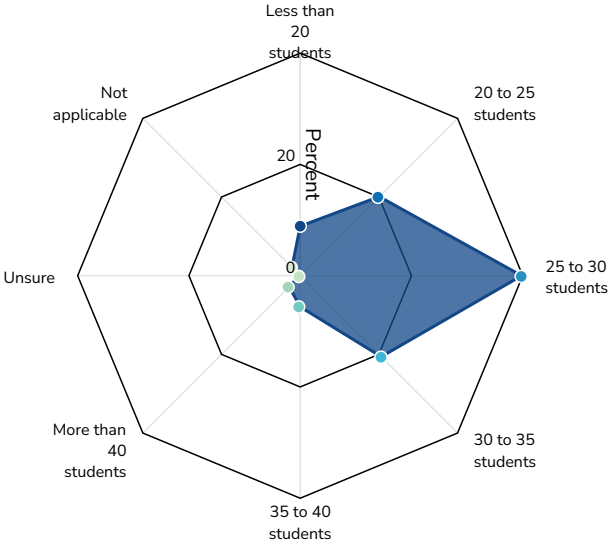
Value	Percent	Responses
Less than 20 students	8.9%	54
20 to 25 students	20.1%	122
25 to 30 students	39.8%	242
30 to 35 students	20.6%	125
35 to 40 students	5.6%	34
More than 40 students	2.8%	17
Unsure	0.2%	1
Not applicable	2.1%	13

Totals: 608

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19. Division III (Grades 7 to 9) Class Sizes - Polar Map

Filter: #4 Question "What grade levels are you currently teaching? (Please check all that apply)." is one of the following answers ("Grade 7","Grade 8","Grade 9")
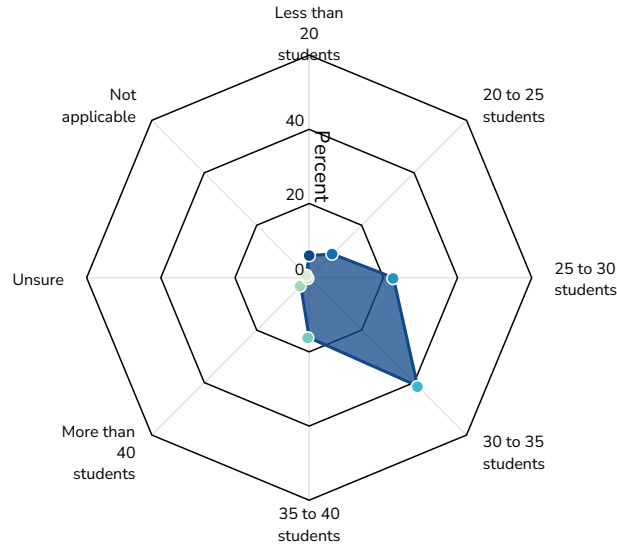
Value	Percent	Responses
Less than 20 students	6.0%	33
20 to 25 students	9.0%	50
25 to 30 students	22.7%	126
30 to 35 students	41.3%	229
35 to 40 students	16.2%	90
More than 40 students	3.2%	18
Unsure	0.4%	2
Not applicable	1.1%	6

Totals: 554

20. Division IV (Grades 10 to 12) Class Sizes - Polar Map

Filter: #4 Question "What grade levels are you currently teaching? (Please check all that apply)." is one of the following answers ("Grade 10","Grade 11","Grade 12")
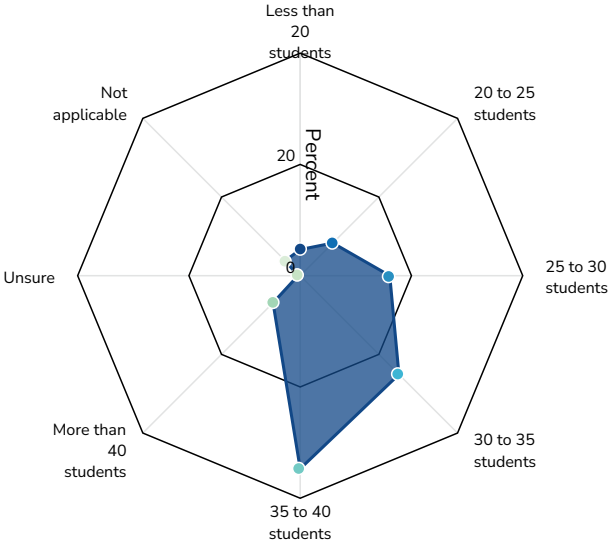
Value	Percent	Responses
Less than 20 students	4.7%	25
20 to 25 students	8.3%	44
25 to 30 students	16.1%	86
30 to 35 students	25.1%	134
35 to 40 students	34.7%	185
More than 40 students	6.9%	37
Unsure	0.4%	2
Not applicable	3.8%	20

Totals: 533

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Complexity

21. How has the complexity and diversity of student needs in your classes (e.g., socio-economic, linguistic, behavioural, cognitive, social/emotional) changed this year over last year?

3% Decreased (Significantly or Somewhat)

12% No Change

86% Increased (Significantly or Somewhat)
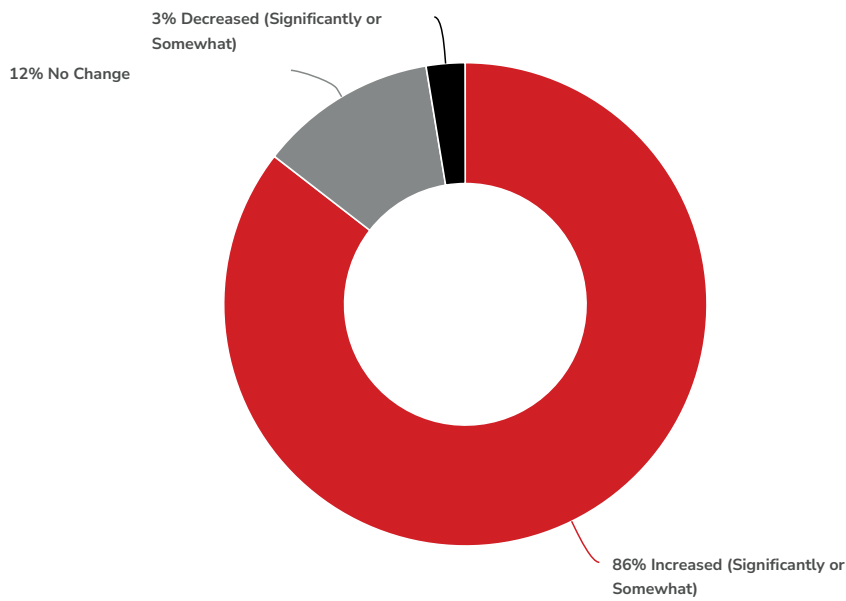
Value	Percent	Responses
Increased (Significantly or Somewhat)	85.5%	1,674
No Change	11.9%	233
Decreased (Significantly or Somewhat)	2.6%	51

Totals: 1,958

22. Teacher - In what areas do you see the greatest level of complexity in your classroom(s)? Please check all that apply.
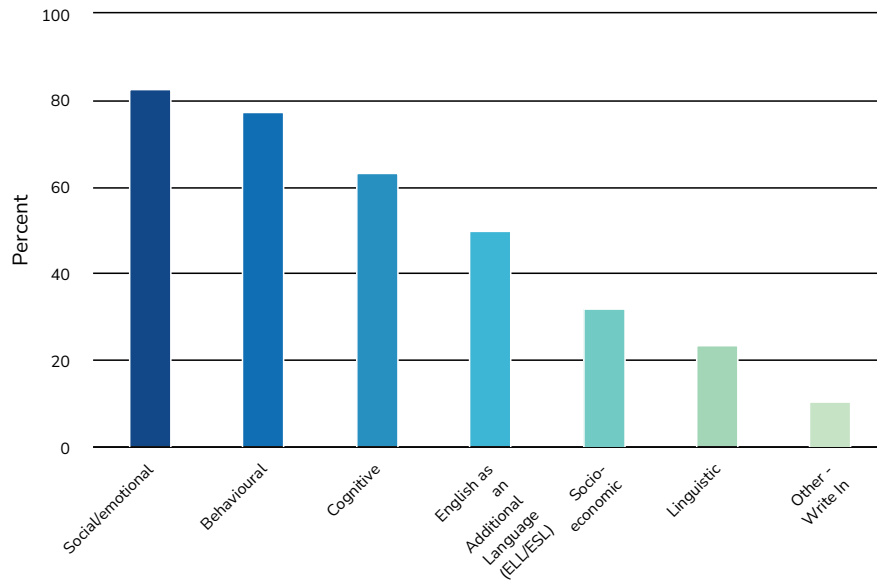
Value	Percent	Responses
Social/emotional	82.7%	1,556
Behavioural	77.5%	1,457
Cognitive	63.3%	1,190
English as an Additional Language (ELL/ESL)	49.9%	938
Socio-economic	32.0%	602
Linguistic	23.6%	444
Other - Write In	10.7%	202

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23. School Leader - In what areas do you see the greatest level of complexity in your school? Please check all that apply.
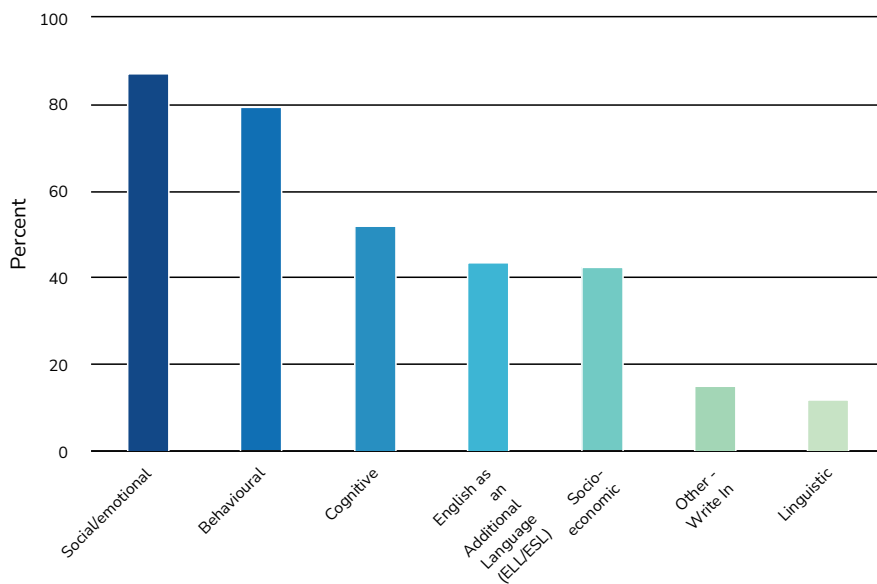
Value	Percent	Responses
Social/emotional	87.5%	175
Behavioural	79.5%	159
Cognitive	52.0%	104
English as an Additional Language (ELL/ESL)	43.5%	87
Socio-economic	42.5%	85
Other - Write In	15.0%	30
Linguistic	12.0%	24

24. Supports for students with exceptionalities

17% Increased (Significantly or Somewhat)

27% No Change

57% Decreased (Significantly or Somewhat)
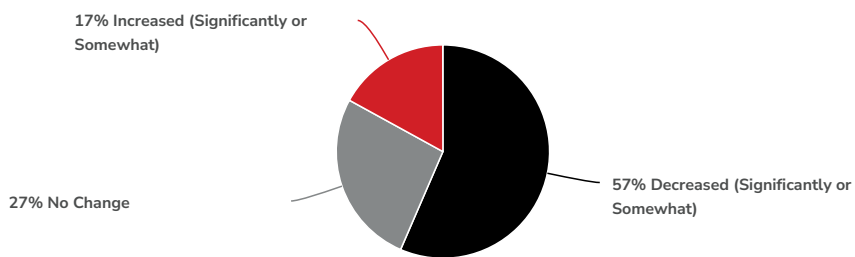
Value	Percent	Responses
Decreased (Significantly or Somewhat)	56.5%	1,111
No Change	26.5%	522
Increased (Significantly or Somewhat)	17.0%	334

Totals: 1,967

25. Have you requested speech, occupational therapy, physical therapy, and/or psycho-educational assessments for any of your student(s) this year?

8% Not applicable

17% Not at this point

53% Yes

23% No
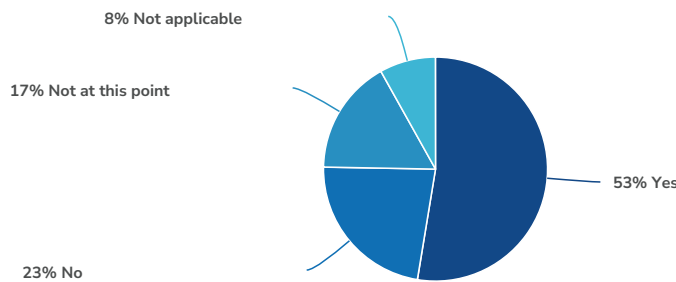
Value	Percent	Responses
Yes	52.6%	993
No	22.7%	429
Not at this point	16.6%	313
Not applicable	8.1%	152

Totals: 1,887

26. Have you requested (or approved) speech, occupational therapy, physical therapy, and/or psycho-educational assessments for any of the student(s) in your school this year?

5% Not applicable

5% Not at this point

4% No

87% Yes
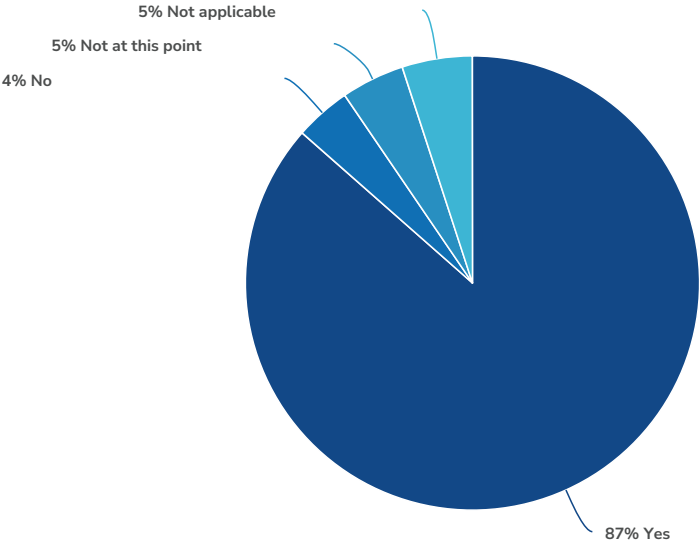
Value	Percent	Responses
Yes	86.5%	173
No	4.0%	8
Not at this point	4.5%	9
Not applicable	5.0%	10

Totals: 200

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27. How long do you estimate that you will be waiting this year for these assessments of exceptionalities to be completed?

11% Not Applicable

12% 1 to 2 Months

56% 6+ Months to Never (Not this 2023/2024 School Year)
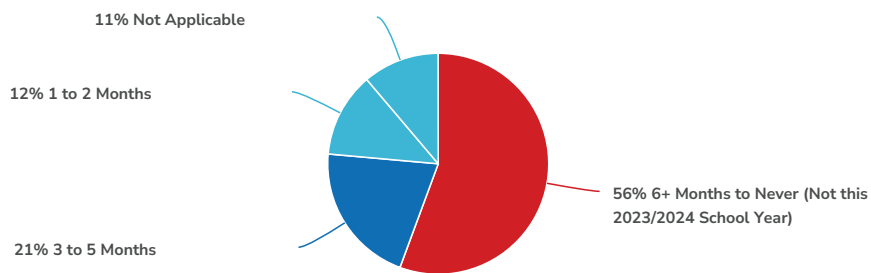
21% 3 to 5 Months

Value	Percent	Responses
6+ Months to Never (Not this 2023/2024 School Year)	55.7%	812
3 to 5 Months	20.8%	303
1 to 2 Months	12.4%	181
Not Applicable	11.2%	163

Totals: 1,459

Conditions of Professional Practice

28. Teachers - My school board creates a positive environment for my teaching and learning conditions.

38% No Change

54% Decreased (Significantly or Somewhat)

8% Increased (Significantly or Somewhat)
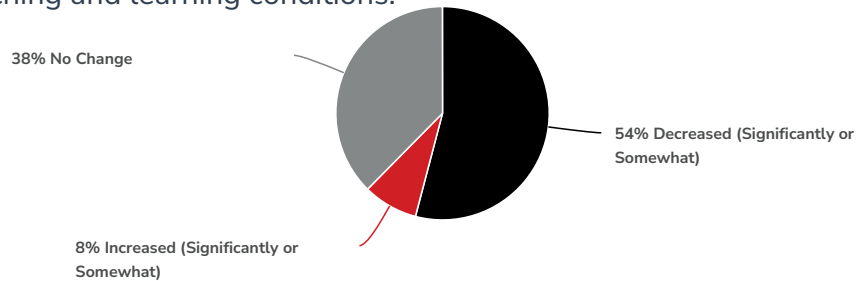
Value	Percent	Responses
Decreased (Significantly or Somewhat)	54.1%	1,064
Increased (Significantly or Somewhat)	8.3%	164
No Change	37.6%	739

Totals: **1,967**

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29. School Leadership - My school board creates a positive environment for the teaching and learning conditions in my school.

41% No Change

42% Decreased (Significantly or Somewhat)

17% Increased (Significantly or Somewhat)
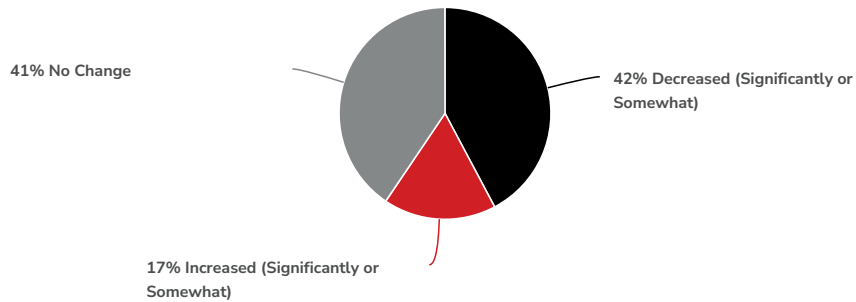
Value	Percent	Responses
Decreased (Significantly or Somewhat)	42.2%	49
Increased (Significantly or Somewhat)	17.2%	20
No Change	40.5%	47

Totals: 116

30. Teacher - Use the scale below to indicate the degree to which the following conditions have changed this school year compared with last.

	Significantly increased	Somewhat increased	No change	Somewhat decreased	Significantly decreased	Responses
The size of your classes Count Row %	471 24.1%	727 37.1%	588 30.0%	151 7.7%	20 1.0%	1,957
The complexity and diversity of student needs in your classes (e.g., socio-economic, linguistic, behavioural, cognitive, social/emotional) Count Row %	986 50.4%	688 35.1%	233 11.9%	45 2.3%	6 0.3%	1,958
Supports for students with exceptionalities Count Row %	132 6.7%	202 10.3%	522 26.5%	542 27.6%	569 28.9%	1,967
Requirements to supervise and undertake other assigned tasks Count Row %	561 28.5%	798 40.6%	570 29.0%	29 1.5%	7 0.4%	1,965
Access that students and families have to mental health services Count Row %	47 2.4%	252 12.9%	1,048 53.6%	430 22.0%	178 9.1%	1,955

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	Significantly increased	Somewhat increased	No change	Somewhat decreased	Significantly decreased	Responses
Expectations to undertake standardized testing for students Count Row %	370 18.9%	497 25.3%	1,044 53.2%	36 1.8%	14 0.7%	1,961
Expectations to report student progress to parents Count Row %	449 22.9%	703 35.8%	792 40.3%	19 1.0%	0 0.0%	1,963
My school board creates a positive environment for my teaching and learning conditions. Count Row %	19 1.0%	145 7.4%	739 37.6%	622 31.6%	442 22.5%	1,967
Positive working relationships with parents/guardians Count Row %	28 1.4%	301 15.3%	1,193 60.7%	372 18.9%	71 3.6%	1,965
Totals Total Responses						1967

31. School Leader - Use the scale below to indicate the degree to which the following conditions have changed this school year compared with last.

	Significantly increased	Somewhat increased	No change	Somewhat decreased	Significantly decreased	Responses
The size of classes in your school Count Row %	26 22.6%	52 45.2%	33 28.7%	4 3.5%	0 0.0%	115
The complexity and diversity of student needs in your school (e.g., socio-economic, linguistic, behavioural, cognitive, social/emotional) Count Row %	64 55.7%	40 34.8%	11 9.6%	0 0.0%	0 0.0%	115
Supports for students with exceptionalities Count Row %	10 8.6%	13 11.2%	28 24.1%	45 38.8%	20 17.2%	116
Requirements to supervise and undertake other assigned tasks as a school leader Count Row %	50 43.5%	44 38.3%	19 16.5%	2 1.7%	0 0.0%	115
Access that students and families have to mental health services Count Row %	5 4.3%	14 12.1%	45 38.8%	36 31.0%	16 13.8%	116

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	Significantly increased	Somewhat increased	No change	Somewhat decreased	Significantly decreased	Responses
Expectations to undertake standardized testing for students Count Row %	25 21.7%	38 33.0%	50 43.5%	1 0.9%	1 0.9%	115
Expectations to report student progress to parents Count Row %	19 16.4%	34 29.3%	61 52.6%	2 1.7%	0 0.0%	116
My school board creates a positive environment for the teaching and learning conditions in my school. Count Row %	0 0.0%	20 17.2%	47 40.5%	26 22.4%	23 19.8%	116
Positive working relationships with parents/guardians Count Row %	1 0.9%	30 25.9%	49 42.2%	34 29.3%	2 1.7%	116
Totals Total Responses						116

Smartphones - Prioritization and Classroom Limits

32. Smartphones should be turned off during classroom lessons.

14% Disagree (Strongly Disagree or Disagree)

12% Unsure

75% Agree (Strongly Agree or Agree)
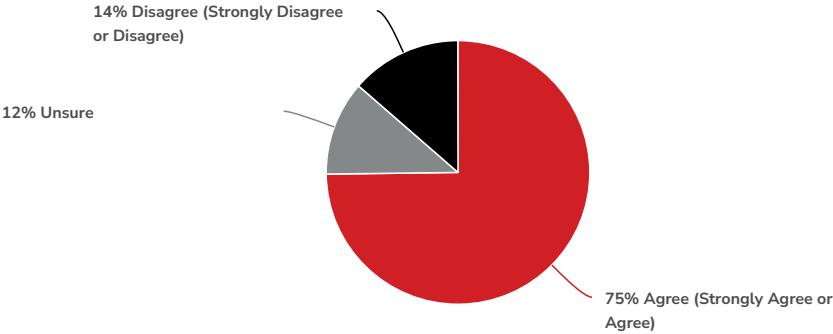
Value	Percent	Responses
Agree (Strongly Agree or Agree)	74.8%	1,398
Unsure	11.6%	216
Disagree (Strongly Disagree or Disagree)	13.6%	255

Totals: 1,869

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33. My students prioritize their smartphones over in-person interactions.

18% Disagree (Strongly Disagree or Disagree)

16% Unsure

66% Agree (Strongly Agree or Agree)
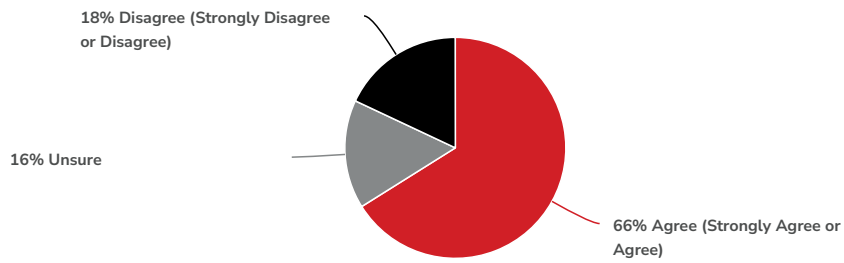
Value	Percent	Responses
Agree (Strongly Agree or Agree)	66.1%	1,227
Unsure	15.9%	295
Disagree (Strongly Disagree or Disagree)	18.0%	335

Totals: 1,857

Aggression in Schools

34. Since the commencement of this 2023-2024 school year, have you experienced aggression as a part of your work?
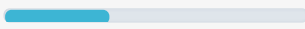
48% No   52% Yes
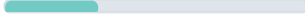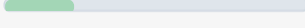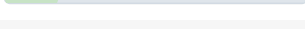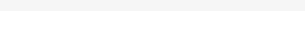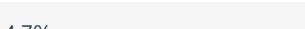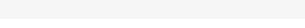
Value	Percent	Responses
Yes	52.3%	996
No	47.7%	908

Totals: 1,904

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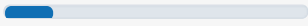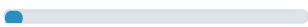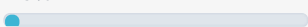
35. Fall 2023 - In this school year, I have experienced the following. Please check all that apply.

Value	Percent	Responses
Rude or obscene gestures intended to offend, insult or intimidate you	71.6%	697
Remarks or statements to others about you with the intention to harm your reputation or relationships	52.9%	515
A single behavior that you believe was intended to make you fearful or intimidated	39.6%	386
Continual or chronic activities that might be tolerable on their own, but in total are intended to intimidate you	34.6%	337
Threatened physical aggression without a weapon	28.5%	278
Personal property damage	27.9%	272
Actual physical aggression without a weapon	25.2%	245
Attempted physical aggression without a weapon	24.4%	238
Threatened physical aggression with a weapon	6.4%	62
Attempted physical aggression with a weapon	3.9%	38
Actual physical aggression with a weapon	3.4%	33
Threatened, attempted, or actual aggression directed against a member of your family	2.1%	20
Stalking which is defined as repeated (two or more) acts of threatening or harassing nature that made you feel concerned for your safety	1.5%	15

36. At any time in your career, have you experienced any of the following? Please check all that apply.

Value	Percent	Responses
Rude or obscene gestures intended to offend, insult or intimidate you	77.0%	523
Remarks or statements to others about you with the intention to harm your reputation or relationships	59.8%	406
A single behavior that you believe was intended to make you fearful or intimidated	49.0%	333
Personal property damage	35.1%	238
Continual or chronic activities that might be tolerable on their own, but in total are intended to intimidate you	30.6%	208
Threatened physical aggression without a weapon	23.0%	156
Actual physical aggression without a weapon	18.1%	123
Attempted physical aggression without a weapon	15.5%	105
Threatened physical aggression with a weapon	5.7%	39
Attempted physical aggression with a weapon	4.7%	32
Stalking which is defined as repeated (two or more) acts of threatening or harassing nature that made you feel concerned for your safety	3.5%	24
Threatened, attempted, or actual aggression directed against a member of your family	3.1%	21
Actual physical aggression with a weapon	2.2%	15

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37. How did the aggression you experienced occur? Please check all that apply.

Value	Percent	Responses
In person	94.7%	928
Online or virtually (computer, smartphone, tablet)	16.0%	157
By phone	6.2%	61
Other - Write In	4.5%	44

38. What is the nature of the relationship you hold with the person(s) perpetrating the aggression against you in this situation?

Value	Percent	Responses
Student(s) who attends my school who I directly teach or work with	60.3%	594
Student(s) who attends my school who I do not direct teach or work with	14.9%	147
Parent(s)/guardian(s)/adult family member(s) of a student who attends my school	10.6%	104
School leader(s)	5.2%	51
Other - Write In	4.2%	41
Other teaching staff	2.9%	29
Anonymous/unknown	1.0%	10
Support staff (custodial, clerical, aides)	0.5%	5
Student(s) or youth(s) from outside my school	0.4%	4

Totals: 985

39. Teacher - Have you received training in your role as a teacher on being able to de-escalate a situation which appears to have the potential to escalate to aggression?

63% No

32% Yes
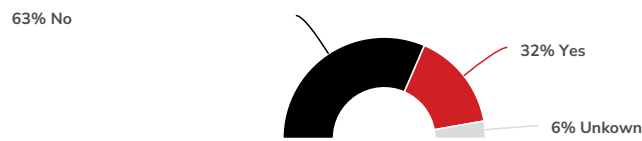
6% Unkown

Value	Percent	Responses
No	63.0%	1,092
Yes	31.5%	547
Unkown	5.5%	95

Totals: 1,734

40. School Leader - Have you received training in your role as a school leader on being able to de-escalate a situation which appears to have the potential to escalate to aggression?

65% Yes

32% No

3% Unkown

Value	Percent	Responses
Yes	65.4%	123
No	31.9%	60
Unkown	2.7%	5

Totals: 188

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41. If you received training, is this training relevant and applicable to your current context?

26% No

74% Yes
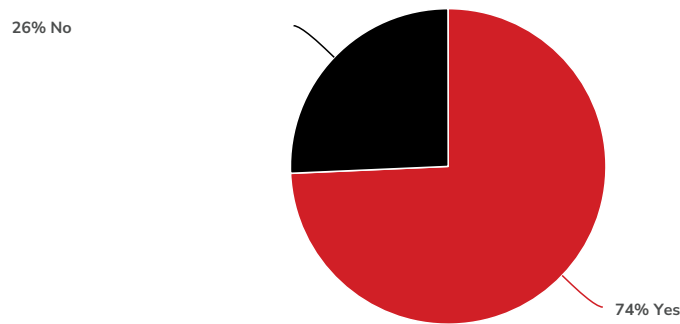
Value	Percent	Responses
Yes	74.3%	498
No	25.7%	172
		Totals: 670

42. How comfortable do you feel that you could de-escalate a situation which appears to have the potential to escalate to aggression?

45% Comfortable (Very and Comfortable)

55% Uncomfortable (Very and Uncomfortable)
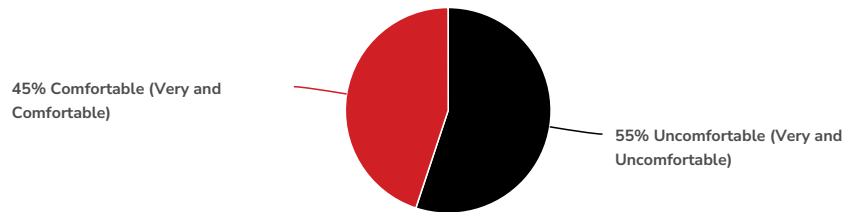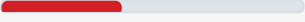
Value	Percent	Responses
Uncomfortable (Very and Uncomfortable)	55.1%	1,067
Comfortable (Very and Comfortable)	44.9%	869

Totals: 1,936

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43. Are you generally satisfied with how your school and/or district policies and procedures are followed in instances of aggression in the work place?

40% Yes

60% No
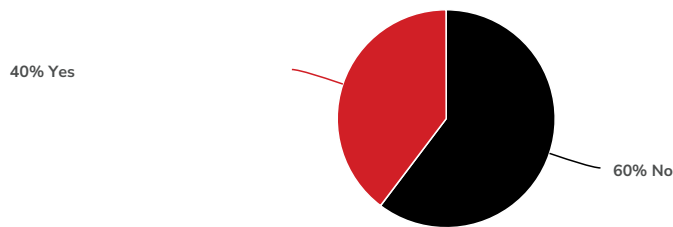
Value	Percent	Responses
No	60.3%	1,165
Yes	39.7%	766

Totals: 1,931

44. How frequently have you observed the following general occurrences since the start of the 2023/2024 school year?

	Occurred multiple times	Occurred 1-2 times	No occurrence	Responses
Strong differences of opinion amongst students has created more contentious Alberta classroom environments. Count Row %	680 35.5%	677 35.4%	557 29.1%	1,914
Strong differences of opinion amongst students has prompted hostile exchanges outside of class. Count Row %	590 30.7%	623 32.4%	707 36.8%	1,920
Strong differences of opinion among community members or between community members and school staff has had an adverse impact on the school. Count Row %	460 24.2%	718 37.8%	721 38.0%	1,899
Students have made demeaning or hateful remarks towards classmates because they hold or express views that challenge their strongly held beliefs. Count Row %	687 35.8%	672 35.0%	562 29.3%	1,921

Totals

Total Responses   1921

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Polarization, Divisiveness, Hostility and Aggression

45. How frequently have you observed the following occurrences on specific issues since the start of the 2023/2024 school year?

	Occurred multiple times	Occurred 1-2 times	No occurrence	Responses
Students or parents in my school community have made negative references to COVID policies (masking or vaccines). Count Row %	500 26.0%	452 23.5%	969 50.4%	1,921
Students or parents in my school community have made negative references to sexual orientation and gender identity (SOGI). Count Row %	692 36.0%	634 33.0%	597 31.0%	1,923
Students or parents in my school community have made negative references to issue of climate change science. Count Row %	220 11.5%	367 19.1%	1,331 69.4%	1,918
Students or parents in my school community have made prejudicial comments on race (racial discrimination). Count Row %	526 27.5%	670 35.0%	716 37.4%	1,912

Totals
Total Responses   1923

Impact on Pedagogical and Leadership Practice(s)

46. Teacher - To what extent has divisiveness or polarization of opinion in your community affected how and/or what you teach?

24% Not at all

59% Slightly/Moderately

17% Significantly/Extremely
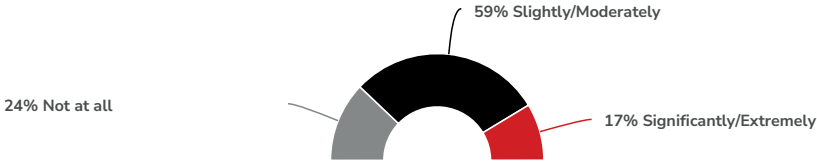
Value	Percent	Responses
Not at all	24.2%	421
Slightly/Moderately	58.5%	1,018
Significantly/Extremely	17.3%	302

Totals: 1,741

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47. School Leader - To what extent has divisiveness or polarization of opinion in your community affected your leadership practice(s)?

64% Slightly/Moderately

16% Not at All

21% Extremely/Significantly
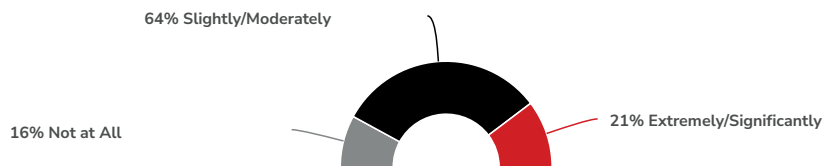
Value	Percent	Responses
Not at All	15.9%	30
Slightly/Moderately	63.5%	120
Extremely/Significantly	20.6%	39

Totals: 189

Pandemic Impact(s) on Aggression

48. Teacher - To what extent has aggression between (or among) students in your classroom(s) changed since the pandemic?

2% Better (Much or Somewhat)

34% About the same

64% Worse (Much or Somewhat)
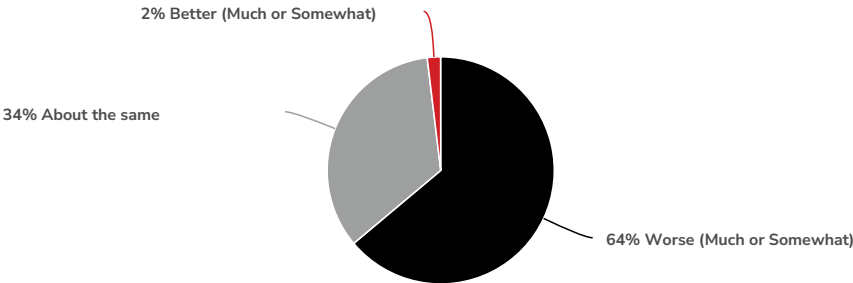
Value	Percent	Responses
Worse (Much or Somewhat)	63.9%	1,111
About the same	34.2%	595
Better (Much or Somewhat)	1.9%	33

Totals: 1,739

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49. School Leader - To what extent has aggression between (or among) students in your school changed since the pandemic?

3% Better (Much or Somewhat)

29% About the same

68% Worse (Much or Somewhat)
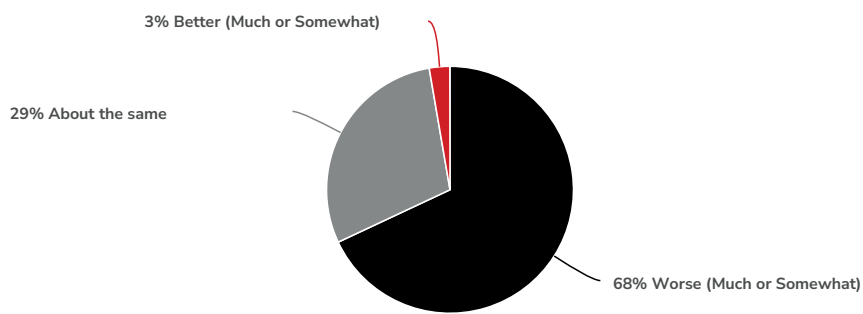
Value	Percent	Responses
Worse (Much or Somewhat)	68.1%	128
About the same	29.3%	55
Better (Much or Somewhat)	2.7%	5

Totals: 188

Artificial Intelligence (A.I.)

50. Have you used any artificial intelligence (AI) tools either professionally or personally in the last six months?

2% Unsure

44% No

55% Yes
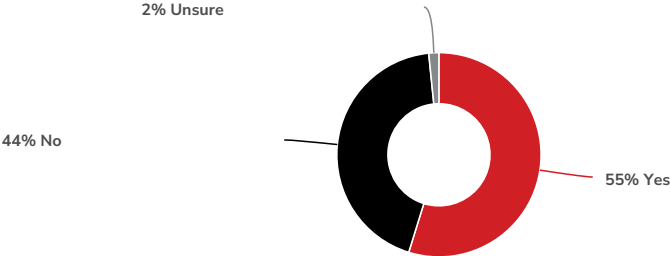
Value	Percent	Responses
Yes	54.8%	1,027
No	43.6%	816
Unsure	1.6%	30

Totals: 1,873

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51. Do you think that advances in artificial intelligence (AI) will overall have a positive or negative effect on Alberta's K-12 education system?

29% Positive (Very or Somewhat)

37% Negative (Very or Somewhat)

19% Not sure

15% Neither positive or negative
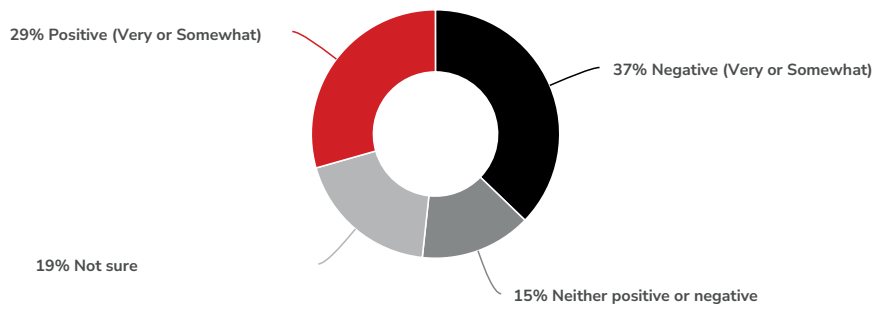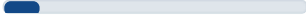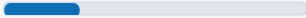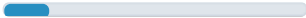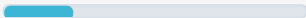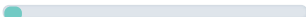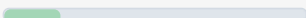
Value	Percent	Responses
Negative (Very or Somewhat)	37.2%	697
Neither positive or negative	14.5%	272
Not sure	18.9%	353
Positive (Very or Somewhat)	29.4%	550

Totals: 1,872

52. Polar Chart - Do you think that advances in artificial intelligence (AI) will overall have a positive or negative effect on Alberta's K-12 education system? This polar map shows that the profession has three divergent poles of opinion on this issue, with cross-tabulation suggesting that the more familiarity with artificial narrow intelligence tools and systems, the more positive the sentiments..

Reporting on Class Size and Complexity, Aggression, and Artificial Intelligence (AI) in Alberta's K–12 Schools (Fall 2023) | 2024

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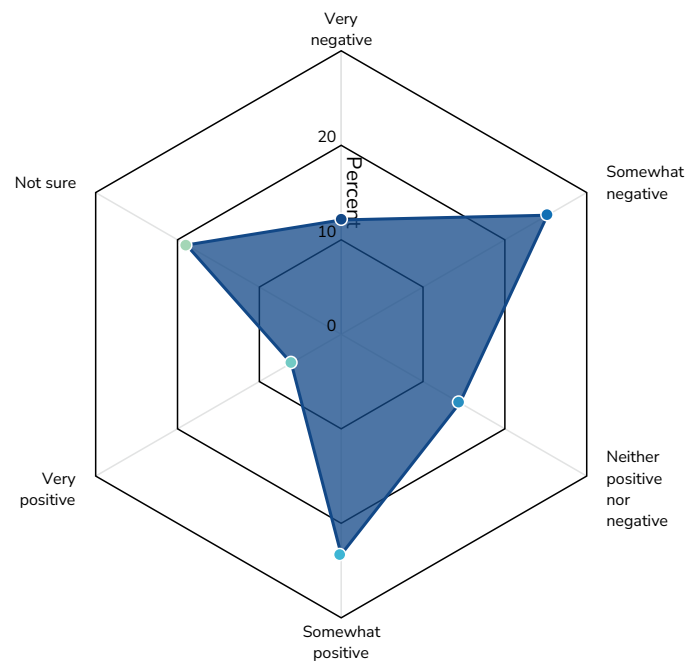
Value	Percent		Responses
Very negative	12.1%		226
Somewhat negative	25.2%		471
Neither positive nor negative	14.5%		272
Somewhat positive	23.3%		436
Very positive	6.1%		114
Not sure	18.9%		353

Totals: 1,872

53. My school is ready to effectively leverage AI technologies to benefit students and teachers.

8% Agree (Strongly Agree or Agree)

33% Unsure
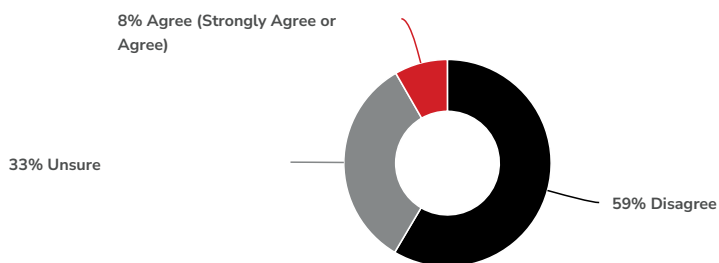
59% Disagree

Value	Percent	Responses
Disagree	58.5%	1,091
Unsure	33.2%	619
Agree (Strongly Agree or Agree)	8.3%	155
		Totals: 1,865

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80

54. AI will enhance personalized learning.

27% Disagree (Strongly Disagree or Disagree)

24% Agree (Strongly Agree or Agree)
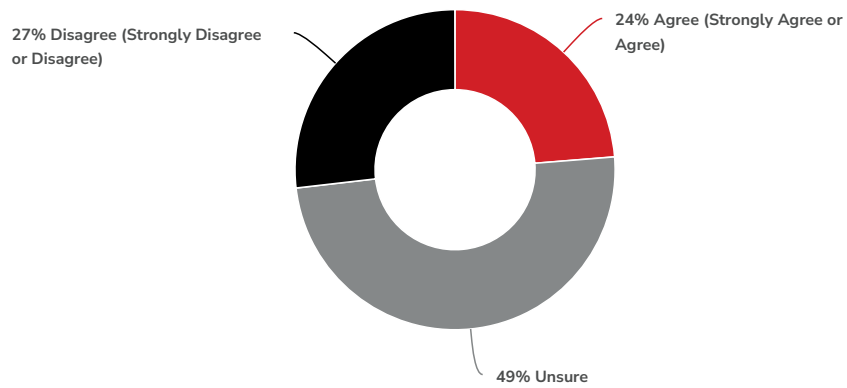
49% Unsure

Value	Percent	Responses
Agree (Strongly Agree or Agree)	23.7%	442
Unsure	49.4%	921
Disagree (Strongly Disagree or Disagree)	26.8%	500
		Totals: 1,863

55. AI will save me time by reducing bureaucratic and/or administrative tasks.

20% Disagree (Strongly Disagree or Disagree)

38% Agree (Strongly Agree or Agree)
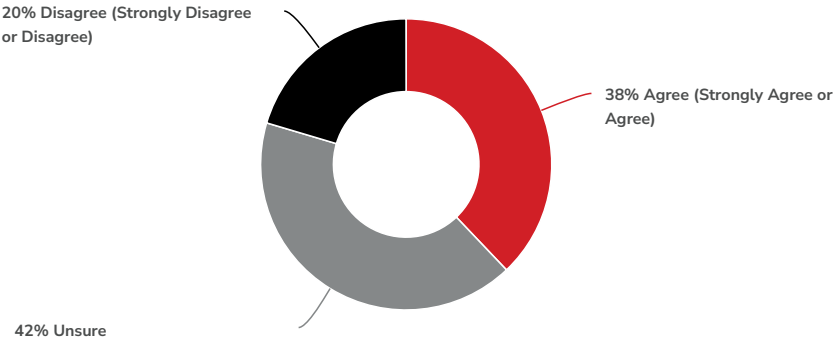
42% Unsure

Value	Percent	Responses
Agree (Strongly Agree or Agree)	37.9%	708
Unsure	41.7%	779
Disagree (Strongly Disagree or Disagree)	20.4%	380
		Totals: 1,867

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56. Uneven access to AI technologies will widen the educational divide for students.

6% Disagree (Strongly Disagree or Disagree)

35% Unsure

59% Agree (Strongly Agree or Agree)
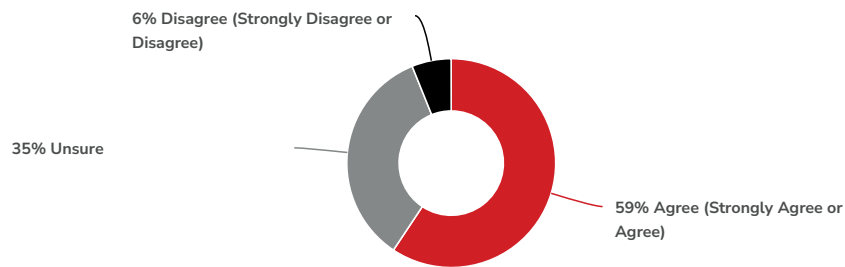
Value	Percent	Responses
Agree (Strongly Agree or Agree)	59.4%	1,101
Unsure	34.6%	641
Disagree (Strongly Disagree or Disagree)	6.1%	113
		Totals: 1,855

57. AI will increase the time I spend on identifying cheating and/or plagiarism.

17% Disagree (Strongly Disagree or Disagree)

34% Unsure

50% Agree (Strongly Agree or Agree)
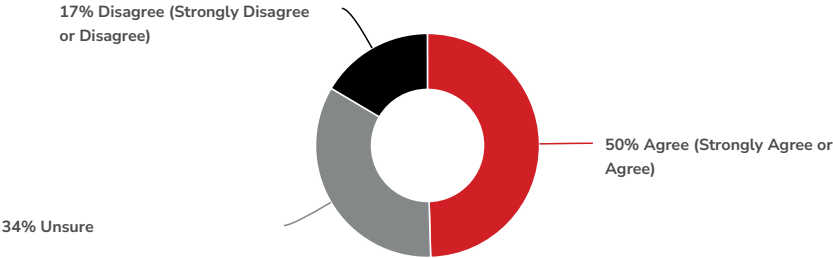
Value	Percent	Responses
Agree (Strongly Agree or Agree)	49.6%	925
Unsure	34.0%	634
Disagree (Strongly Disagree or Disagree)	16.5%	307

Totals: 1,866

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58. Please identify your level of agreement with the following statements related to teachers:

	Strongly disagree	Disagree	Unsure	Agree	Strongly agree	Responses
The use of AI tools will enhance teaching effectiveness. Count Row %	126 6.8%	243 13.0%	761 40.8%	596 31.9%	140 7.5%	1,866
Smartphones should be turned off during classroom lessons. Count Row %	54 2.9%	201 10.8%	216 11.6%	515 27.6%	883 47.2%	1,869
AI will negatively impact my professional autonomy. Count Row %	97 5.2%	436 23.4%	963 51.7%	259 13.9%	109 5.8%	1,864
My school is ready to effectively leverage AI technologies to benefit students and teachers. Count Row %	601 32.2%	490 26.3%	619 33.2%	128 6.9%	27 1.4%	1,865
AI will be detrimental to classroom dynamics and student learning. Count Row %	77 4.1%	388 20.8%	851 45.6%	374 20.0%	176 9.4%	1,866
AI will save me time by reducing bureaucratic and/or administrative tasks. Count Row %	149 8.0%	231 12.4%	779 41.7%	538 28.8%	170 9.1%	1,867
AI driven analytics and data insights should play a crucial role in a school's decision-making processes. Count Row %	185 9.9%	334 17.9%	1,023 54.7%	271 14.5%	56 3.0%	1,869

	Strongly disagree	Disagree	Unsure	Agree	Strongly agree	Responses
AI will increase the time I spend on identifying cheating and/or plagiarism. Count Row %	87 4.7%	220 11.8%	634 34.0%	485 26.0%	440 23.6%	1,866

Totals
Total Responses 1869

Reporting on Class Size and Complexity, Aggression, and Artificial Intelligence (AI) in Alberta's K–12 Schools (Fall 2023) | 2024

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59. Please identify your level of agreement with the following statements related to students:

	Strongly disagree	Disagree	Unsure	Agree	Strongly agree	Responses
AI will enhance student creativity and innovation. Count Row %	313 16.8%	490 26.3%	770 41.3%	259 13.9%	32 1.7%	1,864
My students prioritize their smartphones over in-person interactions. Count Row %	92 5.0%	243 13.1%	295 15.9%	624 33.6%	603 32.5%	1,857
AI will be detrimental to student learning. Count Row %	44 2.4%	291 15.7%	856 46.1%	427 23.0%	240 12.9%	1,858
AI will enhance personalized learning. Count Row %	166 8.9%	334 17.9%	921 49.4%	392 21.0%	50 2.7%	1,863
Uneven access to AI technologies will widen the educational divide for students. Count Row %	25 1.3%	88 4.7%	641 34.6%	724 39.0%	377 20.3%	1,855
Totals Total Responses						1864

Level of Concern
Artificial Intelligence in Education (AIED) and Society

60. Level of concern that A.I. will replace jobs in the teaching profession.

14% Concern
(Extremely/Moderately)

46% Concern (Somewhat/Slightly)

40% Not at all concerned
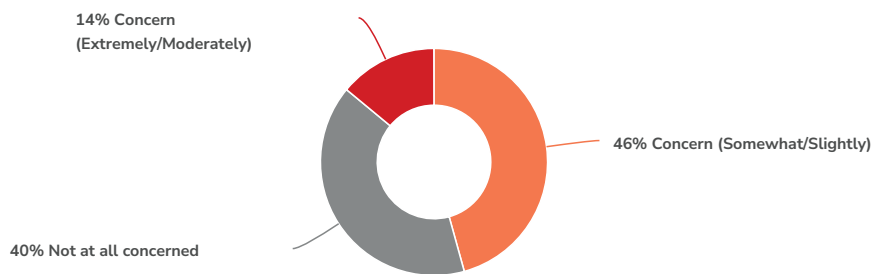
Value	Percent	Responses
Concern (Somewhat/Slightly)	45.7%	851
Not at all concerned	40.3%	750
Concern (Extremely/Moderately)	14.0%	260

Totals: 1,861

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61. Level of concern that A.I. will decrease trust in the teaching profession.

17% Not at all concerned

49% Concern (Somewhat/Slightly)

34% Concern (Extremely/Moderately)
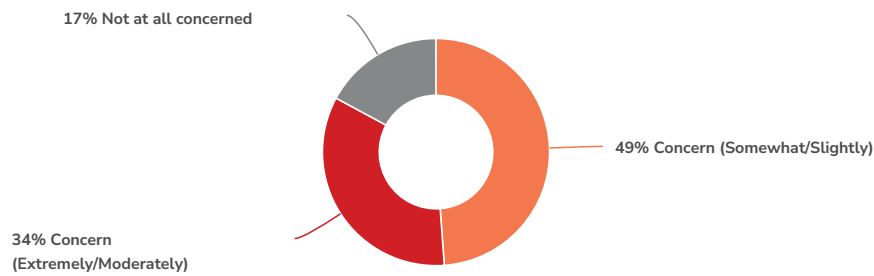
Value	Percent	Responses
Concern (Somewhat/Slightly)	48.8%	907
Concern (Extremely/Moderately)	34.0%	632
Not at all concerned	17.1%	318

Totals: 1,857

62. Level of concern that A.I. will erode our cognitive skills such as memory or critical thinking (cognitive atrophy).

12% Concern Not at all concerned

45% Concern
(Extremely/Moderately)

43% Concern (Somewhat/Slightly)
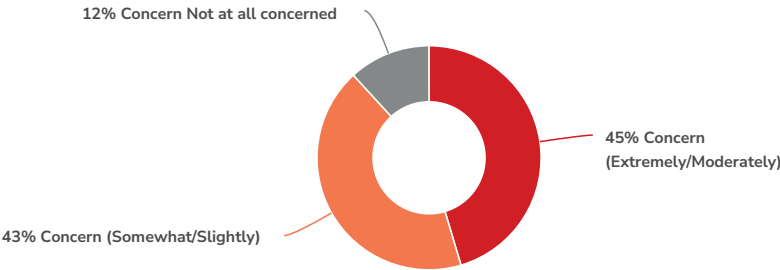
Value	Percent	Responses
Concern (Extremely/Moderately)	45.4%	843
Concern (Somewhat/Slightly)	42.8%	794
Concern Not at all concerned	11.8%	220

Totals: 1,857

Reporting on Class Size and Complexity, Aggression, and Artificial Intelligence (AI) in Alberta's K–12 Schools (Fall 2023) | 2024

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63. Level of concern that A.I. will negatively impact human agency and decision-making ability (moral passivity).

10% Not at all concerned

46% Concern
(Extremely/Moderately)

44% Concern (Somewhat/Slighlty)
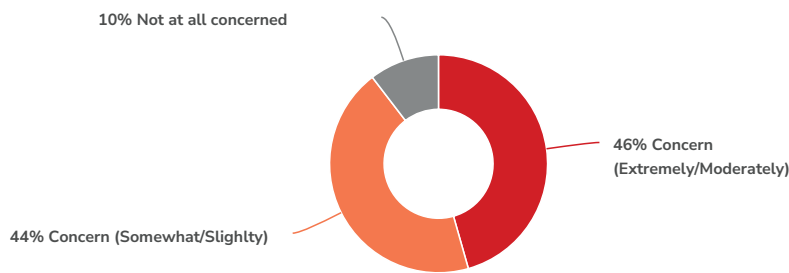
Value	Percent	Responses
Concern (Extremely/Moderately)	45.6%	845
Concern (Somewhat/Slighlty)	44.0%	817
Not at all concerned	10.4%	193
		Totals: 1,855

64. Please identify your level of concern with the following statements:

	Extremely concerned	**Moderately concerned**	**Somewhat concerned**	**Slightly concerned**	**Not at all concerned**	**Responses**
AI will replace **jobs** in the teaching profession. Count Row %	77 4.1%	183 9.8%	415 22.3%	436 23.4%	750 40.3%	1,861
AI will decrease **trust** in the teaching profession. Count Row %	242 13.0%	390 21.0%	478 25.7%	429 23.1%	318 17.1%	1,857
AI will erode our **cognitive skills** such as memory or critical thinking (cognitive atrophy). Count Row %	418 22.5%	425 22.9%	471 25.4%	323 17.4%	220 11.8%	1,857
AI will negatively impact **human agency** and decision-making ability (moral passivity). Count Row %	396 21.3%	449 24.2%	478 25.8%	339 18.3%	193 10.4%	1,855
Totals Total Responses						1861

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65. Mental Health

7% Better (Somewhat or Much)

50% Worse (Somewhat or Much)
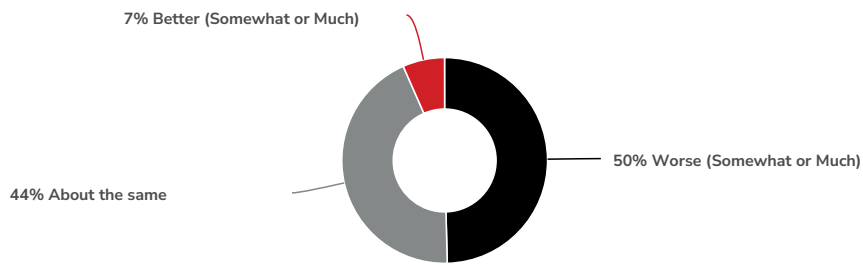
44% About the same

Value	Percent	Responses
Worse (Somewhat or Much)	49.6%	897
About the same	43.8%	792
Better (Somewhat or Much)	6.6%	120

Totals: 1,809

66. Personal and family relationships

3% Better (Somewhat or Much)

36% Worse (Somewhat or Much)
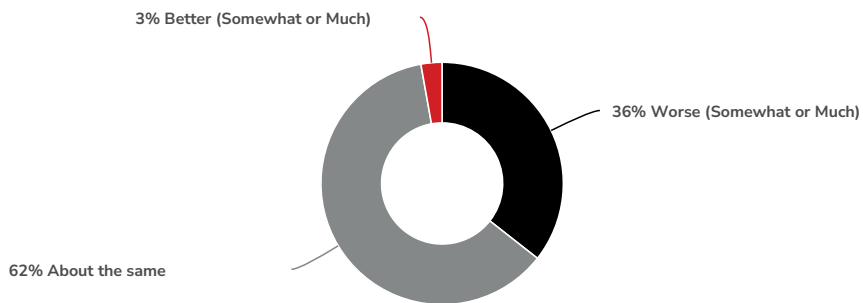
62% About the same

Value	Percent	Responses
Worse (Somewhat or Much)	35.6%	646
About the same	61.6%	1,117
Better (Somewhat or Much)	2.8%	51

Totals: 1,814

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67. Employment

9% Better (Somewhat or Much)

34% Worse (Somewhat or Much)
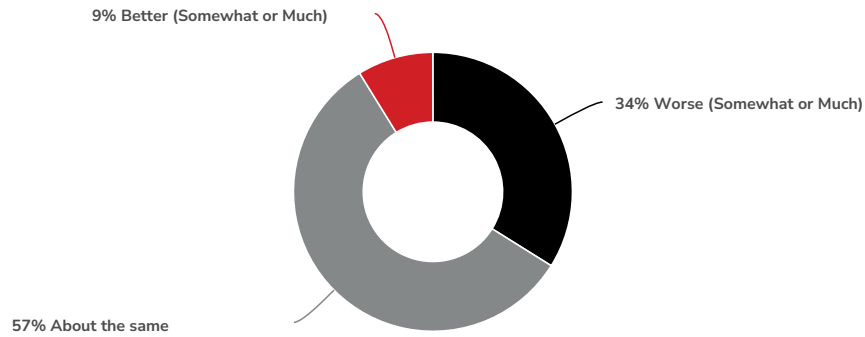
57% About the same

Value	Percent	Responses
Worse (Somewhat or Much)	33.9%	619
About the same	57.3%	1,046
Better (Somewhat or Much)	8.8%	161
		Totals: 1,826

68. Education/learning new things

35% Better (Somewhat or Much)

32% Worse (Somewhat or Much)
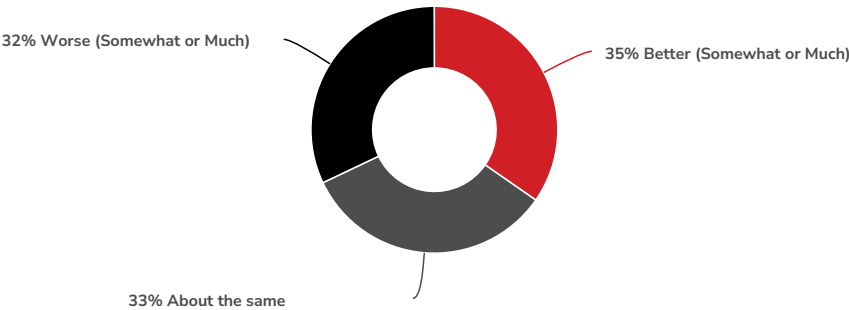
33% About the same

Value	Percent	Responses
Better (Somewhat or Much)	34.7%	629
About the same	33.3%	604
Worse (Somewhat or Much)	32.1%	582

Totals: 1,815

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69. Please indicate whether you expect that the increased use of artificial intelligence (AI) will make each of the following better or worse for you and your family?

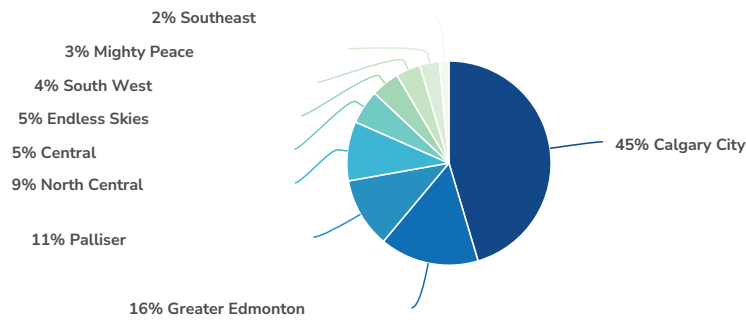|	Much worse	Somewhat worse	About the same	Somewhat better	Much better	Responses
Employment Count Row %	122 6.7%	497 27.2%	1,046 57.3%	143 7.8%	18 1.0%	1,826
Education/learning new things Count Row %	185 10.2%	397 21.9%	604 33.3%	561 30.9%	68 3.7%	1,815
Entertainment Count Row %	118 6.5%	254 14.1%	950 52.6%	443 24.5%	41 2.3%	1,806
Transportation Count Row %	35 1.9%	150 8.3%	1,252 69.1%	328 18.1%	48 2.6%	1,813
Home Life Count Row %	71 3.9%	279 15.4%	1,278 70.4%	177 9.8%	10 0.6%	1,815
Work Life Count Row %	143 7.9%	465 25.6%	773 42.5%	401 22.1%	35 1.9%	1,817
Safety Count Row %	168 9.3%	480 26.5%	1,000 55.2%	150 8.3%	14 0.8%	1,812
Environment Count Row %	119 6.6%	338 18.7%	1,191 65.9%	145 8.0%	15 0.8%	1,808
Food/nutrition Count Row %	71 3.9%	193 10.7%	1,350 74.6%	181 10.0%	14 0.8%	1,809
Income Count Row %	110 6.1%	410 22.6%	1,243 68.6%	45 2.5%	5 0.3%	1,813

	Much worse	Somewhat worse	About the same	Somewhat better	Much better	Responses
Personal and family relationships Count Row %	170 9.4%	476 26.2%	1,117 61.6%	45 2.5%	6 0.3%	1,814
Physical Health Count Row %	169 9.4%	376 20.8%	1,128 62.5%	125 6.9%	8 0.4%	1,806
Mental Health Count Row %	306 16.9%	591 32.7%	792 43.8%	111 6.1%	9 0.5%	1,809
Cost of living Count Row %	114 6.3%	399 22.1%	1,224 67.7%	65 3.6%	7 0.4%	1,809
Freedom/legal rights Count Row %	217 12.0%	576 31.8%	947 52.3%	63 3.5%	6 0.3%	1,809
Totals Total Responses						1826

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Demographics

70. Teachers' convention that you attend

2% Southeast
3% Mighty Peace
4% South West
5% Endless Skies
5% Central
9% North Central
11% Palliser
16% Greater Edmonton
45% Calgary City

Value	Percent	Responses
Calgary City	45.4%	844
Greater Edmonton	15.7%	292
Palliser	11.1%	206
North Central	9.4%	174
Central	5.4%	100
Endless Skies	4.5%	84
South West	3.9%	73
Mighty Peace	3.1%	57
Southeast	1.5%	28

Totals: 1,858

Statistics

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71. Type of school authority in which you are employed

1% Francophone

22% Separate
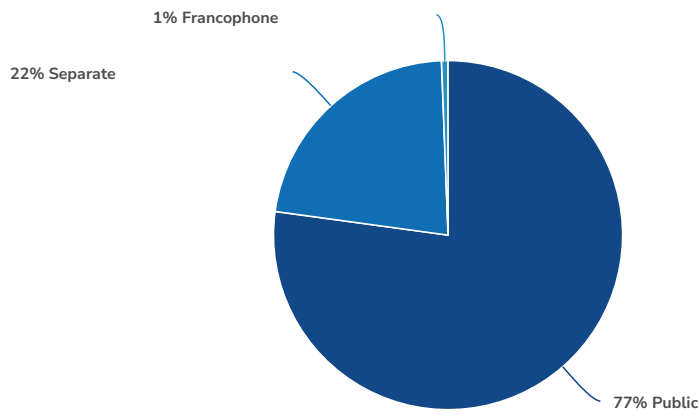
77% Public

Value	Percent	Responses
Public	77.1%	1,437
Separate	22.2%	414
Francophone	0.6%	12

Totals: 1,863

72. What grade levels are represented in your school? Please check all that apply.
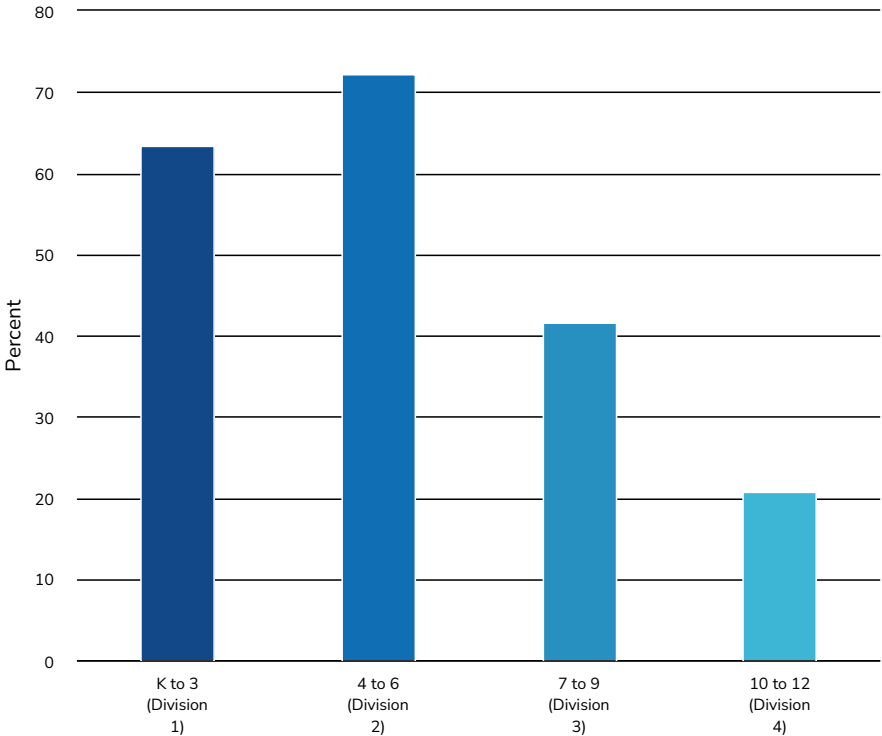
Value	Percent	Responses
K to 3 (Division 1)	63.4%	64
4 to 6 (Division 2)	72.3%	73
7 to 9 (Division 3)	41.6%	42
10 to 12 (Division 4)	20.8%	21

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73. Your teaching experience, including current year
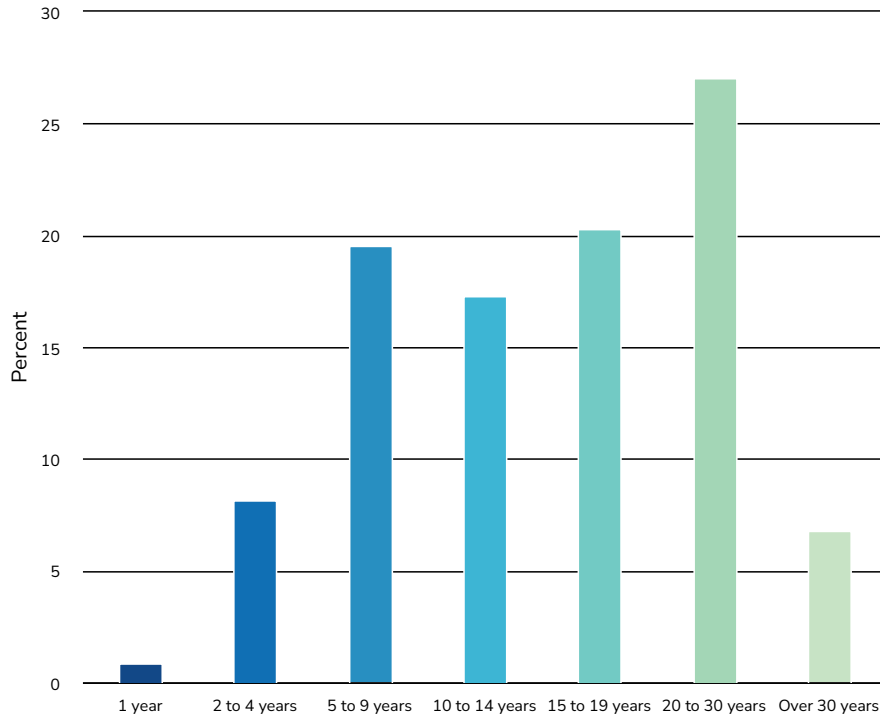
Value	Percent	Responses
1 year	0.9%	16
2 to 4 years	8.2%	152
5 to 9 years	19.6%	365
10 to 14 years	17.3%	322
15 to 19 years	20.3%	379
20 to 30 years	27.1%	505

74. Your age

Percent

| 25 and younger | 26–30 years old | 31–35 years old | 36–40 years old | 41–45 years old | 46–50 years old | 51–55 years old | 56–60 years old | 61–65 years old | Over 65 |

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Value	Percent	Responses
25 and younger	2.3%	43
26–30 years old	9.4%	174
31–35 years old	14.0%	258
36–40 years old	14.1%	260
41–45 years old	17.7%	328
46–50 years old	16.4%	303
51–55 years old	15.5%	286
56–60 years old	6.9%	127
61–65 years old	2.9%	54
Over 65	0.9%	16

Totals: 1,849

When were the responses to this ATA random stratified sample collected between December 1, 2023 and December 11, 2023?

● **Complete**

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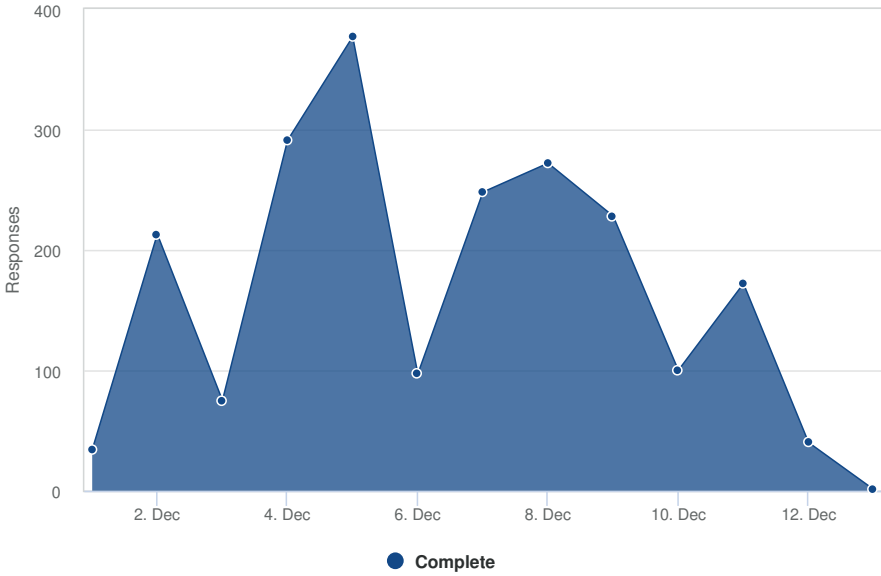
Note

1. Reports on the ATA's education research can be found at https://teachers.ab.ca/professional-development/education-research/.

References

Alberta Teachers' Association (ATA). 2020. *Understanding Aggression(s) in Alberta Schools and School Communities*. Edmonton, Alta: ATA. Also available at https://legacy.teachers.ab.ca/ SiteCollectionDocuments/ATA/Publications/Research/COOR-101-29%20Aggression%20in%20 AB%20Schools.pdf (accessed January 26, 2024).

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