

Digital Reporting and Digital Assessment Tools: Evaluating their Value and their Impact

2014 Research Results Summary
Alberta





The Alberta Teachers' Association

© Copyright 2014

ISBN 978-1-927074-27-5

Unauthorized use or duplication without prior approval is strictly prohibited.

Alberta Teachers' Association

11010 142 Street NW, Edmonton AB T5N 2R1

Telephone 780-447-9400 or 1-800-232-7208

www.teachers.ab.ca

*Further information about the Association's research is available from Lindsay Yakimyshyn
at the Alberta Teachers' Association; email lindsay.yakimyshyn@ata.ab.ca.*

Digital Reporting and Digital Assessment Tools: Evaluating their Value and their Impact

2014 Research Results Summary, Alberta

Contents

List of Figures and Tables.....	4
Preface.....	6
Infographic	7
Background	8
Definitions	9
Digital Reporting	9
Digital Assessment.....	9
Method	10
Procedure	10
Instruments	10
Limitations	10
Key Findings	11
Results	12
Demographics	12
Quantitative	16
General Student Assessment and Reporting Requirements	16
Reporting Student Progress [eg, SIRS, Iris, D2L]	19
Assessing Student Progress [eg, Mathletics, DreamBox]	28
Data Issues	34
Provincial Government Moving from Print to Digital	37
Current Teaching and Learning Conditions	42
Qualitative—Focus Groups	44
Challenges of Using Digital Reporting Tools	44
Support	44
Parental Expectations	45
Adaptive Assessment Software	45
Data Privacy and Storage	46
Impact of Digitally-Based Resources	46
Appendix A:	47
Other Specified: Which of the following diagnostic, adaptive and real-time assessment tools do you use?	47
Appendix B:	48
Other Specified: Please indicate your level of concern around the following issues related to digital reporting and assessment	48
Appendix C:	52
Survey	52

List of Figures and Tables

Figure 1: Teachers' Convention (n=1052).....	12
Figure 2: Years of teaching experience, including the current year (n=976).....	13
Figure 3: Employment status (n=1050).....	13
Figure 4: Current designation (n=1060).....	14
Figure 5: Age (n=1039).....	14
Figure 6: Gender (n=1045)	15
Figure 7: Type of school (n=1064)	15
Figure 8: How confident are you that the digital assessment and reporting tools used in your school/jurisdiction are improving your students' learning? (n=1066)	16
Figure 9: Overall impact different initiatives have had on student learning.....	17
Figure 10: Extent to which digital reporting tools used	18
Figure 11: Do you currently use or are you planning to use digital reporting tools in your classroom/school? (n=1070)	19
Figure 12: Digital reporting tools primarily used to prepare student reports or communicate student progress (n=868).....	19
Figure 13: What is the name of the digital reporting tool you are planning to use to prepare student reports or communicate student progress? (n=51).....	20
Figure 14: How much input did you have in choosing and implementing this reporting tool? (n=849)	21
Figure 15: Which best describes how the use of the digital reporting tool was determined for your class(es)? (n=869).....	21
Figure 16: How has the use of this digital reporting tool changed your workload as a classroom teacher? (n=854)	22
Figure 17: How has the use of digital reporting changed parental expectations with respect to the frequency of reporting? (n=818)	23
Figure 18: How has the adoption of digital reporting affected the amount of time you spend reporting student progress? (n=843)	23

Figure 19: Professional development/support.....	24
Figure 20: Level of stress you experience with various student reporting and assessment requirements.....	25
Figure 21: How reports are provided to parents.	27
Figure 22: Do you currently use (or are you planning to use) diagnostic, adaptive and real-time assessment tools in your classroom/school? (n=1057)	28
Figure 23: Diagnostic, adaptive and real-time assessment tools used (n=218)	29
Figure 24: Diagnostic, adaptive and real-time assessment tools planning to use (n=59)	30
Figure 25: Degree of input.....	31
Figure 26: Which of the following best describes how the use of the diagnostic, adaptive and real-time assessment tool(s) was determined for your class(es)? (n=231).....	32
Figure 27: How has the use of this tool(s) changed your workload as a classroom teacher? (n=214)	33
Figure 28: Rating of professional development and technical support	33
Figure 29: Level of concern around issues related to digital reporting and assessment	35
Figure 30: Who has access (and can use) the stored data? (Multiple responses possible) (n=1062).....	36
Figure 31: Impact of provincial government's decisions on student learning	37
Figure 32: Working condition elements.....	43
 Table 1: List of diagnostic, adaptive and real-time assessment tools of which respondents were aware.....	 30
Table 2: How the Alberta government's decision to implement digitally-based resources will affect student learning.	39
Table 3: How the Alberta government's decision to implement digital assessment might affect student learning.....	40
Table 4: Additional comments.....	41

Preface

In Alberta, the use of digital reporting and assessment tools has grown dramatically over the past decade. Unfortunately teachers have rarely been involved in the selection of the systems or been asked about the value or impact digital tools are having on instruction and assessment practices, work lives or parental expectations regarding reporting.

This is an especially timely research study given the recent piloting of digital student learning assessments and the government's explicit mandate to shift away from print-based to digitally-based resources. This research represents teachers' and principals' views on a host of factors affecting the future of teaching, including the emergence of new technologies and the intensification of teachers' work.

In order to better understand this rapidly changing digital reporting and assessment landscape, the Association surveyed nearly 1,100 teachers and principals from across urban and rural Alberta about the perceived value and impact of these digital tools to their professional practices. Offering a highly representative voice of Alberta's teaching profession, the data in this report stem from the third study conducted by the Association on the subject and carefully chart the consistent and amplifying trends and patterns from the research conducted in 2008 and 2011.

The research activity was led by Dr Philip McRae, an executive staff officer with the Alberta Teachers' Association (ATA), and an evaluative research team from the University of Alberta's Faculty of Extension directed by Dr Stanley Varnhagen and Dr Jason Daniels. It was supported by ATA Associate Coordinator for research Dr J-C Couture and ATA Administrative Officer Dr Lindsay Yakimyshyn. The collective attention, support and analysis provided by all these individuals are greatly appreciated.

Alberta teachers acknowledge that technology integration presents the education system with both significant opportunities and challenges. Assessing the impact of emerging technologies on teachers and their conditions of practice is a research and advocacy priority for the Association. As this report demonstrates, understanding the value and impact of digital reporting tools and learning analytic instruments is critical to (re)shaping the future of teaching and learning.

The Association will continue to research and advocate for the conditions of professional practice required to create teaching and learning environments that advance the goal of public education: to educate all Alberta children well.

Gordon R Thomas
Executive Secretary

DIGITAL REPORTING & ASSESSMENT TOOLS

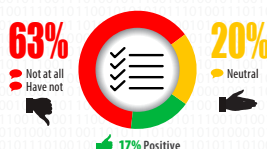
Evaluating their impact on classrooms

In Alberta, the use of digital reporting tools (eg, PowerSchool, StudentsAchieve and Desire2Learn) and digital assessment tools (eg, Mathletics, SuccessMaker, DreamBox Learning Math and Raz-Kids) has grown dramatically over the past decade. In 2014, the Alberta Teachers' Association and University of Alberta researchers surveyed over 1,100 teachers and principals from across urban and rural Alberta about the perceived value and impact of these digital tools on instruction and assessment practices, teachers' work life and shifting parental expectations.

VALUE

Low Trust in Improving Instruction and Assessment for Students

Have digital reporting tools **improved** the level of instruction and assessment in classrooms?



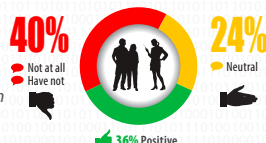
*Note that this trend line is now consistently moving towards the negative with each study on the subject conducted over the past five years.



Not Facilitating Communication

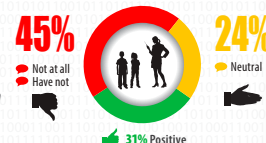
PARENTS

Have digital reporting tools facilitated and improved communication with parents?



STUDENTS

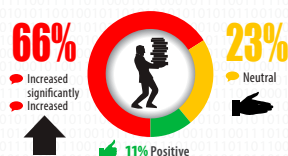
Have digital reporting tools facilitated and improved communication with students?



IMPACT

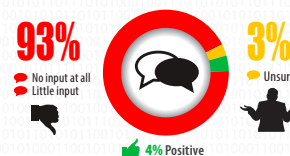
Significant Workload Issues For Teachers

How have digital reporting tools affected your workload?



Relatively No Consultation or Input when Selecting or Implementing Digital Tools

How much input did you have in **choosing and implementing** this reporting tool?



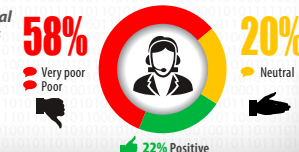
Low Flexibility of the Digital Tools

How do you feel about the **flexibility** of digital tools?



Poor Technical & Professional Development Supports

What sort of **professional development supports** did you receive when initially attempting to learn how to use the digital reporting tool?



The Alberta Teachers' Association

www.teachers.ab.ca

Background

Technology and increased access to information are ubiquitous in the lives of many teachers and students. Schools are adopting computers and online applications, which promise to revolutionize the classroom, individualize the learning process and improve assessment accuracy and efficiency. While these systems come with potential, there are still many questions regarding their overall effect and the role that they can and should play in the classroom.

It sometimes seems that every new technological advance is heralded as revolutionary. Rarely, however, does the hype reflect the real-world impact. In fact, technology used in inappropriate ways might even have a deleterious effect. With the emergence of digital reporting tools, the role of the teacher continues to be impacted by technology. Of specific concern, the teacher's role seems to be increasingly mediated through the use of third-party software. Additionally, in many cases, teachers are not involved in the selection of the systems that are more frequently being mandated, nor do they have any direct influence on the content of these systems.

Computer-based systems can quickly measure certain aspects of learning and, as a result, the educational focus in the classroom shifts toward teaching to those aspects that can subsequently be measured. Therefore, adoption of computer-based systems can lead to an overly reductionist approach to learning, which might result in the alteration or simplification of the definition of learning and the neglect of the harder to measure, but arguably more important, facets of learning.

To examine the place of technology in education, the Alberta Teachers' Association, in collaboration with researchers from the University of Alberta, conducted a study on how the use of digital reporting and digital assessment tools increasingly affect student learning, the workload of teachers and principals and overall assessment practices. This is the third study that the Association has undertaken on this important issue in the last five years.

Definitions

DIGITAL REPORTING

As used in this report, the term *digital reporting* refers to software (eg, StudentsAchieve, SchoolZone, Desire2Learn and PowerSchool) that facilitates the gathering and analysis of student data for the purpose of reporting student progress.

DIGITAL ASSESSMENT

As used in this report, the term *digital assessment* refers to software (eg Mathletics, SuccessMaker, Dreambox Learning Math and Raz-Kids Reading) that serves as an interactive teaching or assessment tool. Digital assessment may also be known as adaptive learning systems, data analytics and/or real-time assessments.

Method

PROCEDURE

The study used a mixed-methods approach to capture the diversity of Alberta teachers' opinions. This mixed-methods approach involved an online survey and focus groups.

INSTRUMENTS

Survey: An online survey was sent to teachers across the province. In total, there were 1,078 responses. The survey produced both quantitative and qualitative data.

Focus groups: Two focus groups with teachers and administrators were held. The focus groups were conducted in person.

LIMITATIONS

While the size of the survey sample was adequate for identifying common themes and key findings, the respondents were all self-selected. As a result of this self-selection, it is difficult to know with any certainty whether the results are representative of all Alberta teachers.

However, the participants in this study were, in terms of demographics, highly representative of Alberta's teaching population (see pages 12–15).

Further, the inclusion of the focus groups as an additional data collection strategy moderately increases assurance that the results reflect what Alberta teachers think.

The findings from the survey and focus groups complement each other. In addition, this study's findings show similar trends to studies conducted in 2008 and 2011, allowing for more confidence in the results.

Key Findings



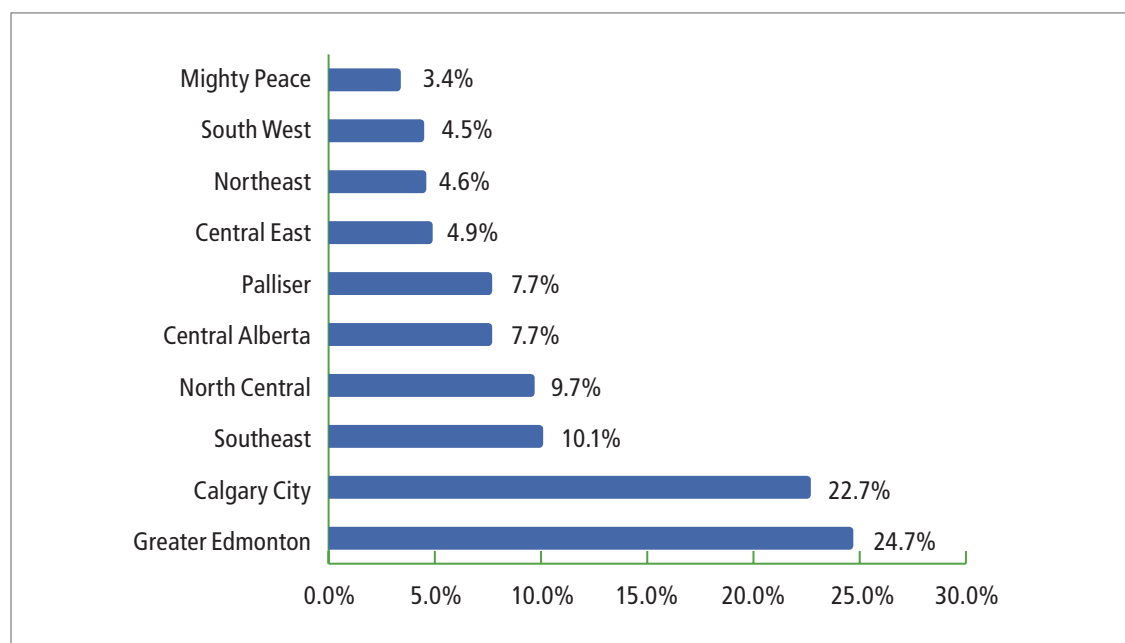
1. Teachers reported that they were generally not confident that digital assessment and reporting tools were improving students' learning. (Figure 8)
2. Teachers viewed digital reporting tools as providing no, or very little, improvement to the level of instruction and assessment in the classroom. In addition, several teachers reported that digital reporting tools have not improved communication with parents or students. (Figure 10)
3. The majority of respondents indicated that they were mandated to use digital reporting tools within their classrooms and were not able to provide any feedback as to which tool would be used. (Figures 14 and 15)
4. Teachers indicated that digital reporting tools have increased teacher workload, increased parental expectations regarding the frequency of reporting and increased the amount of time required to report student progress. (Figures 16, 17 and 18)
5. Participants assigned poor ratings to the professional development and technical support provided for digital reporting tools. (Figure 19)
6. Respondents indicated that preparing report cards and individual program plans (IPPs) caused them the greatest amount of stress in the workplace. (Figure 20)
7. Most respondents stated that they did not use, or were not planning to use, diagnostic, adaptive and real-time assessment tools in their classrooms or schools. (Figure 22)
8. Participants expected to have little to no input in the selection of tools, should their school district implement diagnostic, adaptive and real-time assessment tools. (Figure 25)
9. Teachers have a low level of concern with data issues related to digital reporting and assessment. (Figure 29)
10. Teachers, through their qualitative comments, demonstrated concern that the implementation of digitally-based resources would put students who had limited access to digital learning tools at a disadvantage compared to students who had families and schools that were well-supported. (Table 2)

Results

DEMOGRAPHICS

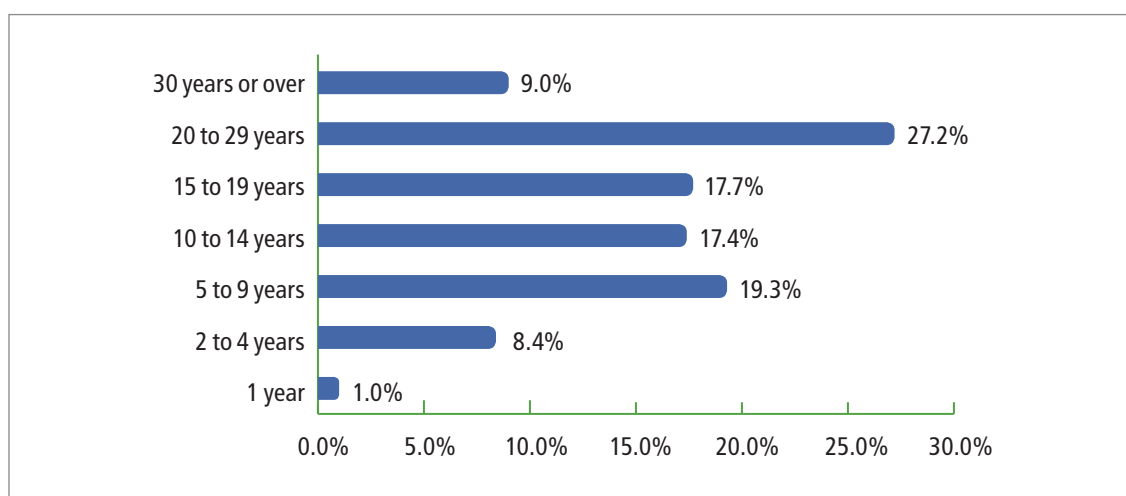
Of the respondents, almost half attended either the Greater Edmonton Teachers' Convention or Calgary City Teachers' Convention (Figure 1). North Central and Southeast each represent about 10 per cent of the sample. About 15 per cent of respondents were close to evenly split between Palliser and Central Alberta. The remaining sample was divided between Central East, Northeast, South West, and Mighty Peace.

Figure 1: Teachers' Convention (n=1052)



Regarding years of teaching experience (Figure 2), less than 10 per cent of the respondents had 4 years or less of experience, almost 20 per cent had between 5 and 9 years of experience, and over 35 per cent had between 10 and 19 years of experience. Over 25 per cent of the sample had between 20 and 29 years of teaching experience, and the remaining respondents (under 10 per cent) had 30 years or more of teaching experience.

Figure 2: Years of teaching experience, including the current year (n=976)



As indicated in Figure 3, the vast majority of respondents (about 93 per cent) worked full-time.

Figure 3: Employment status (n=1050)

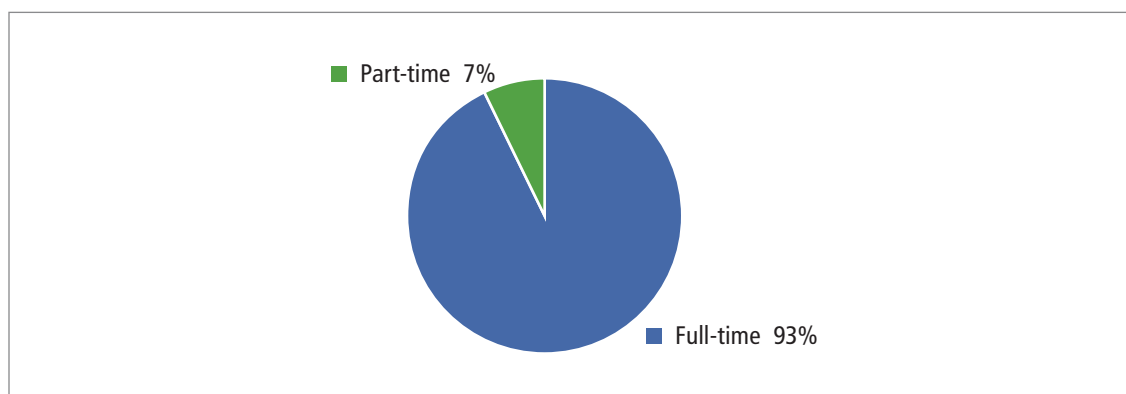
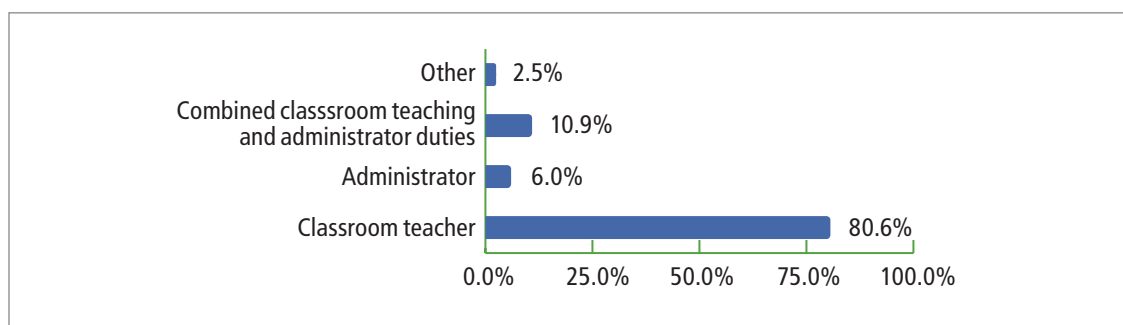


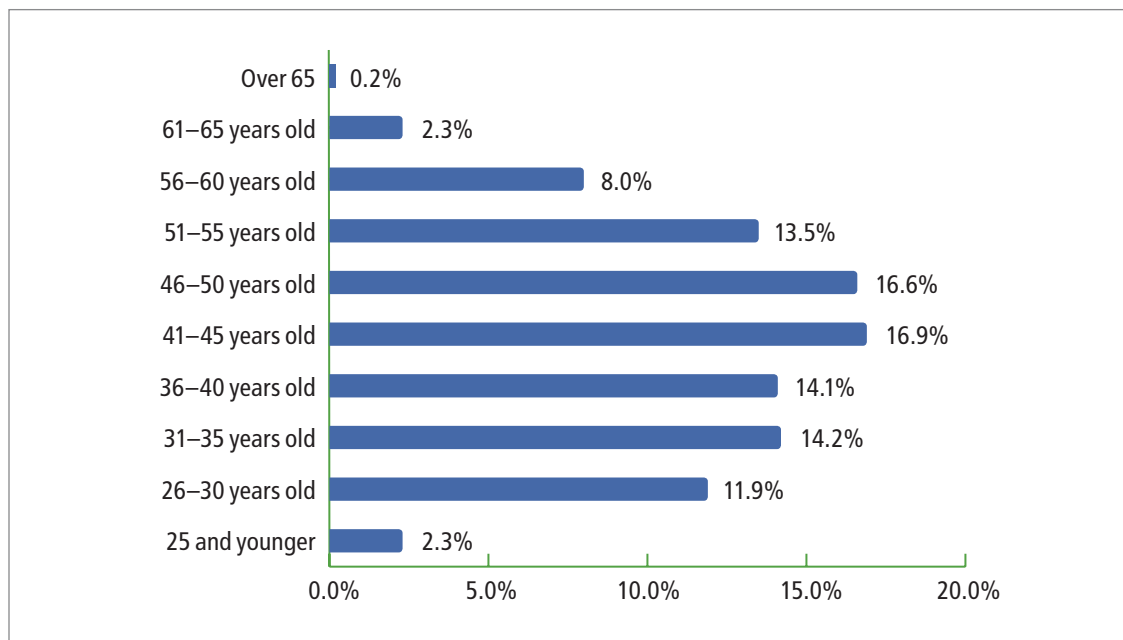
Figure 4 shows the current designation of respondents. Just over 80 per cent indicated that they were classroom teachers, just over 10 per cent indicated they shared teaching and administrator duties, and just over 5 per cent indicated that they were administrators (presumably without teaching duties).

Figure 4: Current designation (n=1060)



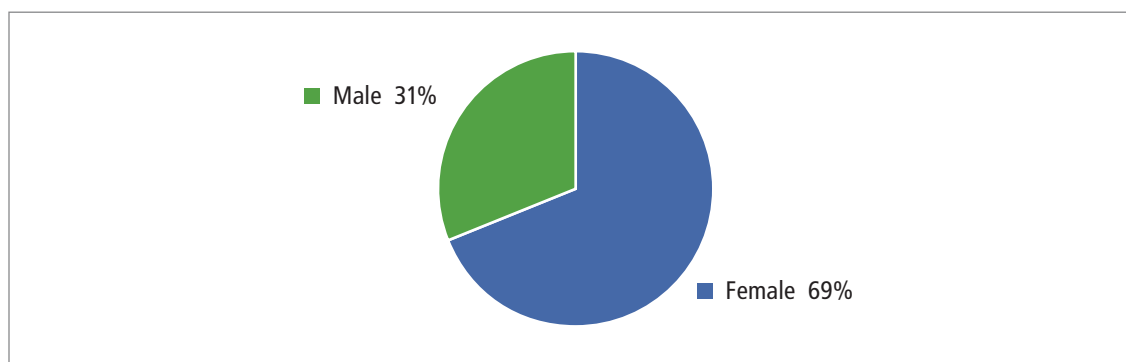
In terms of age of respondents (Figure 5), fewer than 15 per cent were 30 years old or younger, fewer than 30 per cent were between 31 and 40 years of age, fewer than 35 per cent were between 41 and 50, and fewer than 25 per cent were 51 years old or older.

Figure 5: Age (n=1039)



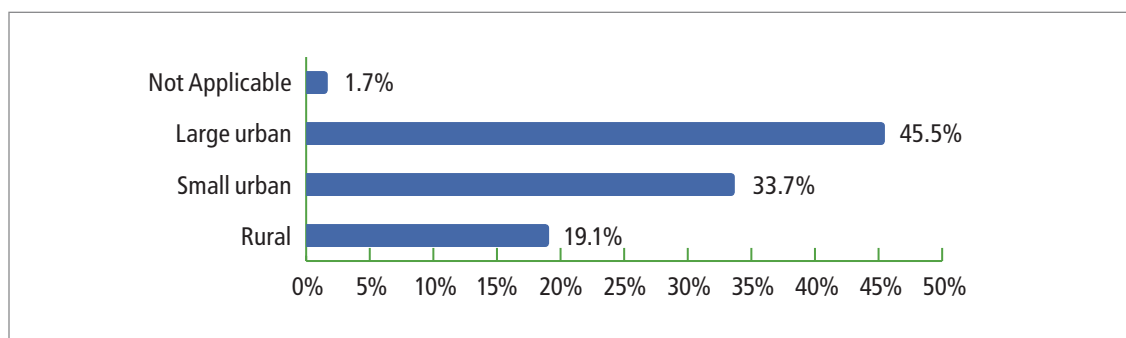
Regarding the gender of the respondents (Figure 6), over two-thirds of the respondents were female.

Figure 6: Gender (n=1045)



In regards to the type of school in which the respondents worked (Figure 7), around 45 per cent indicated that they worked in large urban schools, around 33 per cent indicated that they worked in small urban schools, and about 20 per cent indicated that they worked in rural settings. It should be noted that no definitions for these categories were provided. The participants selected the “type” as they saw fit; therefore, two different respondents from the same school might categorize their location differently.

Figure 7: Type of school (n=1064)





Key Finding 1: Teachers reported that they were generally not confident that digital assessment and reporting tools were improving students' learning. (Figure 8)

QUANTITATIVE

General Student Assessment and Reporting Requirements

Figure 8, below, demonstrates most respondents' low level of confidence in the ability of the digital assessment and reporting tools used in their school/jurisdiction to improve students' learning. Only about a quarter indicated being confident or very confident, while close to half indicated being not confident at all or only slightly confident.

Figure 8: How confident are you that the digital assessment and reporting tools used in your school/jurisdiction are improving your students' learning? (n=1066)

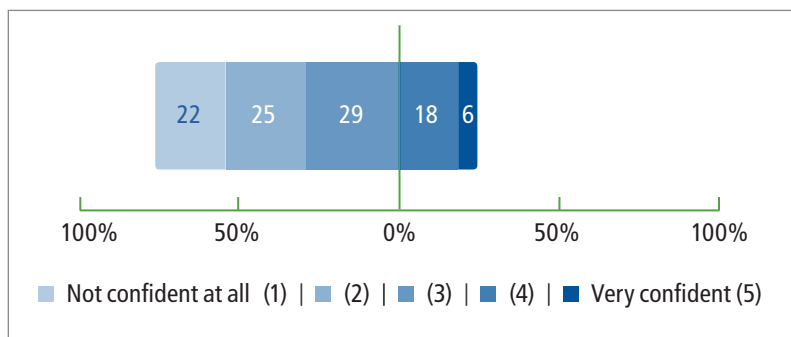
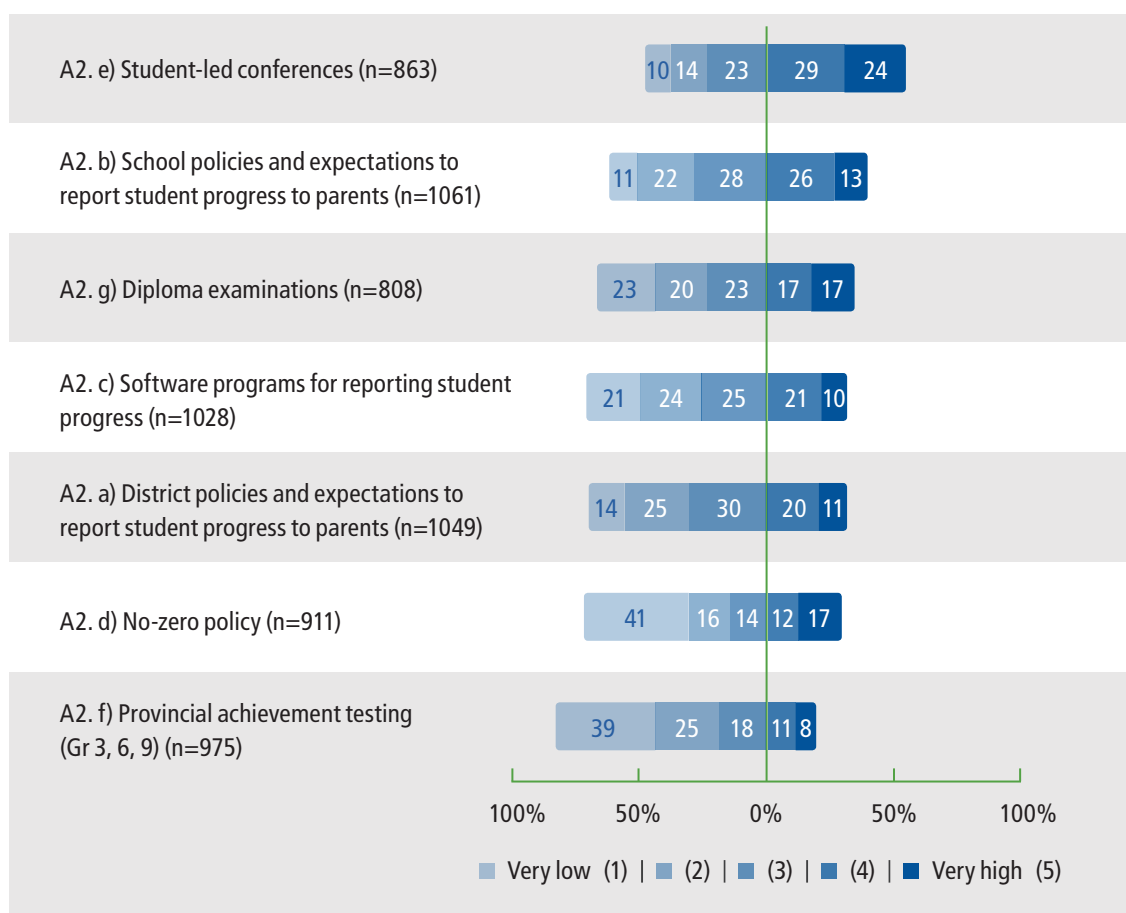


Figure 9 shows participants' perceptions of the overall impact of a number of different initiatives on student learning. The different items are ordered from highest to lowest rating, based on the item's average rating. Student-led conferences received the highest rating; over half of respondents rated that item in the top two categories. School policies and expectations to report student progress to parents received the next highest rating, with about 40 per cent rating this item in the top two categories. Ratings for the next three items—diploma examinations, software programs for reporting student progress, and district policies and expectations to report student progress to parents—were akin to each other, with 30 per cent or more indicating their response in the two highest categories for each. No-zero policy rated second to lowest, with over 40 per cent of respondents rating this item in the lowest category. Overall, the lowest-rated item was provincial achievement testing (Grades 3, 6 and 9), with over 60 per cent rating this in the lowest two categories.

Figure 9: Overall impact different initiatives have had on student learning¹



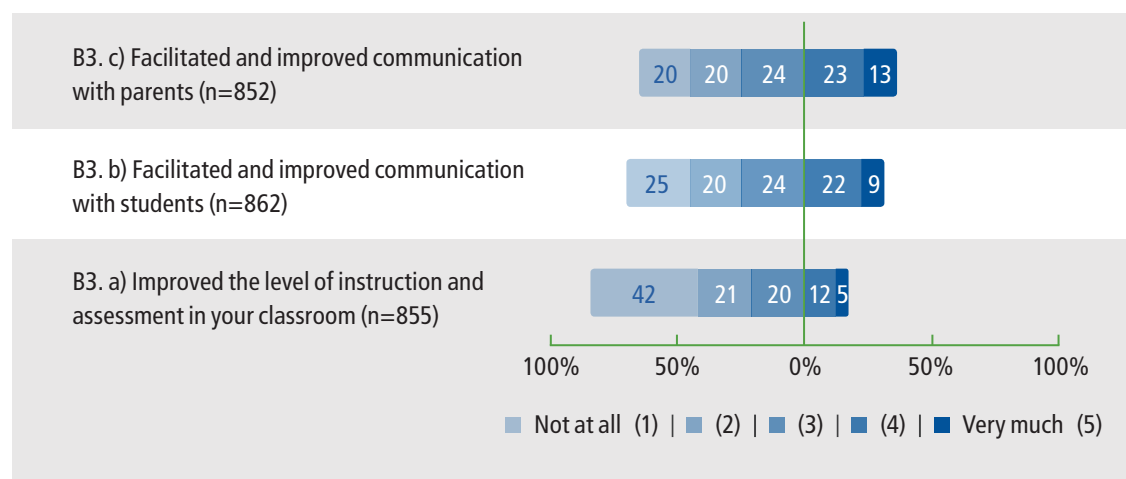
¹ For reference, several of the figures, including Figure 9, note the question number from the survey (ie, A1.e). The survey is included in this report as Appendix C.



Key Finding 2: Teachers viewed digital reporting tools as providing no, or very little, improvement to the level of instruction and assessment in the classroom. In addition, several teachers reported that digital reporting tools have not improved communication with parents or students. (Figure 10)

In the next item (Figure 10), participants rated to what extent the digital reporting tools were being used. Evaluating the items from higher use to lower use, respondents assigned the highest rating to the tools' facilitation and improvement of communication with parents. Notably, the extent to which tools facilitated and improved communication with students received a similar rating. Both items had respondents indicate about 30 per cent or more for the top two options. Clearly the lowest-rated item was improved level of instruction and assessment in the classroom; over 40 per cent indicated that this did not occur at all, and only about 15 per cent rated this in the top two categories.

Figure 10: Extent to which digital reporting tools used



Reporting Student Progress [eg, SIRS, Iris, D2L]

When asked if digital reporting tools were currently being used or planned to be used in the participant’s classroom, over 80 per cent indicated digital reporting tools were being used, and another 5 per cent indicated that they were not currently using the tools but planned to in the future. The remaining responses were “no” or “not sure.”

Figure 11: Do you currently use or are you planning to use digital reporting tools in your classroom/school? (n=1070)

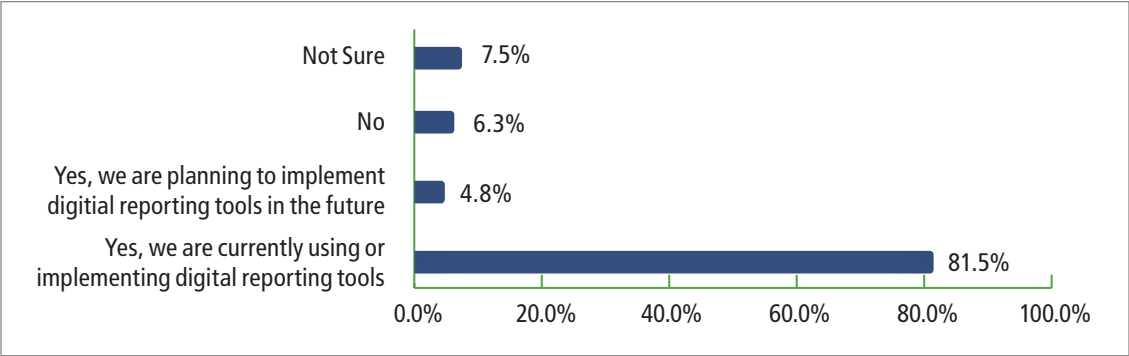
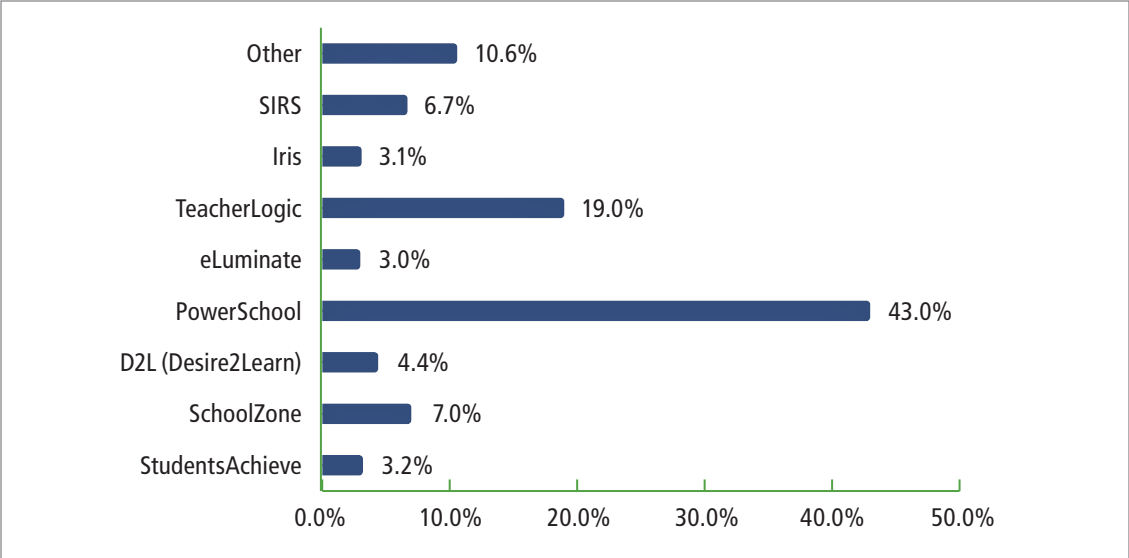


Figure 12 shows the digital reporting tools that were primarily being used to prepare student reports or communicate progress, according to respondents. While a number of different tools were listed, a plurality used PowerSchool (43 per cent); the next most frequently cited tool was TeacherLogic (almost 20 per cent).

Figure 12: Digital reporting tools primarily used to prepare student reports or communicate student progress (n=868)

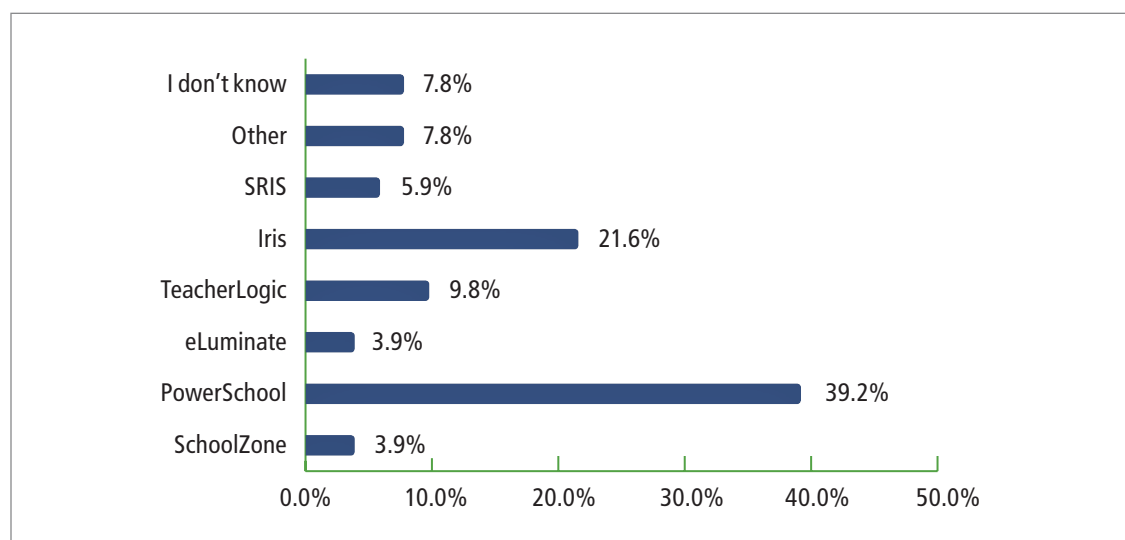


Additional digital reporting tools that participants primarily used to prepare student reports consist of Breeze, Capella, ConnectED, Easy Grade Pro, E-Link, FirstClass, Google Apps for Education, GradeBook, Intellimedia, Maplewood, STARS, School Blogs, and Weebly Website.

The next item (Figure 13) represents respondents who were not currently but were planning to use digital reporting tools in the future for preparing student reports or communicating student progress. Here, again, PowerSchool was the most frequent option chosen (almost 40 per cent of respondents); the second most cited tool was Iris (just over 20 per cent). About 10 per cent of respondents indicated plans to use TeacherLogic.

Maplewood and Capella are the names of other digital reporting tools that a few participants indicated they planned to use to prepare student reports.

Figure 13: What is the name of the digital reporting tool you are planning to use to prepare student reports or communicate student progress? (n=51)

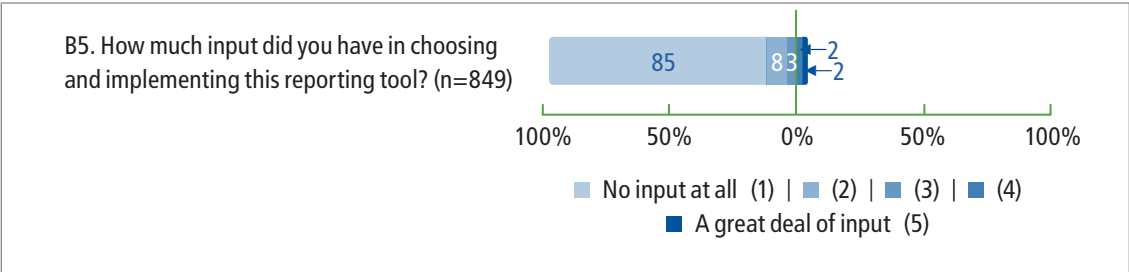




Key Finding 3: The majority of respondents indicated that they were mandated to use digital reporting tools within their classrooms and were not able to provide any feedback as to which tool would be used. (Figures 14 and 15)

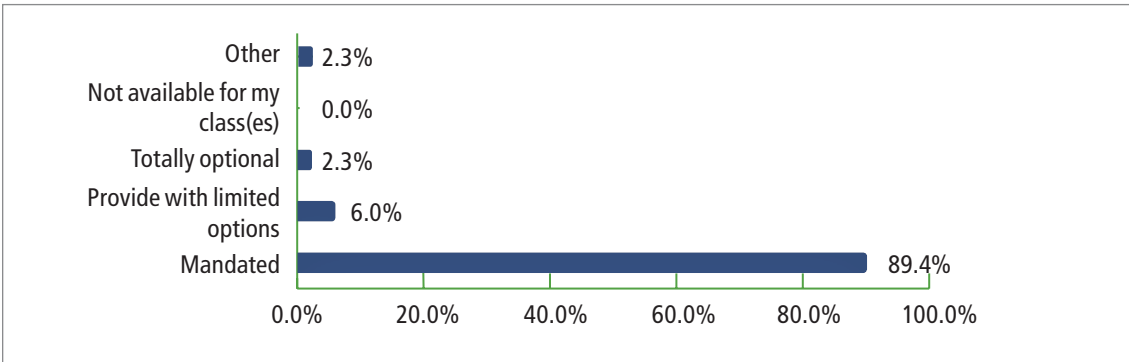
Figure 14 shows how participants rated the amount of input they had in choosing and implementing the reporting tool. The vast majority (around 85 per cent) indicated that they had no input.

Figure 14: How much input did you have in choosing and implementing this reporting tool? (n=849)



Ninety per cent of respondents indicated that their use of the digital reporting tool was mandated for their class(es) (Figure 15).

Figure 15: Which best describes how the use of the digital reporting tool was determined for your class(es)? (n=869)



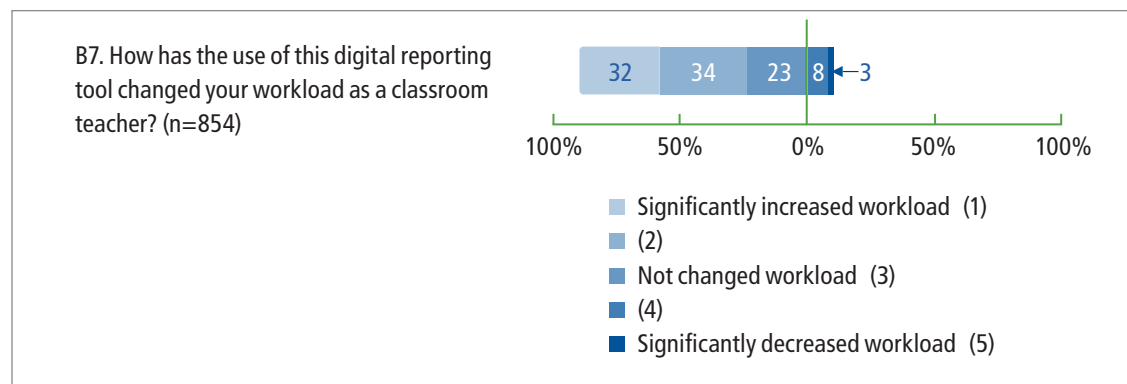


Key Finding 4: Teachers indicated that digital reporting tools have increased teacher workload, increased parental expectations regarding the frequency of reporting, and increased the amount of time required to report student progress. (Figures 16, 17 and 18)

According to respondents, alternate ways of determining the use of digital reporting tools included collaborative decision-making, stakeholder suggestions and expectations, low cost of the tool, workload reduction associated with the tool, and teacher feedback that led to the design and creation of a tool to meet the specific needs of the school.

When asked whether the use of their digital reporting tool changed their workload as a classroom teacher, about two-thirds of respondents indicated that it had increased or significantly increased their workload (Figure 16). Only just over 10 per cent indicated that it had decreased or significantly decreased their workload.

Figure 16: How has the use of this digital reporting tool changed your workload as a classroom teacher? (n=854)



Regarding parental expectations, over half of respondents indicated that digital reporting had increased or significantly increased expectations (Figure 17). Over 40 per cent indicated that expectations had not changed, and only about 5 per cent indicated that digital reporting had decreased parental expectations.

Figure 17: How has the use of digital reporting changed parental expectations with respect to the frequency of reporting? (n=818)

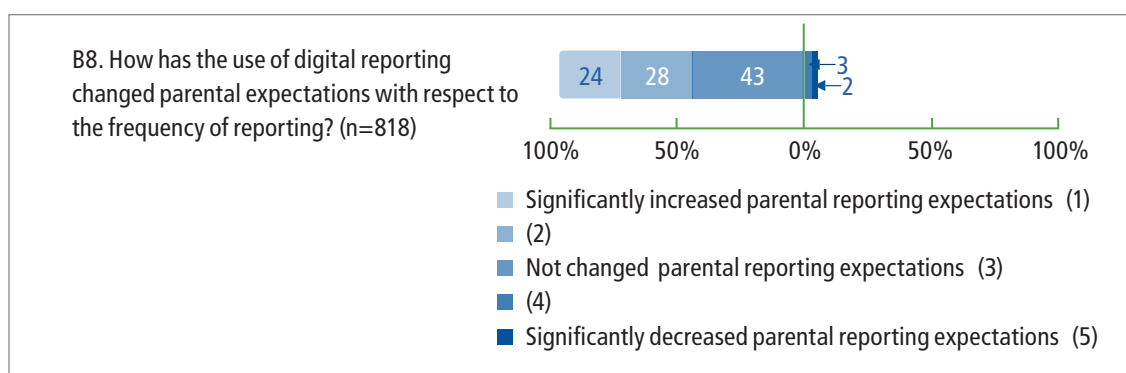
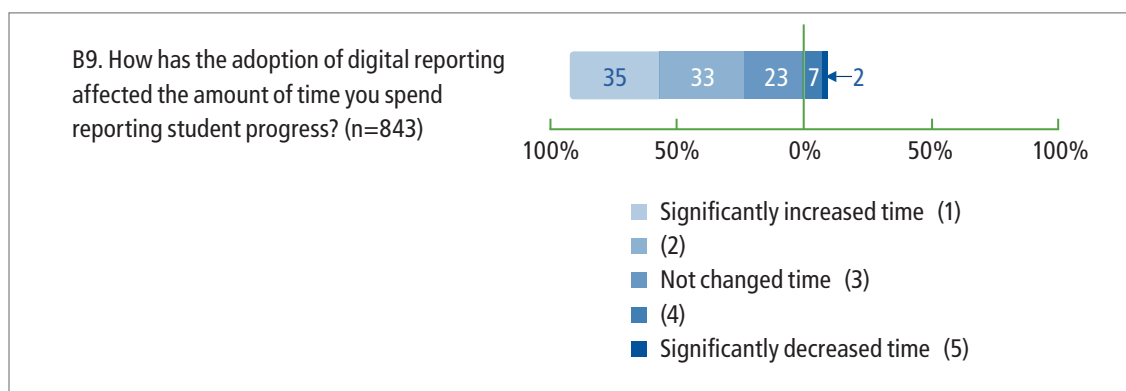


Figure 18 conveys responses in relation to the time teachers spent reporting student progress. About two-thirds indicated that digital reporting either increased or significantly increased the time spent reporting; about 10 per cent indicated that it had decreased or significantly decreased this time; and the remaining indicated that it had not changed this time.

Figure 18: How has the adoption of digital reporting affected the amount of time you spend reporting student progress? (n=843)

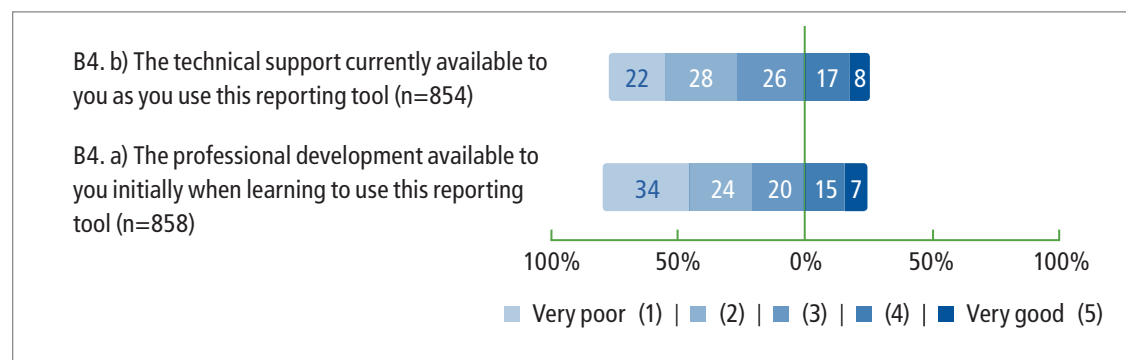




Key Finding 5: Participants assigned poor ratings to the professional development and technical support provided for digital reporting tools.
(Figure 19)

As Figure 19 conveys, respondents rated both professional development and support poorly, though they rated professional development as the lower of the two. About half of participants rated technical support as poor or very poor, and over a third rated professional development as very poor.

Figure 19: Professional development/support





Key Finding 6: Respondents indicated that preparing report cards and individual program plans (IPPs) caused them the greatest amount of stress in the workplace. (Figure 20)

Figure 20: Level of stress you experience with various student reporting and assessment requirements

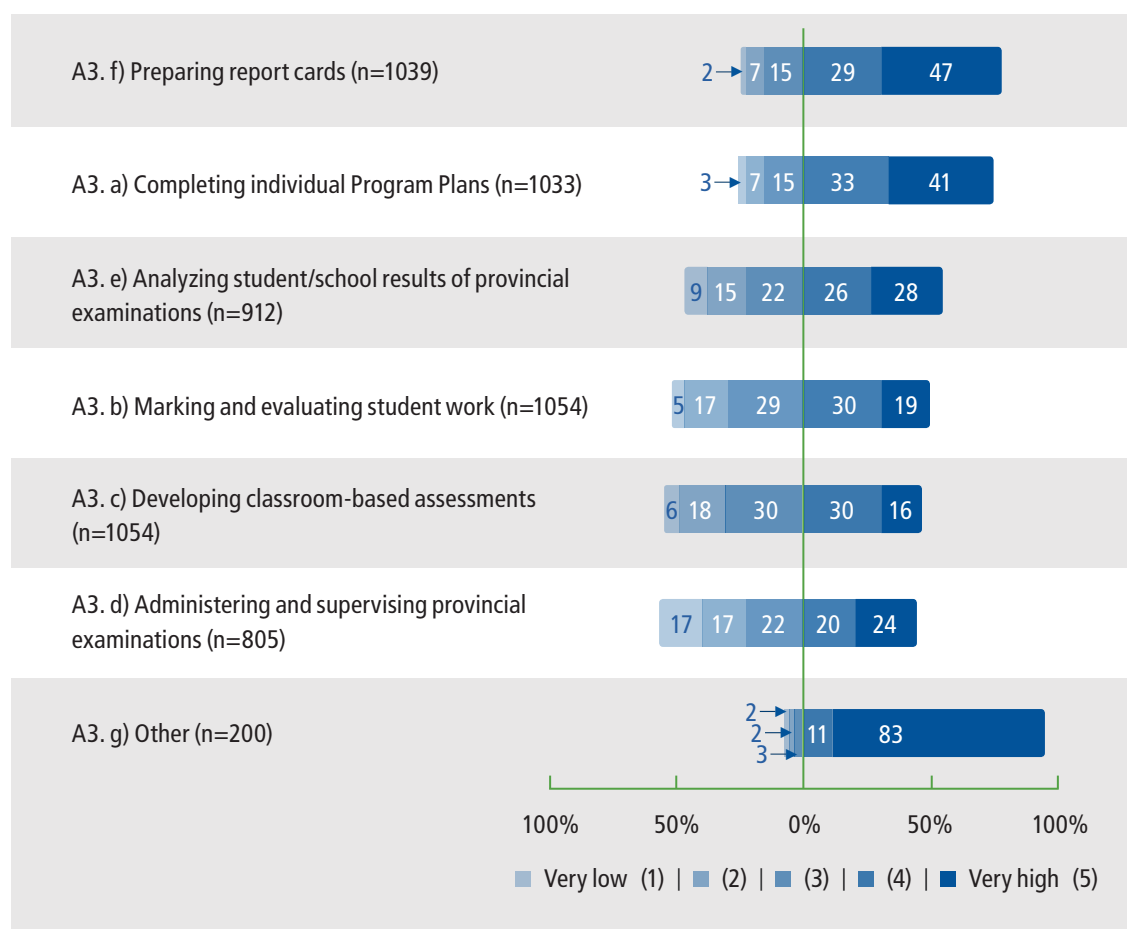


Figure 20 shows the level of stress that teachers reported experiencing in relation to various student reporting and assessment requirements. The items are ordered from the highest level to the lowest level of stress. The two aspects of reporting and assessment that respondents indicated as most

stress-inducing are preparing report cards and completing individual program plans. Both items had over 70 per cent of respondents reporting that the level of stress was high or very high. The next three items—analyzing student/school results of provincial examinations, marking and evaluating student work, and developing classroom-based assessments—were similar to each other in terms of reported stress level, with over 70 per cent of respondents rating the stress in the three highest categories (some to very high) for each. Finally, respondents indicated the lowest stress in relation to administering and supervising provincial examinations; close to 35 per cent reported the associated stress level was low or very low. Notably, for each category, more teachers indicated that the level of stress was high or very high rather than low or very low.

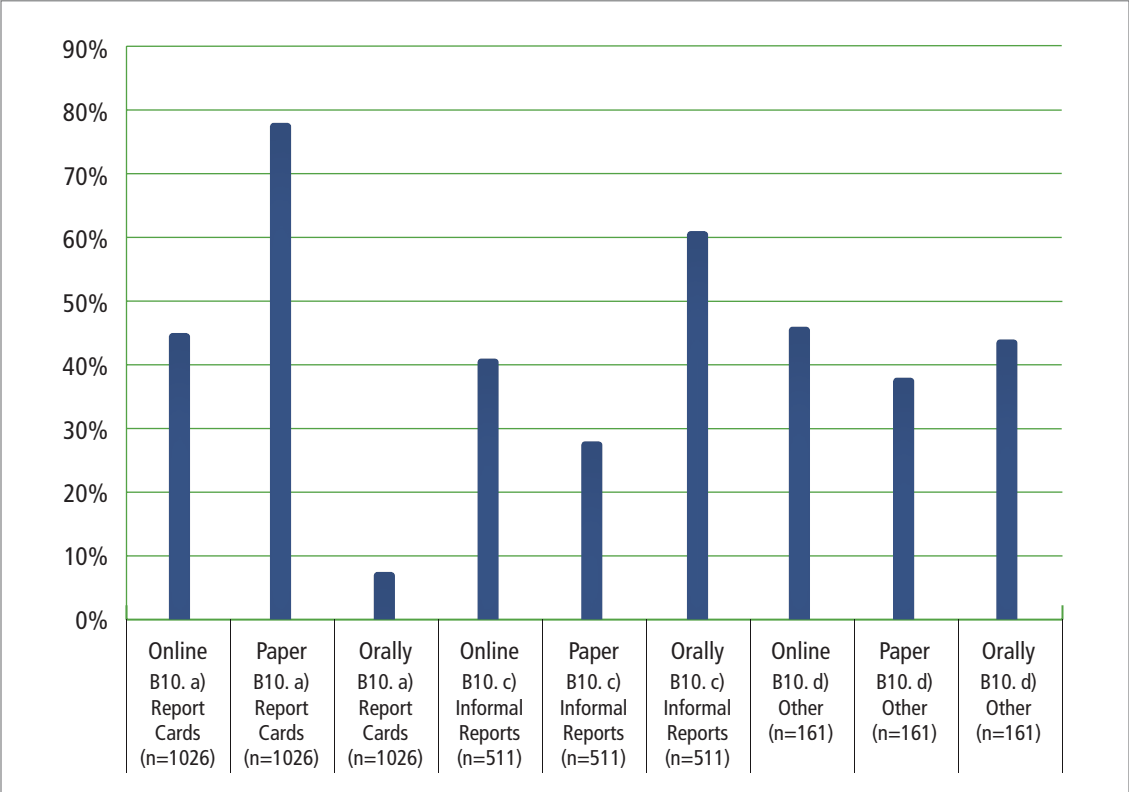
Additional comments about the stress levels related to reporting and assessment requirements included parent-teacher communication through e-mail, phone calls and interviews; learning and using various reporting software, such as PowerSchool and IRIS; and inclusion.

Notably, for each category, more teachers indicated that the level of stress was high or very high rather than low or very low.

Each participant was asked to indicate how reports were provided to parents. Multiple selections were possible. Over three-quarters indicated (Figure 21) that they used paper report cards, followed by oral, informal reports (just over 60 per cent). The remaining options—which were each reported by under 50 per cent of respondents—including (in order) online other, online report cards, oral other, online informal reports, paper other, paper informal reports and oral report cards.

Other reports provided to parents during the school year include blog posts, ongoing daily reports of marks that are made available online, IPP and behavior reports, and parent-teacher updates through e-mail, phone calls and interviews.

Figure 21: How reports are provided to parents



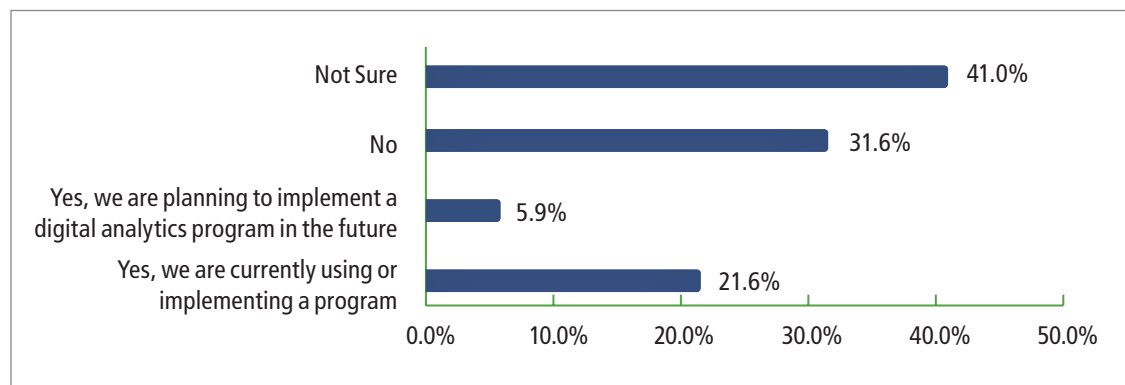


Key Finding 7: Most respondents stated that they did not use, or were not planning to use, diagnostic, adaptive and real-time assessment tools in their classrooms or schools. (Figure 22)

Assessing Student Progress [eg, Mathletics, DreamBox]

The following graph (Figure 22) represents the percentage of respondents who were using, or were planning to use, diagnostic, adaptive and real-time assessment tools in their classrooms or schools. Twenty per cent indicated that they were using these tools, with about another 5 per cent reporting that they were planning to use these tools in the future. A plurality (over 40 per cent) was not sure, and less than a third of respondents indicated that they were not using these tools.

Figure 22: Do you currently use (or are you planning to use) diagnostic, adaptive and real-time assessment tools in your classroom/school? (n=1057)



As Figure 23 shows, the two most popular tools used by respondents were Raz-Kids Reading (over 50 per cent) and Mathletics (close to 40 per cent).

A full list of the other diagnostic, adaptive and real-time assessment tools being used is available for review in Appendix A.

Of those respondents planning to use these tools, over 45 per cent did not know which tool might be used, but around 40 per cent total indicated the popular tools noted above, Raz-Kids Reading and Mathletics.

Figure 23: Diagnostic, adaptive and real-time assessment tools used (n=218)

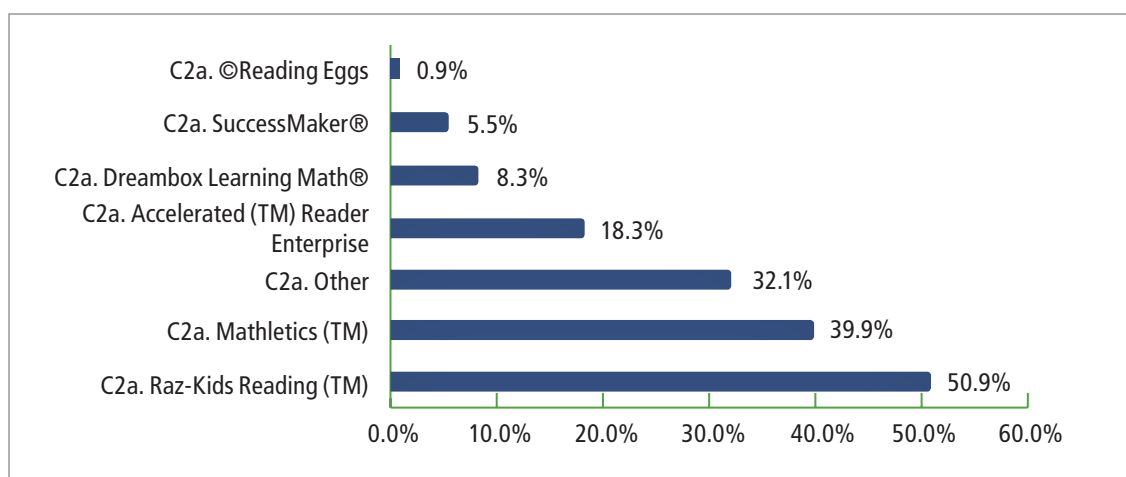
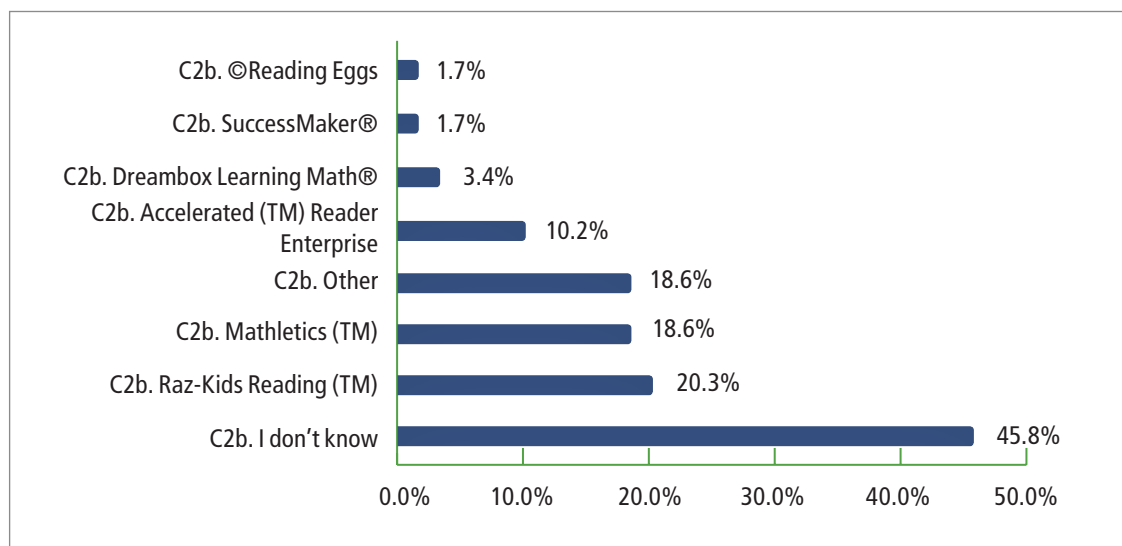


Figure 24: Diagnostic, adaptive and real-time assessment tools planning to use (n=59)

Additional diagnostic, adaptive and real-time assessment tools that participants planned to use include AIMSweb, DIBELS, Khan Academy, Lectora, SMART Response, Socrates, SOLARO, Scantron exam analysis, and provincial Student Learning Assessments (SLAs) that will replace Provincial Achievement Tests (PATs). Some respondents were unsure and still looking into available options.

Participants provided a list of diagnostic, adaptive and real-time assessment tools of which they were aware. Raz-Kids was the most cited tool, followed by Mathletics and Success Maker. See Table 1 for a breakdown of responses.

Table 1: List of diagnostic, adaptive and real-time assessment tools of which respondents were aware.

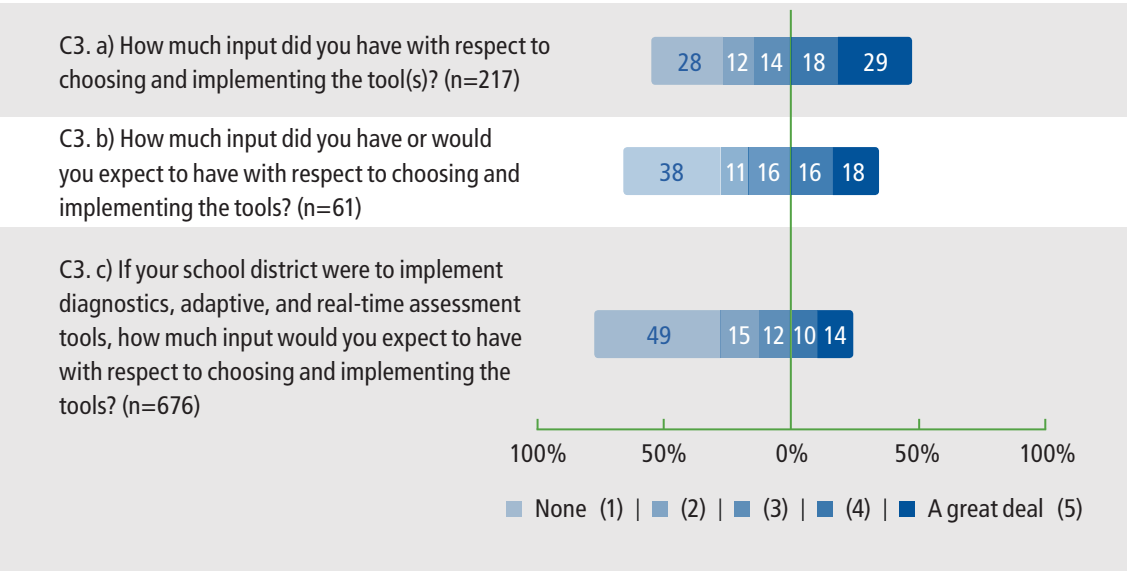
Category of Comment	# of Responses
Raz-Kids	21
Mathletics	16
Success Maker	14
D2L	11
Senteo	7
Smart Response	5
Dreambox	5
Cat 4	4
Socrative	4



Key Finding 8: Participants expected to have little to no input in the selection of tools, should their school district implement diagnostic, adaptive and real-time assessment tools. (Figure 25)

The next graph (Figure 25) represents the degree of input the respondents had, or expected to have, in choosing and implementing the tools. Around 45 per cent indicated that the amount of input they had was a great deal or the next highest indicator (4 on a 5-point scale). At the same time, around 40 per cent indicated no or little input.

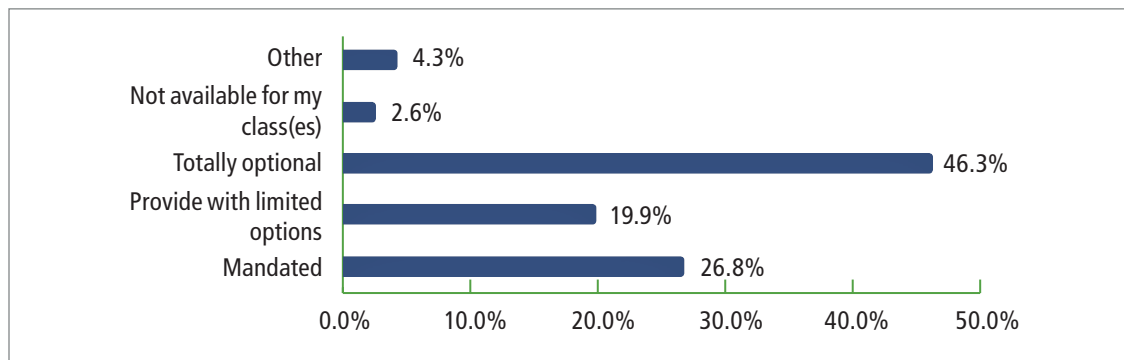
Figure 25: Degree of input



The next item (Figure 26) indicates how the assessment tools used in the respondent's classroom were determined. Over 45 per cent of respondents reported that the use of the programs was totally optional, and over 25 per cent of respondents reported that the program was mandated. One-fifth of respondents indicated that the program was provided with only limited options available.

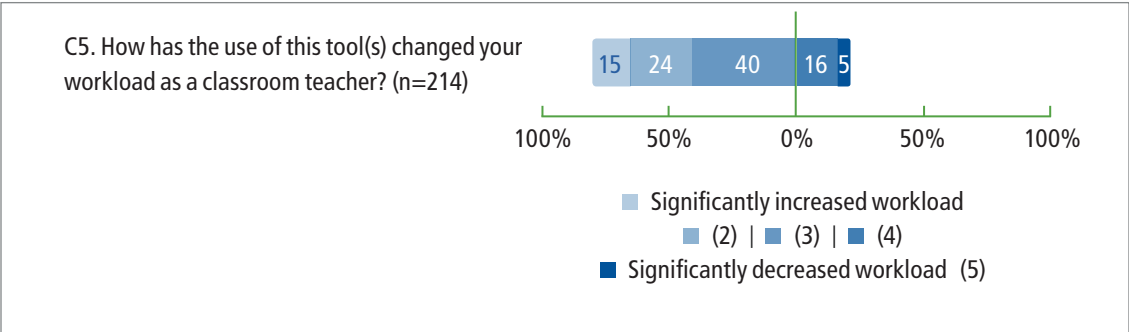
Respondents also described the following as alternate determining factors for the use of the diagnostic, adaptive and real-time assessment tools for the participants' classes: staff agreed upon the tool, the school district already purchased and implemented the tool, and parents expected the tool to be used. Additionally, one respondent indicated that he or she was awarded a grant to use a certain tool and one respondent stated he or she chose not to use a tool, relying on his or her own professional development instead.

Figure 26: Which of the following best describes how the use of the diagnostic, adaptive and real-time assessment tool(s) was determined for your class(es)? (n=231)



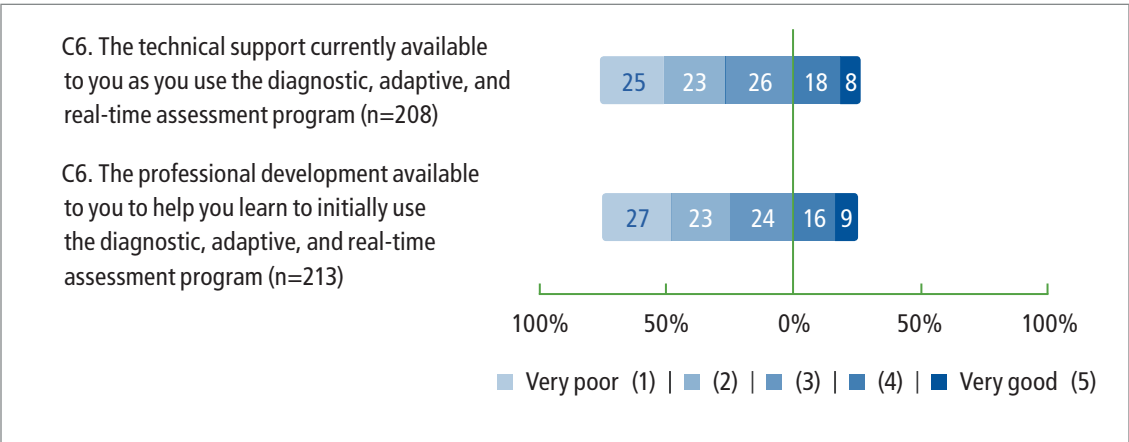
When asked about how the tool changed classroom teacher workload (Figure 27), only about 21 per cent indicated that it decreased workload (somewhat or significantly), about 40 per cent indicated that it did not change workload, and just under 40 per cent indicated that it either somewhat or significantly increased workload.

Figure 27: How has the use of this tool(s) changed your workload as a classroom teacher? (n=214)



The respondents' ratings in relation to professional development and technical support were akin to each other, as Figure 28 demonstrates. Around 50 per cent of respondents indicated that each was poor or very poor, while about a quarter of respondents rated professional development and technical service as good or very good.

Figure 28: Rating of professional development and technical support





Key Finding 9: *Teachers have a low level of concern with data issues related to digital reporting and assessment. (Figure 29)*

Data Issues

The following graph conveys the levels of concern participants had in relation to digital reporting and assessment issues. The most concern surrounds teachers' workload, with over 60 per cent indicating that they were very concerned. Respondents reported similar levels of concern regarding the flexibility of the tools and level of consultation with instructors around the purchase and use of the tools, with over 40 per cent indicating being very concerned. Next, the cost of the tool had fewer than 25 per cent indicating being very concerned. The next four items—maintaining appropriate privacy, automated scoring or analysis of student data, who controls student data and who has access to student data—garnered comparable levels of concern, with around 35 per cent indicating being concerned or very concerned with each. Finally, over 35 per cent reported that they were not at all concerned about where the student data was being stored.

Few respondents provided comments regarding other concerns related to digital reporting and assessment. Of the comments made, one participant noted the limited time available for training with the various tools as a concern. In addition, respondents suggested that the tools were complicated to use. Moreover, they expressed frustration with their schools continuously switching the tool being used. A complete list of concerns provided by the respondents is located in Appendix B.

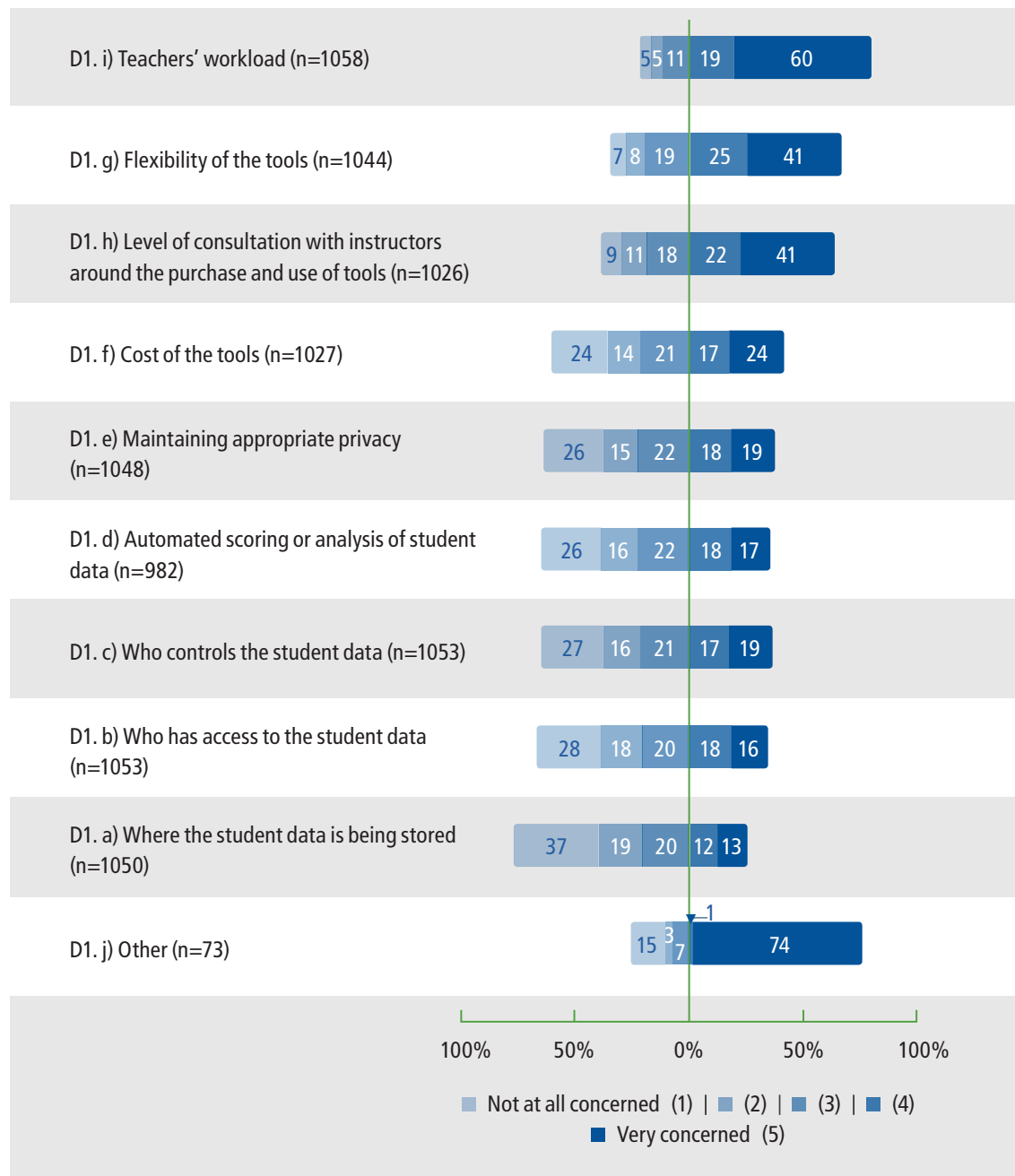
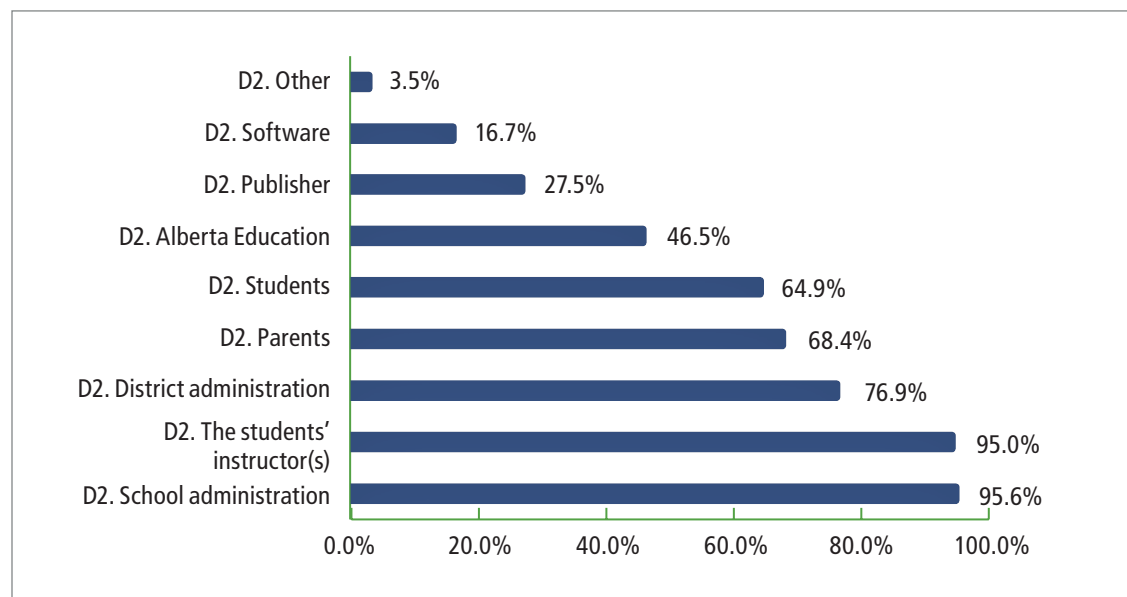
Figure 29: Level of concern around issues related to digital reporting and assessment

Figure 30 indicates who the respondents felt could access and use the stored data. Multiple responses were possible for this question. Around 95 per cent indicated that school administration and the instructor had access. This was followed by around 77 per cent of respondents who thought the district administration had access. Further, over two-thirds indicated that parents had access; fewer than 65 per cent indicated that students had access; over 45 per cent indicated that Alberta Education had access; over 25 per cent indicated that publishers had access; over 15 per cent indicated software had access; and less than 5 per cent indicated another option.

For other people who have access to the stored data, respondents made the following suggestions: anyone who is approved by the school board, all teachers within the division, health care providers, postsecondary institutions, researchers, school counselors, secretaries, student services, and technical support. Some respondents indicated that who had access was dependent on whether the data was secured outside of Canada, further noting that access varies based on the platform.

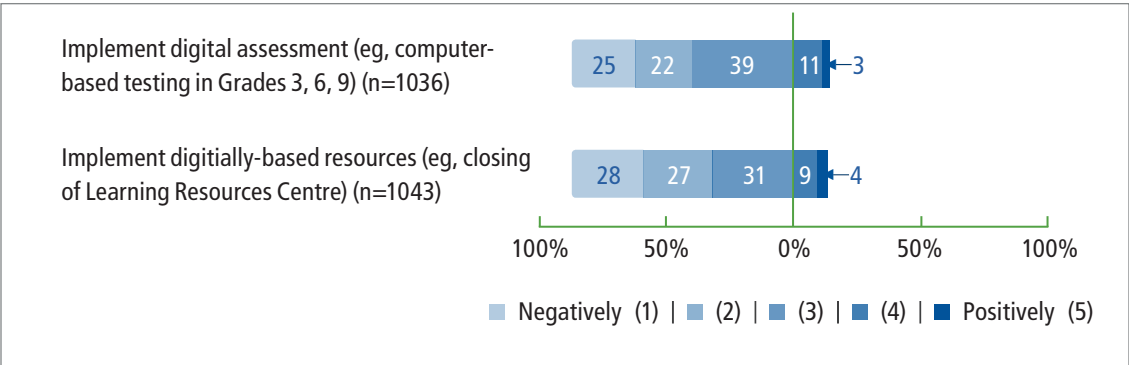
Figure 30: Who has access (and can use) the stored data? (Multiple responses possible) (n=1062)



Provincial Government Moving from Print to Digital

The following graph (Figure 31) shows the participants’ perceptions of the impact of the provincial government’s decisions around implementing digitally-based resources (eg, closing the Learning Resource Centre) and implementing digital assessment (eg, computer-based assessment at Grades 3, 6 and 9). Around 55 per cent of respondents indicated that implementing digitally-based resources was negative (negative or slightly negative), and nearly 50 per cent indicated that digital assessment was negative (negative or slightly negative).

Figure 31: Impact of provincial government’s decisions on student learning





Key Finding 10: *Teachers, through their qualitative comments, demonstrated concern that the implementation of digitally-based resources would put students who had limited access to digital learning tools at a disadvantage compared to students who had families and schools that were well supported. (Table 2)*

Teachers and administrators were provided with the opportunity to explain how the Alberta government's decision to implement digitally-based resources would affect student learning.

Students having limited access to the resources was the most cited topic, followed by the learning options for students being limited and the lack of reliable and adequate resources. See Table 2 for a thematic breakdown of responses.

Table 2: *How the Alberta government's decision to implement digitally-based resources will affect student learning.*

Category of Comment	# of Responses	Exemplary Comments
Students with limited access to resources will be at a disadvantage	90	Even today, there are some families that simply cannot afford their own computer for the home let alone be expected to purchase a device for each child to use in the classroom. Schools cannot afford to buy devices for each child, so how is everyone supposed to access the material? I teach in a school where a high percentage of my students do not have digital learning tools.
Limits learning options for students	51	Any removal of an option for learning is detrimental to students. Accessing information digitally does not necessarily create the same kind of learning. I believe many students will continue to choose print resources, and this is a way for the government to download the cost of producing them to families and schools. Digital is just one part. While it can help many students, there are many, many others who require a different kind of help.
Lack of reliable/adequate infrastructure and supports	39	Networks go down—does everything stop if we cannot access the book? Does a teacher have to be prepared to go to alternate activities without notice? I do not believe this is the best way to go. I have concerns about sufficient and adequate technology and infrastructure to implement and carry out the use of digitally-based resources. The time requirement needed to use the resources is also a concern. We ALWAYS have trouble connecting an entire class to the Wi-Fi network. This wastes a great deal of instructional time. Many teachers give up and use other resources. The great number of students in our school would make using the tools difficult.
Easier access to resources	22	Access to digital materials is much easier than paper books. Students can access at any time, provided they have a computer and Internet. I currently do not know how to access resources, but, if it were online, it would be easier.
No impact on learning	16	I do not think any government assessment impacts student learning. I do not think that computer-based testing will have a significant impact on student performance.
Decreases teacher workload	15	I will have more time to prepare and mark work that matters. Less time marking for teachers is more time spent on planning activities or other assessments

Respondents provided additional open-ended feedback describing how they felt the Alberta government's decision to implement digital assessment might affect student learning. Participants most frequently suggested that students with limited access to resources would be at a disadvantage. They mentioned that digital assessment would limit the learning options for students who prefer print. Finally, some respondents were unsure of the impact that the decision to employ digital assessment would have on students and students' ability to use the technology. See Table 3 for a thematic breakdown of responses.

Table 3: *How the Alberta government's decision to implement digital assessment might affect student learning.*

Category of Comment	# of Responses	Exemplary Comments
Students with limited access to resources will be at a disadvantage	48	My only concern is that the available technology and training is not consistent throughout the district. Some students will have greater access to technology than others, putting them at an advantage. There are "have" and "have not" schools. I am not sure how available the resources will be to everyone. There could be a negative effect because of that.
Limits learning options for students who prefer print	35	I think it is important to be able to see a hard copy of a test for students. Not all students will be comfortable with a digital format. Most students are pretty computer savvy even at Grade 3. I have concerns about the IPP students though. We should be able to provide options for all students to either do the test on computer or on paper.
Unsure of impact	34	Not sure until I see how it works. It depends on how the program is set up. Is it engaging for children? Is it easy to use? Will they be able to represent their learning in a variety of ways?
Lack of student ability to use the technology could negatively affect scores	31	It will take students longer to type up information because they do not use placement of hands correctly. My grade 9 students do not have proficient word-processing skills to do the PAT on computer now—I am worried about the changes.
More efficient for the teacher	15	Less time spent by teachers having to run Scantrons through a machine and manually record results, etc Less marking for teachers.

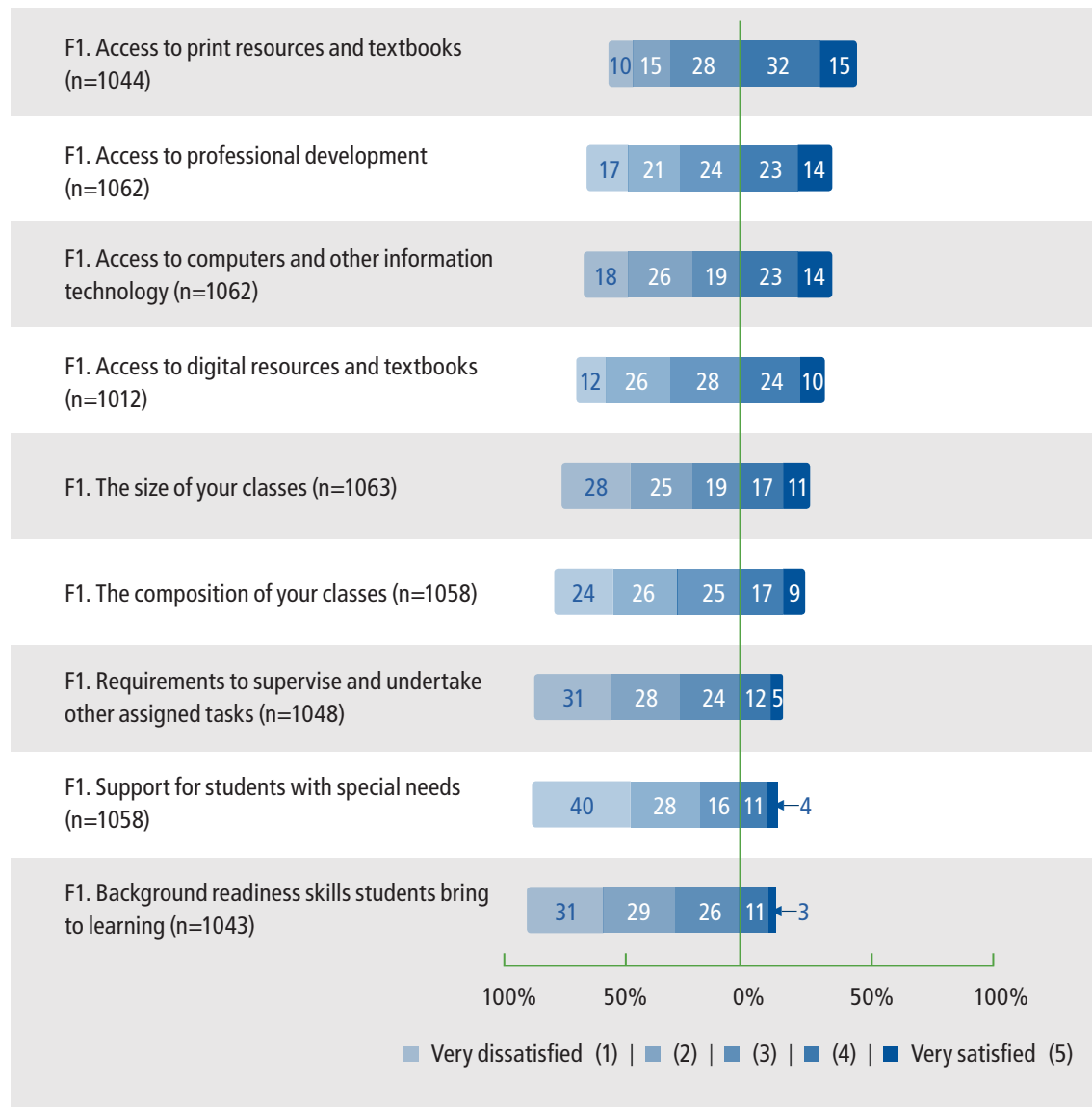
Respondents provided additional open-ended comments about their experiences using digital reporting and assessment tools or any other aspect of this survey. Increased teacher workload was the most cited topic, followed by technology being slow and unreliable, and then by digital reporting tools not being user-friendly. See Table 4 for a thematic breakdown of responses.

Table 4: Additional comments

Category of Comment	# of Responses	Exemplary Comments
Increased teacher workload	39	Digital reporting has added numerous hours to my workload as a teacher. I have become a DATA ENTRY EXPERT...and less of a one-on-one teacher. Much has been downloaded onto teachers through digital reporting. I used to spend a weekend typing in the comments for my student report cards. Of course, I had marks, anecdotal notes, etc already gathered prior to that point. These days I spend around 60 hours creating a class set of report cards which are repetitive and a huge document that the parents rarely read!!!
Technology is slow and unreliable	35	Digital reporting is a good idea if it works all of the time. I have found that I need to do report cards late at night (even on weekends—like 10 pm) because the system is too slow the rest of the time. We knew everyone would be doing report cards at the same time each semester, so why not get a system that can handle all of the traffic? I have concerns with all aspects of technology in the classroom. We would never expect a student to write a paper/pencil task without the necessary tools. However, we are constantly being asked to use technology but not given reliable technology to use. The hours wasted using programs that do not work consistently is unacceptable!
Digital reporting tools are not user-friendly	22	I do not mind digital reporting but the eLuminate report card is awkward to use and the font is really small. It is the program itself that makes the teacher workload increase. There needs to be a more user-friendly program. In general, working with D2L, SIRS, etc has not been easy. These programs, for the most part, are not "user-friendly" to begin with...
Lack of technical support and training	21	Need more support—we are pretty much left to our own devices to learn. No one in the school has any real/superior knowledge of the program. Just very frustrated with the reporting program and the lack of training and technical support.
Increased communication with parents	17	Digital reporting has made the work easier and improved communication time to parents and guardians. I like using PowerSchool to keep parents and students informed about their progress in classes and attendance.

Current Teaching and Learning Conditions

As Figure 32 demonstrates, when asked about different elements of working conditions, respondents were most satisfied (on average) with access to *print* resources and textbooks (with over 45 per cent being satisfied or very satisfied). They also indicated relatively high satisfaction with access to professional development and access to computers and other information technology; these ratings were about the same, with over 35 per cent indicating they were satisfied or very satisfied in relation to each element. Access to *digital* resources and textbooks received the next highest rating, with fewer than 35 per cent satisfied. Next, over 50 per cent of respondents were dissatisfied or very dissatisfied with the size of their classes and the composition of their classes. The requirements to supervise and undertake other assigned tasks and the background readiness skills students bring to learning each saw about 60 per cent of respondents expressing dissatisfaction. Finally, support for students with special needs had almost 80 per cent of respondents dissatisfied or very dissatisfied.

Figure 32: Working condition elements

QUALITATIVE—FOCUS GROUPS

Challenges of Using Digital Reporting Tools

According to several respondents, the various digital tools they have used are not user-friendly, are slow and take time away from instructing their students. Teachers also mentioned that they are required to report marks in several different systems and generate printed reports, making the process redundant. Respondents also mentioned that they were spending so much time reporting that it was starting to be prioritized over teaching and working with students. In addition, the emphasis on reporting decreased time spent on professional development or planning quality programs for students.

Several respondents indicated that the digital tool they used increased communication with parents; however, the tool was not flexible and did not allow for effective communication with parents regarding their children's progress. Communicating progress to parents was especially difficult if the student was on modified programming or outcome-based assessment, as the software only allowed for a number, a letter grade or a one-word descriptor.

The lack of input regarding which digital resources were used posed another challenge to participants. Most participants noted that the school board decided which digital reporting tools were used in the classroom without teacher input. Yet one respondent felt that the decision on digital resources was made as a community, with input from the board, school and teachers. This respondent added that digital reporting may or may not be a fit for a particular school and, because his or her school was a small rural school, he or she chose not to use an digital reporting tool and had the full support of the school administrator in this choice. Another participant added that, due to cultural considerations, teachers were not allowed to use the technology during the day and all work using technology had to be done at home and on their own time.

Support

Several participants stated that they would embrace technology that was developed for their needs if the software had adequate support and they had sufficient training. In relation to this, the continuous learning that the changes in systems demand and the time needed to enter data into those systems have become sources of frustration and stress for some teachers. Further, there was strong agreement amongst participants that the computer systems and Internet access within their schools were usually unreliable, and there was limited technical support available. One respondent, however, mentioned that teachers in his or her school have quick access to technical support and problems are usually fixed relatively quickly.

With regard to the amount of training provided for digital reporting tools, participants reported mixed levels of support. Several educators mentioned that no professional development was provided for digital reporting tools and that learning had to be done on their own time. Yet some respondents mentioned that a few teachers within their school were given training with the technology and then required to train the other teachers in the tools; in some cases, no other supports were made available, while in some other cases these trained teachers supplemented existing supports provided by the school.

Parental Expectations

Participants indicated that teachers felt stress about meeting the deadline for reporting marks on the system for parents. On the other hand, one respondent said that parents felt overloaded by the school in terms of checking digital resources. Overall, though, most participants suggested that parents have extremely high expectations of how quickly marks will be posted online, sometimes expecting the mark the day the assignment is completed. One suggestion for mitigating parental expectations was to communicate to parents that there would be a two-day delay between the assignment's submission date and the mark's posting date. Another respondent added that student expectations are high as well, particularly when parents attach rewards to their marks.

Adaptive Assessment Software

Quest A+, DreamBox, SuccessMaker, Raz-Kids, and Mathletics were mentioned as adaptive assessment software used at the participants' schools. These assessment tools were seen by a few participants to drive the curriculum, not allowing for creative teaching and professional opinion and, moreover, doubling teacher workload. One teacher added that the curriculum is moving more towards child-centred learning, while technology is taking the curriculum in the opposite direction.

One respondent mentioned that these programs seemed to work for low- to middle-level learners, but that very low-level learners had trouble focusing and manipulating the mouse or track pad. On the other hand, several respondents indicated that some teachers would use a program like Mathletics for high-need students for whom they felt the software was a good fit. This would give the teacher freedom to work with a small group while the high-need students practiced their math with the software.

Finally, one respondent perceived Raz-Kids as a very interactive tool. He or she noted that, although it was not required for students to use the tool, the logs reporting activity and progress indicated that several students were using Raz-Kids at home.

Data Privacy and Storage

Participants stated that parents, teachers, students and administration should have access to information about students. Yet several respondents suggested that the privacy constraints of the digital reporting tools hinder teachers' ability to see comments that were entered in previous years regarding the supports needed for students to reach learning goals.

The teachers attending the focus group were then asked how they felt about data containing student information being saved within adaptive assessment software databases. One concern mentioned by participants was that the Google Drive servers that store the school's online data are located in the United States, making them accessible under the Patriot Act. However, one respondent felt that the data would contain only the students' first names and, consequently, would not raise a security concern. Another expressed concern that the data would be used to replace the teacher's professional opinion, noting that careful consideration would need to be given to who could access this data. This respondent further stated that it is the teacher's role, as a professional, to interpret and help people understand the results generated by the assessment software.

Impact of Digitally-Based Resources

The majority of respondents stated that some students would not be able to access the digital resources due to location or socio-economic status. One participant added that, because this would place some students at a disadvantage, students lacking digital resources should not be compared to other students in achievement scores. For instance, limited access to digitally-based resources might impede a student's ability to efficiently and effectively complete a timed exam on a computer. Notably, several respondents stated that administering diploma exams digitally would result in no learning.

One educator was concerned with the costs of implementing digital resources. He or she asked who would be responsible for the costs. In addition to the initial cost of the digital resources (eg, e-readers, digital textbooks), expenses for replacements due to loss or damage would be ongoing.

While one respondent mentioned that digitally-based assessment is moving in the right direction (mainly by helping to provide information to teachers at Grades 3, 6 and 9), the implementation of digital reporting and digital assessment tools clearly has multifaceted—not always constructive—effects on student learning, assessment practices and teacher workload.

Appendix A:

OTHER SPECIFIED: WHICH OF THE FOLLOWING DIAGNOSTIC, ADAPTIVE AND REAL-TIME ASSESSMENT TOOLS DO YOU USE?

Diagnostic, adaptive and real-time tools	# of Responses
Academy of READING	2
AIMSweb	2
Bader Reading Assessment	1
CATs	2
Pensieve	2
Centio	1
ClassDojo	1
Desire2Learn	2
DIBELS	3
Edmodo	1
EYE-TA	1
Fountas & Pinnell	4
Gates	1
WIAT III	1
GradeBook Plus	1
Google Docs	1
GradeCam	1
Imagine Learning	6
IXL Math	5
Khan Academy	1
Lexia	1

Diagnostic, adaptive and real-time tools	# of Responses
Mightybook.com	1
Moodle	1
Nautikos	1
PM Benchmark for Reading	1
Quia	1
Read and Write Gold	1
Relfex Math	3
ReMark	1
Self-Evaluations	1
Self-Created Tools	1
Smart Response	2
Socrative	3
STAR Reading	3
Start-to-finish Books	1
Study Ladder	1
Sum Dog	3
Teacher Logic	1
The Grade	1
Tumblebooks	1
XLMath	1

Appendix B:

OTHER SPECIFIED: PLEASE INDICATE YOUR LEVEL OF CONCERN AROUND THE FOLLOWING ISSUES RELATED TO DIGITAL REPORTING AND ASSESSMENT.

- Ability to make/be part of the decision.
- Administration mandating we use them when they are not using them personally for their classes.
- Amount of PD time to receive training on the tools.
- Amount of training/practice with the tools before implementation.
- Appropriateness of data for kindergarten and for students following IPP data will likely not reflect the gains that children make in social skills, etc.
- Appropriate for ELL?
- Areas not checked I haven't considered.
- Assessments ought to give teachers data about where a student is currently on the developmental journey, and enable teachers to make inferences about where to go next to help them along. It ought not to be used to make judgments about a student's ability in the general sense.
- Class sizes in relation to support available.
- Complexity for families in accessing tools.
- Consistency of accessibility.
- Constantly changing software so as soon as you master one, you have to abandon it and start all over again.
- Corporate interests determining the future of assessment and teaching.
- Cultural significance of the material in question.
- District has not opted to pay for some features of PowerSchool that would help teachers with accommodations and IPP's.
- Ease of use and PD time to learn a new program. We've had a new one every year it seems! It's so much about learning a clunky new flawed program rather than reporting work.
- Equitable access to technology.
- Expectation to go paperless for writing assignments, which means more time spent looking at the monitor for teachers = concern for eyes.
- Frustrating to set up grade book.
- How authentic is it for every grade to use the same tool (eg, Iris)? Also, there is a lack of French immersion tools and resources.
- How many times we will be asked to use different programs, etc?
- How relevant it is to improve student learning.
- How the student data is used.
- How user-friendly it is.

- I am at the high school level; our district's use of PowerTeacher has significantly decreased the access and ease with which we access student data.
- I don't see how the extra hours of work to do an online report card help parents know where their kids are at.
- I find the technology is purchased and then the problems are discovered and then the technology is not used. Lots of wasted money.
- If the program will work when I need it to!
- I'm very concerned that this new system of reporting has significantly increased teacher workload and thus is negatively impacting student learning because so much time has to be dedicated to assessment (way more time than before) and the vast majority of parents do not look online at the digital report card. The program is not parent-friendly and is confusing so they don't bother looking at it. That brings a big question to most teachers...WHY are we doing this again? What is the purpose behind this? It isn't helping kids, parents or teachers.
- Implementing new programs in JUNE!! Crazy. Also, implementing programs without teacher input—we are able to ask pertinent questions concerning the efficacy of programs; however, we are never consulted. Also, changing everything over to Google in September was unwise. On top of the usual start-up workload, there is the expectation that teachers will also learn a whole new system, which causes innumerable headaches. It seems as though the adage is, things are working well so let's stir things up and create change for the sake of change. Haven't we already learned that one should not throw out the baby with the bathwater? The reason why some things are sacrosanct is because they are tried and true. Not all of the old ways were wrong!
- In French immersion, we have double the work as we evaluate French and English Language Arts. We also write all comments on Iris in English for parents to read. That means our students get English feedback when they used to get French feedback.
- Inadequate technology available.
- Interoperability.
- IPPs.
- Is this going to improve our workload or make it heavier? We have ongoing technology issues that are often not resolved quickly, which is problematic.
- Lack of functionality and extremely unpredictable/unreliable, bug-filled, seemingly untested software.
- Lack of public awareness of time required by teachers.
- Lack of support to implement, guidance as to how to implement, frequent system errors, no testing of the reports to avoid technical and implementation errors, not suitable for unique programs.
- Lack of training received to utilize assessment.
- Lack of transparency and information regarding procedures using the tools; division continually making changes to the digital reporting tools without consultation or sufficient information; lack of honesty

regarding division's promise of the type of reporting system they indicated they would provide; lack of support and funding to adequately implement the use of the digital reporting tools on THEIR timelines.

- Lack of understanding of how the data should be interpreted.
- Level of expertise required to understand the reporting tool.
- Mandated use (need flexibility for different learning environments).
- Misuse of data by central office.
- Not reliable.
- Not very easy to use for individual CTS credits.
- Nothing replaces face time with a student and/or parent. We NEED time to do this and treat people as people not numbers or an e-mail address, etc. We should be working on getting people together to communicate. First and foremost!!!!
- Obtaining and storing data for 7 years.
- Parent understanding.
- Parental expectations.
- PowerSchool and D2L do not "talk" to each other.
- PowerSchool is not the best choice for primary grades. Per cents are shown.... whether we want them or not.
- Programs continue to be added with the best intent. However, all of these programs require time to set up, maintain and monitor. There is always something additional that we are expected to add to our current workload!
- Programs which are mandated for use are substandard compared to industry norms, yet we are forced to try to deal with them without adequate initial training or ongoing support.
- Proper use and interpretation of the stats.
- Reliability.
- Reliability, as SIRS rarely works properly.
- Reporting of screen on permanent file of kindergarten children.
- Research-based evidence supporting the effectiveness of the assessment tools.
- School jurisdictions are not tech-savvy enough to protect student or teacher information from hackers.
- So many different programs to use.
- Standardizing and lack of flexibility to answer a question or show your knowledge (multiple intelligences).
- Students with a learning disability.
- Teacher Logic can be seen by parents at any time, and the inference is that teachers need to constantly update—but that implies that all marks are summative and that there is no place for formative—since the parent will attach any mark at any given time and think it is a final grade—highly dangerous and potentially a concern for teachers.
- The tool is made for junior high classes and assignments, and elementary grades are derived completely differently.
- The amount of information that is being "thrown" at parents is excessive. Also there is very little consistency from school to school on the amount of comments to write

in the report cards, even though there is a district policy advising the number of comments.

- The amount of new things expected without much training or any extra prep time.
 - The confusion among staff and administrators about what type of data is considered important. Test results? Performance assessments?
 - The expectation that one reporting program will fit all courses. The CTS strands do not fit well with digital reporting. Also, differentiated instruction works against the PowerSchool model.
 - The inefficiency and unclear communication.
 - The problem is that the tools are not consistently available in a timely fashion—hard to implement online stuff with limited computer access.
 - The program does not work as well as what we used to use, but it is mandated. Changes happen very slowly.
 - The program has so many flaws....and the parents who you want to look at it don't and the parents who should back off their children are obsessed. Then we complain when kids cannot think for themselves.
- These programs should not take the place of good, qualified teachers!!!!
 - Time provided to complete/manage it.
 - Training for teachers in using tools along with technical support.
 - Understanding of parents.
 - Used as tools to teach reading and math rather than teaching reading and math!
 - Validity in recording and reporting what we are expected to document.
 - Validity of real-time marks.
 - What is the purpose? Is it just to make work projects or are they valuable? Why do there have to be so many different ones? Is there not just one tool that can be implemented?
 - Whether it is useful to parents, and most importantly, the student. Is it purposeful or not?
 - Whether the calculation of data is appropriate—many teachers just enter their marks with no checking or regard for the weightings and calculations of that mark.
 - Will it support my children in their learning?

Appendix C:

SURVEY

Survey of Digital Reporting and Digital Assessment Tools

The Alberta Teachers' Association, in collaboration with researchers from the University of Alberta, is studying how the use of digital reporting and digital assessment tools is increasingly affecting the workload of teachers and principals, student learning and overall assessment practices. This is the third study on this important issue that the Association has undertaken in the last five years.

As used in this survey, the term digital reporting refers to software (such as StudentsAchieve, SchoolZone, Desire2Learn and PowerSchool) that facilitates the gathering and analysis of student data for the purpose of reporting student progress. The term digital assessment refers to software (such as Mathletics™, SuccessMaker®, Dreambox Learning Math® and Raz-Kids Reading™) that serves as an interactive teaching device. Digital assessment is also known as adaptive learning and/or real-time assessment.

The survey, which should take 15 to 20 minutes to complete, is totally voluntary, and you are free to skip questions. You can withdraw from the survey at any time up until you click the "Submit" button at the end. There are no known risks associated with participating in this study. All responses will be kept confidential, and only aggregate data will be reported. No data from open-ended questions that could identify individual respondents will be used without permission.

Evaluative researchers from Evaluation & Research Services (ERS) at the Faculty of Extension will analyze the data and provide a report to the Alberta Teachers' Association. The results may also be presented at academic conferences or published in academic journals. ERS will securely store any information collected from you for a minimum of five years. The second phase of the study will involve focus groups during the winter of 2014.

If you would like to participate in a focus group, please follow the instructions at the end of this survey. If you have any questions about this survey, contact Stanley Varnhagen by e-mail at stanley.varnhagen@ualberta.ca or by phone at 780-492-3641. A research ethics board at the University of Alberta has reviewed the plan for this study to ensure that it adheres to ethical guidelines. Questions about participants' rights and the ethical conduct of research should be directed to the Research Ethics Office at 780-492-2615. Continuing with this survey implies consent to participate. Once again, participation in this survey is voluntary.

	Very low (1)	(2)	(3)	(4)	Very high (5)	N/A
a) Completing Individual Program Plans (IPPs).	○	○	○	○	○	○
b) Marking and evaluating student work.	○	○	○	○	○	○
c) Developing classroom-based assessments.	○	○	○	○	○	○
d) Administering and supervising provincial examinations.	○	○	○	○	○	○

	Very low (1)	(2)	(3)	(4)	Very high (5)	N/A
e) Analyzing student/school results of provincial examinations.	☐	☐	☐	☐	☐	☐
f) Preparing report cards.	☐	☐	☐	☐	☐	☐
g) Other (please specify below): 	☐	☐	☐	☐	☐	☐

B. Reporting Student Progress (eg, SIRS, Iris, D2L)

A wide variety of digital tools are currently used to prepare student progress reports. Based on your experience in your school and/or jurisdiction with the particular digital tools you use, respond to the following questions.

B1. Do you currently use or are you planning to use digital reporting tools in your classroom/school?

☐ Yes, we are currently using or implementing digital reporting tools.
☐ Yes, we are planning to implement digital reporting tools in the future.
☐ No.
☐ Not sure.

B2. What is the name of the digital reporting tool you primarily use to prepare student reports or communicate student progress?

☐ Students Achieve
☐ School Zone
☐ D2L (Desire 2 Learn)
☐ PowerSchool
☐ eLuminate
☐ TeacherLogic
☐ Iris
☐ SIRS
☐ Other (please specify): _____
☐ I don't know

B3. To what extent has the use of digital reporting tools:

	Not at all (1)	(2)	(3)	(4)	Very much (5)	Not sure
Improved the level of instruction and assessment in your classroom?	☐	☐	☐	☐	☐	☐
Facilitated and improved communication with students?	☐	☐	☐	☐	☐	☐
Facilitated and improved communication with parents?	☐	☐	☐	☐	☐	☐

B4. How would you rate the following sources of support?

	Very poor (1)	(2)	(3)	(4)	Very good (5)	N/A
The professional development available to you <u>initially</u> when learning to use this reporting tool?	☐	☐	☐	☐	☐	☐
The technical support <u>currently</u> available to you as you use this reporting tool?	☐	☐	☐	☐	☐	☐

B5. How much input did you have in choosing and implementing this reporting tool?

☐ No input at all (1)	☐ (2)	☐ (3)	☐ (4)	☐ A great deal of input (5)	☐ N/A
---	---------------------------	---------------------------	---------------------------	---	---------------------------

B6. Which of the following best describes how the use of the digital reporting tool was determined for your class(es)?

☐ Mandated
☐ Provided with limited options
☐ Totally optional
☐ Not available for my class(es)
☐ Other (please specify): _____

B7. How has the use of this digital reporting tool changed your workload as a classroom teacher?

☐ Significantly <u>increased</u> workload (1)
☐ (2)
☐ Not changed workload (3)
☐ (4)
☐ Significantly <u>decreased</u> workload (5)
☐ N/A

B8. How has the use of digital reporting changed parental expectations with respect to the frequency of reporting?

☐ Significantly <u>increased</u> parental reporting expectations (1)
☐ (2)
☐ Not changed parental reporting expectations (3)
☐ (4)
☐ Significantly <u>decreased</u> parental reporting expectations (5)
☐ N/A

B9. How has the adoption of digital reporting affected the amount of time you spend reporting student progress?

☐ Significantly <u>increased</u> time (1)
☐ (2)
☐ Not changed time (3)
☐ (4)
☐ Significantly <u>decreased</u> time (5)
☐ N/A

B9a. Please estimate how many hours per week on average you spent previously doing comparable reporting activities?

--

B10. How many of the following reports to parents does your school provide during the school year? Are these reports provided online, on paper, and/or orally (select all that apply)?

	# of reports	Online	On paper	Orally
Report cards	☐	☐	☐	☐
Other formal (documented) reports to parents	☐	☐	☐	☐
Informal reports to parents	☐	☐	☐	☐
Other (please specify below): 	☐	☐	☐	☐

B11. How many times during the school year are you required to contact your students' parents/guardians?

C. Assessing Student Progress [eg, Mathletics, DreamBox]

New digital programs are increasingly being used in the diagnostic, adaptive and real-time assessment of student learning. Based on your experience in your school and/or jurisdiction, please respond to the following questions.

C1. Do you currently use (or are you planning to use) diagnostic, adaptive and real-time assessment tools in your classroom/school?

☐ Yes, we are currently using or implementing a program.
☐ Yes, we are planning to implement a data analytics program in the future.
☐ No.
☐ Not sure.

C2. Which of the following diagnostic, adaptive and real-time assessment tools do you use?

☐ Mathletics™
☐ SuccessMaker®
☐ Dreambox Learning Math®
☐ Accelerated™ Reader Enterprise
☐ Raz-Kids Reading™
☐ ©Reading Eggs
☐ Other (please specify): _____

C2. Which of the following diagnostic, adaptive and real-time assessment tools are you planning to use?

☐ Mathletics™
☐ SuccessMaker®
☐ Dreambox Learning Math®
☐ Accelerated™ Reader Enterprise
☐ Raz-Kids Reading™
☐ ©Reading Eggs
☐ Other (please specify): _____
☐ I don't know

C2c. Please list any diagnostic, adaptive and real-time assessment tools you are aware of:

1.
2.
3.
4.
5.

C3. How much input did you have or would you expect to have with respect to choosing and implementing the tools?

☐ None (1)	☐ (2)	☐ (3)	☐ (4)	☐ A great deal (5)	☐ N/A
--------------------------------	---------------------------	---------------------------	---------------------------	--	---------------------------

C3. If your school district were to implement diagnostic, adaptive and real-time assessment tools, how much input would you expect to have with respect to choosing and implementing the tools?

☐ None (1)	☐ (2)	☐ (3)	☐ (4)	☐ A great deal (5)	☐ N/A
--------------------------------	---------------------------	---------------------------	---------------------------	--	---------------------------

C3. How much input did you have with respect to choosing and implementing the tool(s)?

☐ None (1)	☐ (2)	☐ (3)	☐ (4)	☐ A great deal (5)	☐ N/A
--------------------------------	---------------------------	---------------------------	---------------------------	--	---------------------------

C4. Which of the following best describes how the use of the diagnostic, adaptive and real-time assessment tool(s) was determined for your class(es)?

☐ Mandated
☐ Provided with limited options
☐ Totally optional
☐ Not available for my class(es)
☐ Other (please specify): _____

C5. How has the use of this tool(s) changed your workload as a classroom teacher?

☐ Significantly <u>increased</u> workload (1)
☐ (2)
☐ (3)
☐ (4)
☐ Significantly <u>decreased</u> workload (5)
☐ N/A

C6. How would you rate:

The professional development available to you to help you learn to initially use the diagnostic, adaptive and real-time assessment program?

☐ Very poor (1)	☐ (2)	☐ (3)	☐ (4)	☐ Very good (5)	☐ N/A
-------------------------------------	---------------------------	---------------------------	---------------------------	-------------------------------------	---------------------------

D. Data Issues

D1. Please indicate your level of concern around the following issues related to digital reporting and assessment:

	Not at all concerned (1)	(2)	(3)	(4)	Very concerned (5)	N/A
Where the student data is being stored.	☐	☐	☐	☐	☐	☐
Who has access to the student data.	☐	☐	☐	☐	☐	☐
Who controls the student data.	☐	☐	☐	☐	☐	☐
Automated scoring or analysis of student data.	☐	☐	☐	☐	☐	☐
Maintaining appropriate privacy.	☐	☐	☐	☐	☐	☐
Cost of the tools.	☐	☐	☐	☐	☐	☐
Flexibility of the tools.	☐	☐	☐	☐	☐	☐
Level of consultation with instructors around the purchase and use of tools.	☐	☐	☐	☐	☐	☐
Teachers' workload.	☐	☐	☐	☐	☐	☐
Other (Please specify below): 	☐	☐	☐	☐	☐	☐

D2. Who do you think has access (and can use) the stored data (select all that apply)?

☐ The student's instructor(s)
☐ School administration
☐ District administration
☐ Publisher
☐ Software
☐ Parents
☐ Students
☐ Alberta Education
☐ Other (please specify): _____

E. Provincial Government Moving from Print to Digital

In light of the Alberta government’s recent decision to replace most print resources and assessments with digital resources and assessments, please respond to the following:

E1. How will the Alberta government’s decision to implement digitally-based resources affect student learning (eg, closing of Learning Resource Centre)?

☐ Negatively (1)	☐ (2)	☐ (3)	☐ (4)	☐ Positively (5)
--------------------------------------	---------------------------	---------------------------	---------------------------	--------------------------------------

Please explain:

E2. How will the Alberta government’s decision to implement digital assessment affect student learning (eg, computer-based testing in Grades 3, 6, 9)?

☐ Negatively (1)	☐ (2)	☐ (3)	☐ (4)	☐ Positively (5)
--------------------------------------	---------------------------	---------------------------	---------------------------	--------------------------------------

Please explain:

E3. Do you have any additional comments about your experiences using digital reporting and assessment tools or any other aspect of this survey (eg, privacy issues, storage of student data, move from print to digital)?

F. Current Teaching and Learning Conditions

F1. Currently, how satisfied are you with the following elements of your working conditions?

	Very dissatisfied(1)	(2)	(3)	(4)	Very satisfied(5)	Not sure
The size of your classes.	☐	☐	☐	☐	☐	☐
The composition of your classes.	☐	☐	☐	☐	☐	☐
Support for students with special needs.	☐	☐	☐	☐	☐	☐
Access to computers and other information technology.	☐	☐	☐	☐	☐	☐
Access to print resources and textbooks.	☐	☐	☐	☐	☐	☐
Access to digital resources and textbooks.	☐	☐	☐	☐	☐	☐
Access to professional development.	☐	☐	☐	☐	☐	☐
Requirements to supervise and undertake other assigned tasks.	☐	☐	☐	☐	☐	☐
Background readiness skills students bring to learning.	☐	☐	☐	☐	☐	☐

G. Demographic Data

The following information will be used only to compare and analyze the aggregate data collected in this and other related surveys of Alberta teachers.

Your teachers' convention:

☐ Calgary City
☐ Central Alberta
☐ Central East
☐ Greater Edmonton
☐ Mighty Peace
☐ Northeast
☐ North Central
☐ Palliser
☐ South West
☐ Southeast

Your years of teaching experience, including the current year:

☐ 1 year
☐ 2 to 4 years
☐ 5 to 9 years
☐ 10 to 14 years
☐ 15 to 19 years
☐ 20 to 29 years
☐ 30 years or over

Your employment status:

☐ Full-time
☐ Part-time

Your current designation:

☐ Classroom teacher
☐ Administrator
☐ Combined classroom teaching and administrator duties
☐ Other (eg, librarian, resource room facilitator)

Your age:

☐ 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

Your gender:

☐ Female
☐ Male

In what type of school do you teach:

☐ Rural
☐ Small urban
☐ Large urban
☐ Not Applicable

Would you be willing to participate in a focus group at a teacher's convention on the topic of digital reporting and digital assessment?

☐ Yes, please provide your e-mail address: _____
☐ No



The Alberta
Teachers' Association