

**Office of the Treaty Commissioner
and
Saskatchewan Ministry of Education**

Treaty Essential Learnings

Survey 2010

Analysis



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Betty A. Rohr, SELU Consultant

EXECUTIVE SUMMARY

In spring of 2010, the Treaty Essential Learnings Survey was administered to assess student understanding of treaties subsequent to the December 2007 Saskatchewan government commitment of mandatory K-12 treaty education. Over 9000 English-speaking Grade 7 students participated in the Treaty Essential Learnings Survey, representing 457 schools from 28 public and separate school divisions as well as ten First Nations schools from seven Tribal Councils. At the same time, over 1800 teachers and school administrators participated in surveys to ascertain the level of teacher implementation and satisfaction with Office of the Treaty Commissioner treaty learning resources.

The 2010 Treaty Essential Learnings Survey was a replication of the 2009 Treaty Essential Learnings Survey. The six Treaty Essential Learnings (TEL) provided the framework for the content of the student survey that consisted of 14 true/false, 20 multiple choice, and 6 higher order thinking items. On average Grade 7 students' score of understanding treaties was 51.6% which was about three percentage points higher than the 2009 result. While a standard setting process would enhance the interpretation of such results by identifying what cut-off score would represent the level of adequacy, this finding seems to indicate a slight growth in student outcomes as well as room for additional growth.

Similar to the 2009 survey, the 2010 TEL category that pertains to worldview was an area of relative strength while treaty symbolism and contemporary treaty issues were areas of relative weakness in the Grade 7 student understanding of treaties.

Similar to the 2009 survey, a major finding of this study reiterates the observation that students that indicated studying about treaties in school is associated with more successful outcomes in knowledge and understanding about treaties. This finding continues to point to the importance of implementing educational programs that contribute to the growing awareness, knowledge and understanding about treaties and the treaty relationship. Additionally, there was a 2% increase in the percentage of students that recalled studying about treaties in school, from 85% in 2009 to 87% in 2010. Treaty education has increasingly become part of the school improvement plan with a 30% increase since the introduction of mandatory K-12 Treaty

education in September 2008; but, there remain a number of school administrators (43%) who have yet to indicate treaty education as part of their school improvement plan.

Overall, implementation and satisfaction with the OTC treaty education resources have increased. These resources continue to be seen as successful and positive for a large majority of teachers and administrators. Additionally, a large majority of all respondents that used the resources indicated that the materials provide support to mandatory treaty education and curriculum goals.

A few considerations were identified where improvements to implementation could be made. There was an indication that lack of use of resources was associated with lack of accessibility to the materials or lack of training when materials were accessible. A majority of Grade 7 teachers who did not use the resource materials had also indicated a teaching assignment that is departmentalized and did not include treaty-related subjects (60% of Grade 7 teachers that responded 'did not use'). Further investigation would be helpful to clarify what subject areas are not treaty-related as well as how decisions are made at the school level on who would provide treaty education.

When comparing 2010 results with 2009 results in terms of professional development needs, there was a slight increase in need for resources/support whereas a slight decrease in the need for training on teaching about treaties. Nonetheless, there continues to be a stronger indication for the need for training in teaching about treaties and how to use the resources instead of the development of more resources.

STRUCTURE OF REPORT

This report of the 2010 Treaty Essential Learnings Survey is divided into three principal sections. Chapter One, the introductory section, consists of a description of the background and purpose of the surveys. There is an overview of the methodology that includes a description of the survey, sample selection, data collection, data analysis, and limitations. Chapter Two consists of a presentation of the findings of the student survey. Data have been aggregated for sub-populations at gender, regional, Aboriginal/non-Aboriginal self-declaration, and study group levels. The 2010 findings are compared to the 2009 results. In Chapter Three, the 2010 findings of the treaty education resources have been gathered from the viewpoints of Grade 4 teachers, Grade 7 teachers, and school administrators. Throughout each category, the results are compared within respondent groups as well as to the 2009 survey results.

CHAPTER ONE – INTRODUCTION

This document forms the report for the analysis of the Treaty Essential Learnings (TEL) Survey that was conducted May 10 to May 28, 2010 to assess all Grade 7 students in the provincial public and separate education system. First Nations schools were invited to participate. The survey was commissioned by the Office of the Treaty Commissioner along with the Saskatchewan Ministry of Education. The Saskatchewan Educational Leadership Unit at the University of Saskatchewan was contracted to conduct the analysis of the survey. In 2009, the same Treaty Essential Learnings Survey was administered province-wide to establish a benchmark of student treaty understanding.

Similar to 2009, the primary aim was to monitor student understanding of treaties in light of the December 10, 2007 Speech from the Throne and the Saskatchewan government commitment “to making mandatory instruction in history and content of the Treaties in the K-12 curriculum.” Secondary objectives were to ascertain the level of teacher implementation and satisfaction with Office of the Treaty Commissioner treaty learning resources. The results of the student survey provide a ‘snapshot’ of Grade 7 student understanding of treaties and serve as a potential guide for treaty learning in provincial and First Nations’ school systems. The survey data of treaty education resources help to inform future decision-making for professional development in treaty education.

BACKGROUND

The Office of the Treaty Commissioner, the First Nations of Saskatchewan and the Saskatchewan Ministry of Education recognized the importance of all Saskatchewan people to have a strong understanding of the spirit and intent that existed when the treaties were signed by the First Nations and the Crown. In 2008, the first Saskatchewan student survey of treaty understanding was initiated and involved a convenience sample of 1800 students from throughout the province. The results were reported in *Saskatchewan Grade 7 Survey: Knowledge and Understanding of Treaties, 2008*.

In the spring of 2009, the second administration of the Treaty Essential Learnings Survey was undertaken with the intention to replicate the 2008 student survey to all Grade 7 students in

Saskatchewan public schools as well as add items that tapped into higher order thinking. An added component of the survey was extended to survey school administrators, Grade 4 teachers, and Grade 7 teachers in order to determine implementation and satisfaction of treaty education resources published by the Office of the Treaty Commissioner. First Nations schools were invited to participate. Over 9000 Grade 7 students and over 1500 administrators and teachers from Saskatchewan provincial schools and First Nations schools participated. The results were reported in *Treaty Education Survey 2009: Final Report*.

In 2002, the first treaty education resource materials were published by the Office of the Treaty Commissioner: *Teaching Treaties in the Classroom Resource Guide 7-12* and *Teaching Treaties in the Classroom: Teacher Resource Kit*. In the fall of 2008, two additional resource materials were published: 1) *Treaty Essential Learnings: We Are All Treaty People* and 2) *Teaching Treaties in the Classroom: K-6 Resource Guides*. The resource materials were distributed to all provincial and First Nations schools in Saskatchewan.

GRADE 7 STUDENT SURVEY

The first component of the survey focused on treaty knowledge and understanding of Grade 7 students in all provincially-funded schools and participating First Nations schools. This survey replicated the 2009 Treaty Essential Learnings Survey. The document, *Treaty Essential Learnings: We Are All Treaty People*, served as the content source of questions for the survey.

The objectives of the student survey were:

1. To assess Grade 7 student knowledge and understanding of treaties;
2. To compare the 2010 Grade 7 survey results to the results of the 2009 survey;
3. To serve as a research tool that uses data to promote inquiry on factors that contribute to student success in treaty education;
4. To assist educators with program planning by providing data on student knowledge and understanding of the Treaty Essential Learnings; and,
5. To provide data on implementation and awareness of treaty education in schools.

The intent of the student survey was to provide data on student knowledge and understanding of treaties in order to provide information deemed to be useful for:

- Students, as they discuss and learn about society, each other, and their rights and privileges;
- Teachers, as they plan instructional activities and selected instructional resources to support the development of
 - the concept of human rights and responsibilities (Elementary and Middle Level Social Studies curricula), and
 - the knowledge, values, attitudes and abilities which contribute to the development of a sound moral character, a sense of community, and competence in responding to the personal, social and cultural aspects of life;
- Curriculum and resource developers, as they structure and support opportunities for learning treaties;
- Educational administrators, parents and community members, as they support the development of a strong education system and an equitable Saskatchewan society; and,
- Senior government officials, as they evaluate treaty education programs, including the Office of the Treaty Commissioner, First Nations, the Ministry of Education Programs, and Indian and Northern Affairs Canada (INAC).

The survey consisted of 40 close-ended questions using two formats: 1) multiple choice (26 items) that included six higher order questions and 2) true/false (14 items). The instrument was designed to be completed by students in approximately 20 minutes. The *Treaty Essential Learnings: We Are All Treaty People* provided the framework for the content of the survey.

Content of the items was aligned to the six Treaty Essential Learnings (TEL). The six Treaty Essential Learnings are defined as:

- TEL1 Treaties – introduces the who, what, where, when, and why of treaties.
- TEL2 Treaty Relationship – reviews responsibilities and partners involved in the treaty relationship.
- TEL3 History – consists of the historical events in the making of the treaty making process.
- TEL4 Worldviews – provides an understanding of the differing worldviews of the treaty partners.
- TEL5 Symbolism – focuses on meaning behind the symbols and actions used in the treaty making process.
- TEL6 Contemporary Issues – deals with new and current issues related to the treaties.

Table 1 shows the specifications set for the design and development of the TEL survey. The table of specifications attends to the emphasis placed within the treaty resource materials and apportions scores according to question type: 1 point for each correct true/false response, 3 points for each correct multiple choice response, and 4 points for each higher order thinking item, for a total weighted score of 98.

Table 1: Table of Specifications for Grade 7 Student Survey of Treaty Knowledge and Understanding

Treaty Essential Learning (TEL)		Question Type			Total
		True/False	Multiple Choice	Higher Order	
TEL1. Treaties	Number of items	2	3	1	6
	Weighted Score	2	9	4	15
	Percentage	(2%)	(9.2%)	(4.1%)	(15.3%)
TEL2. Treaty Relationship	Number of items	2	1	1	4
	Weighted Score	2	3	4	9
	Percentage	(2%)	(3.1%)	(4.1%)	(9.2%)
TEL3. History	Number of items	2	5	1	8
	Weighted Score	2	15	4	21
	Percentage	(2%)	(15.3%)	(4.1%)	(21.4%)
TEL4. Worldviews	Number of items	4	7	1	12
	Weighted Score	4	21	4	29
	Percentage	(4.1%)	(21.4%)	(4.1%)	(29.6%)
TEL5. Symbolism	Number of items	2	1	1	4
	Weighted Score	2	3	4	9
	Percentage	(2%)	(3.1%)	(4.1%)	(9.2%)
TEL6. Contemporary Issues	Number of items	2	3	1	6
	Weighted Score	2	9	4	15
	Percentage	(2%)	(9.2%)	(4.1%)	(15.3%)
Total Items		14	20	6	40 items
Total Weighted Score		x1=14	x3=60	x4=24	98 Weighted
Total Percentage		(14%)	(61%)	(25%)	(100%)

The instrument underwent a rigorous development process that involved the participation of an expert panel with members knowledgeable in treaties, teaching about treaties, or test development. Focus group interviews were conducted with teachers familiar with teaching about treaties and/or teaching Grade 7 students in order to examine language appropriateness at the Grade 7 student level. Additionally, two preliminary forms of the instrument were field tested with 191 participating students from two urban Saskatchewan school divisions, one rural school division, and two First Nations schools. Item analysis and reliability estimates guided the decision of the best items to be used in the assessment.

A more detailed account of the instrument development can be found in the *Treaty Education Survey 2009: Final Report*. Please refer to Appendix A for information on technical characteristics of reliability for the 2010 survey assessment.

SURVEY OF TREATY EDUCATION RESOURCES

The second component to this survey was the treaty education survey for school administrators and teachers. The objectives were to measure the extent of implementation and satisfaction with the OTC treaty education resources. School administrators, Grade 7 teachers, and Grade 4 teachers were surveyed to determine:

- The extent of use of OTC treaty education resource materials;
- Teacher and school administrator perceptions of the quality of treaty education materials;
- Grade 4 and Grade 7 teacher perceptions of the usefulness of the resource materials when planning instruction;
- Grade 4 teacher and Grade 7 teacher levels of satisfaction with the materials; and,
- School administrator and teacher levels of satisfaction with training and resources that support implementing mandatory treaty education.

The surveys consisted of 13 items in selected response formats including questions on incorporation of mandatory treaty education within the school improvement plan as well as training in teaching about treaties. The survey was designed to take approximately five to ten minutes to complete.

PARTICIPATION

The target population for the student survey was all Grade 7 students in Saskatchewan provincial schools and First Nations schools, whereas the target populations for the treaty resource survey were school administrators, Grade 4 teachers, and Grade 7 teachers from both systems.

Saskatchewan Ministry of Education informed all school divisions of the requirement to participate while First Nations education directors were invited to participate. The expected number of Grade 7 students within the provincial school system (11,922) was provided by Saskatchewan Ministry of Education. Expected numbers of Grade 4 (886) and Grade 7 (1106)

teachers were derived from information provided by 2009 Treaty Essential Learnings Survey school division coordinators. Expected number of administrators (726) was based on the number of schools receiving notification of participation in the survey plus adjustment if more than one administrator in a school responded.

Overall response rates from Saskatchewan provincial school divisions for Grade 7 students (77%), administrators (69%), Grade 4 teachers (69%), and Grade 7 teachers (68%) as well as response rates from school divisions are shown in Table 2. Note that the provincial total response rate calculation excludes Conseils des écoles franciskoises, independent schools, and First Nations schools. Conseils des écoles franciskoises did not participate because the surveys were only available in English.

Of the 81 First Nations schools in Saskatchewan, 11 schools accepted the invitation to participate. Response was received from 55 Grade 7 students (from ten schools), three administrators (from two schools), one Grade 4 teacher, and one Grade 7 teacher.

Table 2: Response Rates from Administrators, Grade 4 Teachers, Grade 7 Teachers, and Grade 7 Students by School Division and First Nations Schools

<i>School Division</i>	<i>Administrators</i>	<i>Grade 4 Teachers</i>	<i>Grade 7 Teachers</i>	<i>Grade 7 Students</i>
Chinook	57%	53%	68%	70%
Christ the Teacher	70%	100%	70%	81%
Creighton	100%	50%	100%	81%
Englefeld	100%	100%	0%	100%
Good Spirit	67%	90%	77%	86%
Holy Family	80%	17%	67%	82%
Holy Trinity	63%	70%	86%	89%
Horizon	76%	96%	91%	92%
Ile a la Crosse	100%	100%	100%	56%
Light of Christ	29%	100%	57%	72%
Living Sky	50%	47%	63%	53%
Lloydminster RCSSD	75%	55%	86%	98%
Lloydminster Public	45%	44%	36%	97%
North East	65%	96%	91%	81%
North West	63%	81%	90%	77%
Northern Lights	88%	73%	73%	54%
Prince Albert RCSSD	100%	100%	100%	89%
Prairie South	60%	83%	93%	96%
Prairie Spirit	33%	22%	12%	58%
Prairie Valley	79%	90%	98%	90%
Regina RCSSD	43%	53%	50%	70%
Regina Public	58%	69%	68%	78%
Sask Rivers	97%	88%	98%	82%
Saskatoon Greater Catholic	63%	66%	67%	85%
Saskatoon Public	95%	93%	95%	77%
St. Augustine	100%	100%	100%	100%
South East Cornerstone	63%	50%	47%	72%
Sun West	50%	42%	40%	65%
PROVINCIAL TOTAL	69%	69%	68%	77%
First Nations Schools				
First Nations Schools	3 SCHOOLS	1 SCHOOL	1 SCHOOL	10 SCHOOLS

Note. Provincial Total Response rate excludes Conseils des écoles francophones (who did not participate because the surveys were only available in English), independent schools, and First Nations schools.

DATA COLLECTION

Data collection occurred over a period of three weeks from May 10 to May 28, 2010. The surveys were made available through the Ministry of Education Blackboard Online Assessment Services.

A total of 9210 students participated from 457 schools (55 students of 10 First Nations schools and eight Tribal Councils, 9155 students of 447 public and separate schools and 28 school divisions). Participation was classified into the three regions: North region consisted of three school divisions and three First Nations schools, Central region consisted of 15 school divisions and five First Nations schools, and the South region consisted of 10 school divisions and two First Nations schools.

In regards to the survey component that pertained to the treaty education resources, participation was as follows: 498 administrators (three from First Nations schools), 612 Grade 4 teachers (one from a First Nation school), and 752 Grade 7 teachers (one from a First Nation school).

LIMITATIONS

Data collected from this assessment are considered to be a ‘snap shot’ of Grade 7 knowledge and understanding of Treaties as broadly defined by the *Treaty Essential Learnings* framework. The results are not definitive and there are contextual aspects that could be considered in a more in-depth study. The surveys do not attempt to evaluate treaty education curriculum nor evaluate teachers. There was no intention to capture attitudes, causal factors, changes over time, or developmental aspects to learning that cannot be addressed with this study. Nonetheless, insights from such an assessment do contribute to meaningful discussions and program planning.

First Nations schools were invited to participate; however, the response was too low to involve a comparative analysis between systems of education within Saskatchewan.

Because student participation was not universal, particularly from the North region (around 50%), generalization of regional comparisons should be done with caution.

Comparability between the 2009 and 2010 results is strengthened by elements of test equity and commonality; however, measurement error is inevitable as a result of variations between the two test administrations. While the test items were identical and objectively scored, and commonly administered online¹; testing conditions could vary in terms of how students were prepared as well as other classroom and school environment variations. There can be variations in individual differences and demographic variations within the student populations; however, comparability is increased with commonality by grade, age, gender, geographical regions; and, variations due to differences in the populations are minimized by the large sample size.

Not all grades and teachers were surveyed due to time and budget constraints; even so, all students and teachers are essential to treaty education. It is the intention that this survey can be a benefit to all grade levels by informing the planning and programming for previous grades in consideration of the cumulative effect within education to the Grade 7 level as well as by informing the planning and programming for future and high school grades.

¹ There were differences to the online submission in that the 2009 administration accepted survey to be submitted upon entire completion whereas 2010 administration accepted question by question submissions.

CHAPTER TWO – GRADE 7 STUDENT SURVEY RESULTS

STUDENT DESCRIPTIVES

Survey responses were received from 9210 Grade 7 students. In total and within regions, males and females had close to equal representation (male = 50.6%; female = 49.4%; nine students did not respond to this item.). In regards to the regions, 54.5% of the student participants were from the Central region; 43.1% of the student participants were from the South region; and, 2.3% of the student participants were from the North region. Participation from the First Nations schools was too low for comparative analysis by system and less than 1% of the respondents overall. See Table 3 for details.

Self-declared Aboriginal was based on the ‘yes’ or ‘no’ response to the question: ‘I am a First Nation, Métis, or Inuit person?’. One out of every five of the students (20%) self-declared as Aboriginal. Within the First Nations and North region subsamples, a majority of students self-declared as Aboriginal (100% and 81% respectively).

Study Group was the student’s perception of when he/she last studied treaties. Students were asked the question: ‘When was the last time you studied information about Treaties?’ and given the following choices: ‘Grade 7’ or ‘Grade 1 to Grade 6’ or ‘Not at all’. In general, more than half of the students (57.2%) perceived Grade 7 as the last time they remembered studying about treaties, followed by about a third of the students (29.9%) that perceived ‘Grade 1 to Grade 6’, and the remaining 13% did not remember studying about treaties.

When comparing this result to the 2008 survey and the 2009 survey, there is an indication of an upward shift of the percentage of students that remember studying from Grade 1 to Grade 7, the 2008 to 2009 increase from 64% to 85% and the 2009 to 2010 increase from 85% to 87%. Conversely, there is a downward shift of the percentage of students that do not remember studying about treaties at all, the 2008 to 2009 decrease from 36% to 15% with a further decrease to 13% in 2010. This finding provides an indication that students are receiving more learning opportunities related to treaty education.

Table 3: Student Frequency by System and Region by Gender, Aboriginal Declaration, and Study Group

		Gender			Self Declared Aboriginal			Study Group				Total
System		Male	Female	Missing	Yes	No	Missing	Grade 7	Grade 1-6	Not at all	Missing	
First Nation	n	21	34	0	55	0	0	37	15	3	0	55
	%	38.2%	61.8%		100%			67.3%	27.3%	5.5%		0.6%
Public/ Separate	n	4639	4507	9	1806	7323	26	5228	2736	1180	11	9155
	%	50.7%	49.3%		19.8%	80.2%		57.2%	29.9%	12.9%		99.4%
Region		Male	Female	Missing	Yes	No	Missing	Grade 7	Grade 1-6	Not at all	Missing	
North	n	108	107	0	175	40	0	152	41	22	0	215
	%	50.2%	49.8%		81.4%	18.6%		70.7%	19.1%	10.2%		2.3%
Central	n	2513	2506	4	1113	3897	13	2658	1704	653	8	5023
	%	50.1%	49.9%		22.2%	77.8%		53.0%	34.0%	13.0%		54.5%
South	n	2039	1928	5	573	3386	13	2455	1006	508	3	3972
	%	51.4%	48.6%		14.5%	85.5%		61.9%	25.3%	12.8%		43.1%
Total	n	4660	4541	9	1861	7323	26	5265	2751	1183	11	9210
	%	50.6%	49.4%		20.3%	79.7%		57.2%	29.9%	12.9%		100.0%

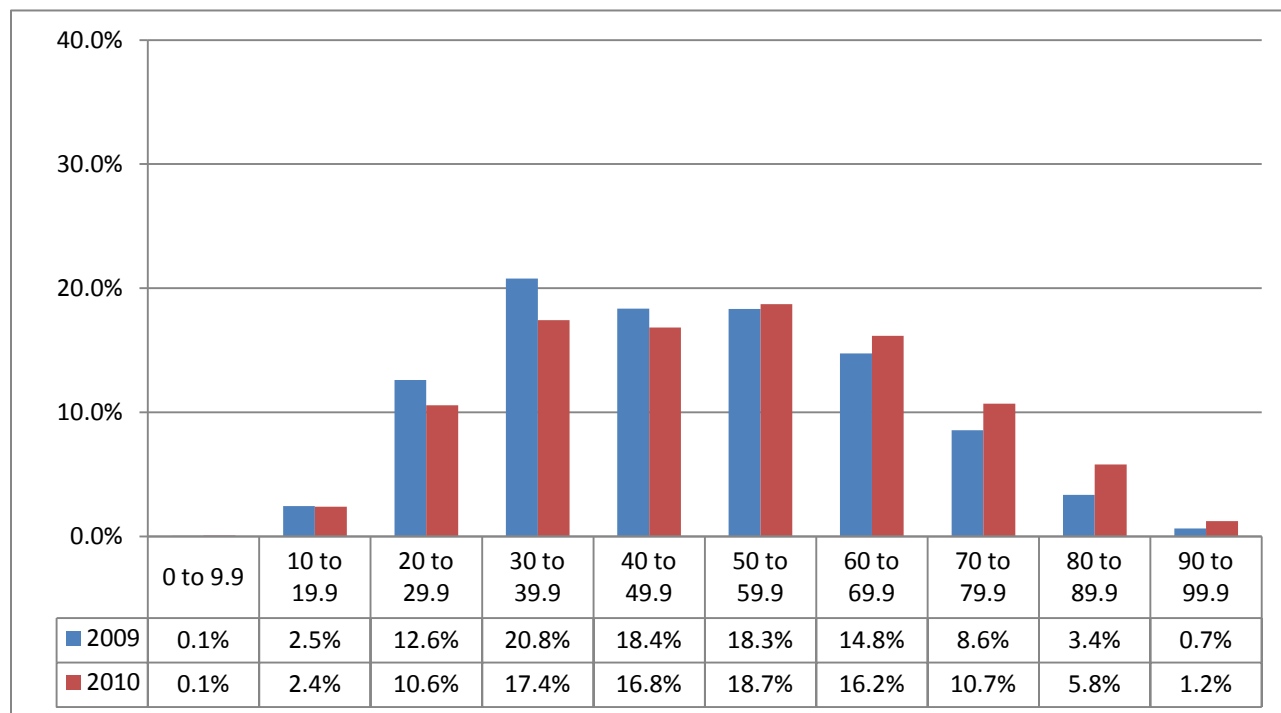
Note. Percentages are presented as proportions across the row by category, except for the last column where percentages are within the column by system and by region.

DISTRIBUTION OF SCORES

In 2010, a little more than half of the students (51.2%) scored the average percentage score of 51.6 or lower.

The average percentage score in the student survey was 51.6 as compared to the 2009 average percentage score of 48.5. Figure 1 illustrates the distribution of percentage of students by score range by year. Within the distribution of the total scores, the 2010 distribution indicates a higher percentage of students with scores more than 70, with 18% of the students in 2010 compared to 13% of the students in 2009. Conversely, a lower percentage of students in 2010 (47%) scored less than 50 as compared to 54% of the students in 2009. These findings suggest some improvement over the past year in student outcomes in understanding treaties.

Figure 1: Distribution of Percentage of Students by Score Range, 2009 and 2010



MEAN SCORES

The average 2010 TEL survey score for the total sample was 51.6%. The Treaty Essential Learnings where the group on average had relative strengths and scored higher were TEL3 History at 53.3% and TEL4 Worldview at 57.9%. On the other hand, the Treaty Essential Learnings areas where the group on average had weaknesses were TEL5 Symbolism at 44.5% and TEL6 Contemporary Issues at 42.0%. Table 4 provides an overview of the mean percentage scores for the total group.

Table 4: Mean Percent Survey Score and TEL Sub-scores

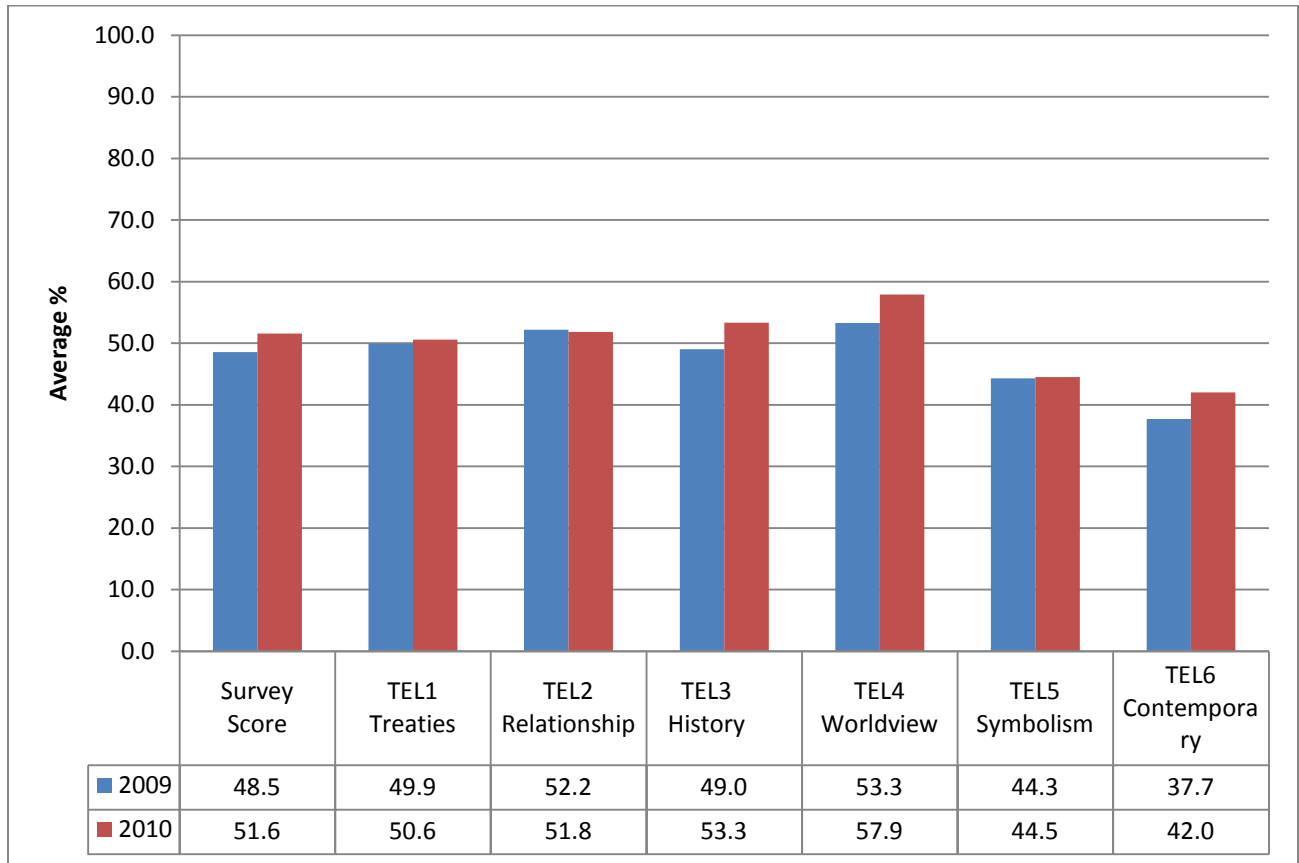
<i>n=9210</i>	<i>Mean%</i>	<i>SE</i>	<i>SD</i>
Survey Score	51.6	.19	18.2
TEL1 Treaties	50.6	.27	26.1
TEL2 Treaty Relationship	51.8	.33	31.8
TEL3 History	53.3	.23	21.9
TEL4 Worldview	57.9	.26	24.8
TEL5 Symbolism	44.5	.31	30.2
TEL6 Contemporary Issues	42.0	.27	25.9

Note. *SE* - Standard Error is an index of variability of the mean based on sample size and standard deviation.

SD – Standard Deviation is a measure of variability of the mean based on all scores.

The comparison of the 2009 and 2010 average student survey subscores are illustrated in Figure 2. The areas of relative strengths and weaknesses are notably similar. Treaty Contemporary Issues (TEL6) and Symbolism (TEL5) continue to be weak areas for most students. On the other hand, Worldview (TEL4) continues to be an area of relative strength for most students.

Figure 2: Average Score and TEL SubScores, 2009 and 2010

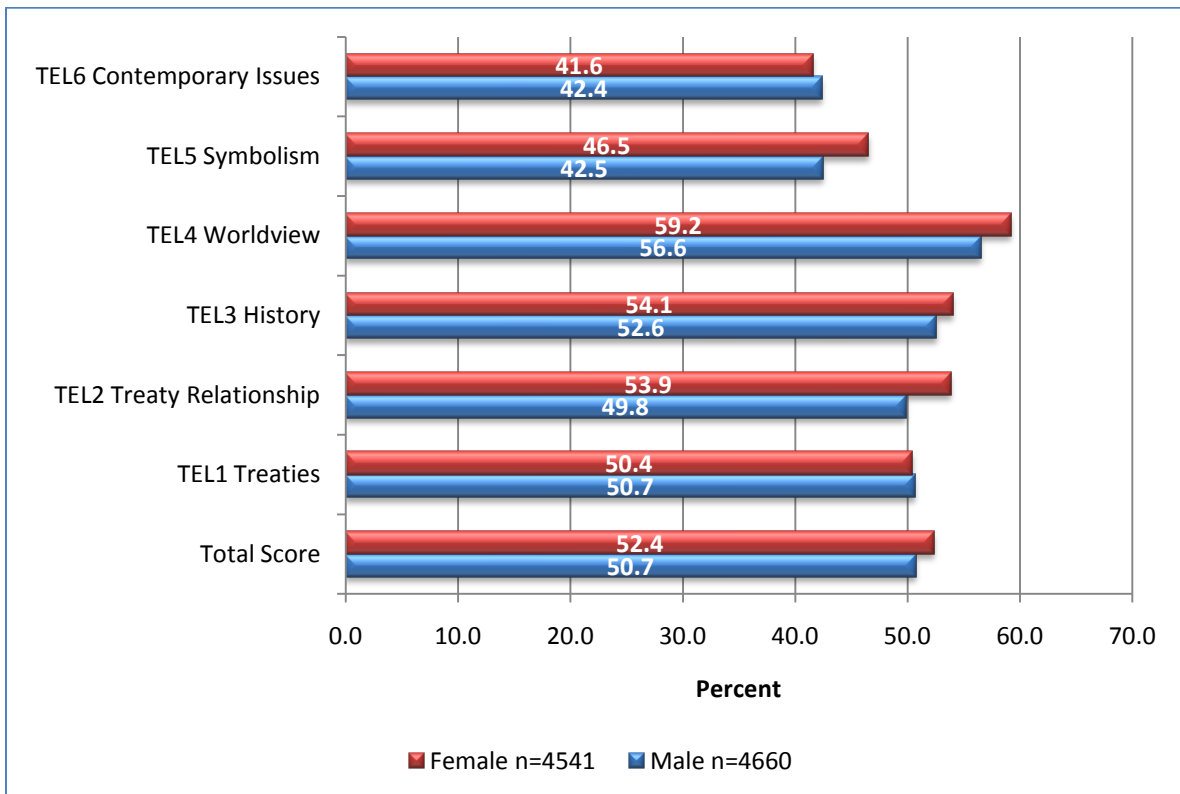


GENDER DIFFERENCES

Although there was a statistically significant difference, average total score for females was similar to the average total score for males (52.4% versus 50.7%) from a practical significance perspective. Females on average scored higher statistically in four of the six TELs: TEL2 Treaty Relationship at 53.9% to 49.8%, TEL3 History at 54.1% to 52.6%, and TEL4 Worldview at 59.2% to 56.6%, and TEL5 Symbolism at 46.5% to 42.5%. Again, practical significance is questionable as the effect size in all cases would be interpreted as trivial. There were no statistical significant differences found within the TEL1 Treaties and TEL6 Contemporary issues scores. See Figure 3 for an illustration of average total score and subscores by gender. See Appendix B for ANOVA table summary by gender and for measures of effect size.

The 2010 findings for gender differences were notably similar to the 2009 results. See Figure 7 for Total score comparison by year.

Figure 3: Gender Differences

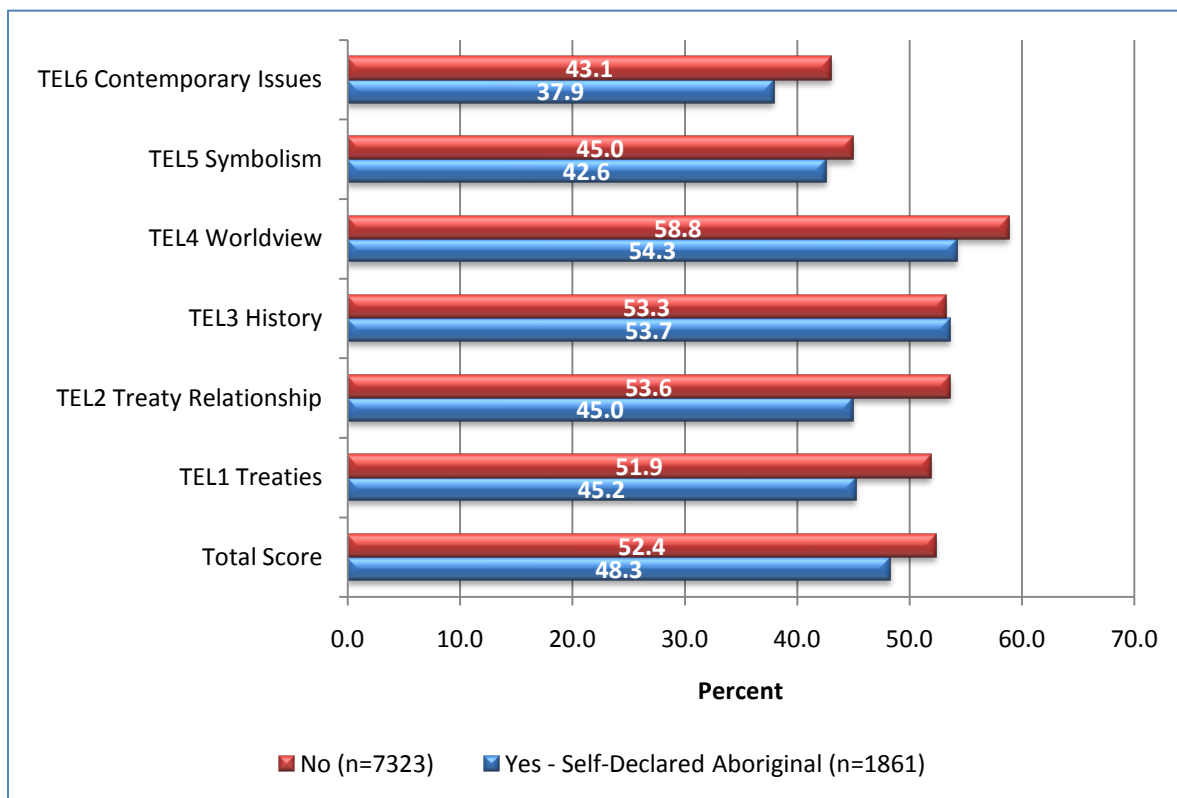


ABORIGINAL/NON-ABORIGINAL DIFFERENCES

Comparisons were examined between subgroups based on students' responses to the question 'I am a First Nation, Métis, or Inuit person?'. The average survey score was lower for those who had responded 'yes', 48.3% versus 52.4% for those who responded 'no'. Other than a similar average score for TEL3 History, the average TEL subscores were lower for the subgroup that self-declared as Aboriginal. More meaningful difference could be considered between the subgroups within TEL1 Treaties and TEL2 Treaty Relationship. See Figure 4 for an illustration of average total score and subscores by self-declared as Aboriginal. See Appendix C for ANOVA table summary by self-declared as Aboriginal, and for measures of effect size.

The 2010 findings for differences in subgroups as defined by Aboriginal self-declaration were notably similar to the 2009 results. See Figure 7 for Total score comparison by year.

Figure 4: Aboriginal/Non-Aboriginal Differences

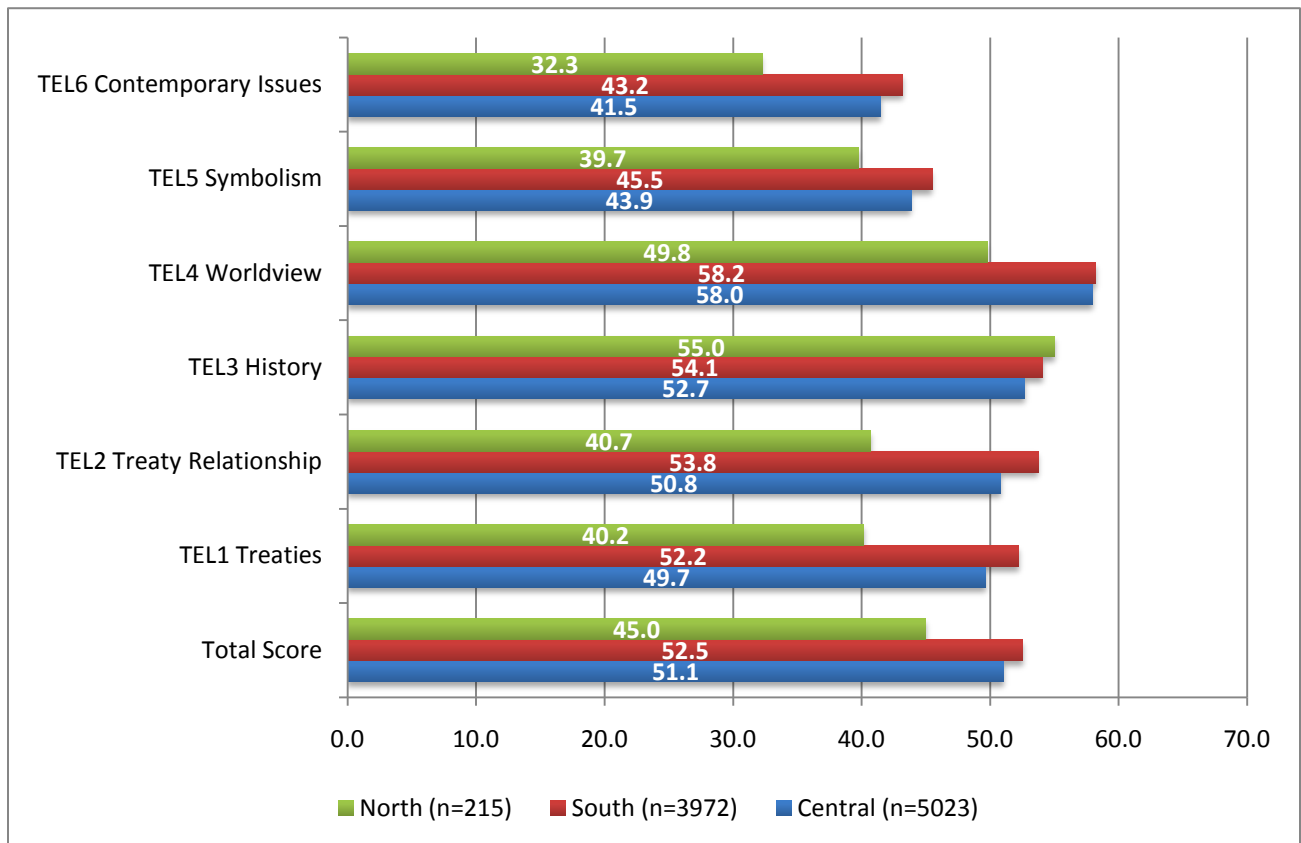


REGION DIFFERENCES

Upon comparing the means of the regions, the average scores for the North region were lower with the exception of TEL3 History. Central and South regions’ average scores were similar. Average scores by region are illustrated in Figure 5. On average, the North region scored lower in the total score than the regional counterparts, 45.0% versus the South region at 52.5% and the Central region at 51.1%. ANOVA table summary by region is presented in Appendix D, along with measures of effect size.

The 2010 findings for differences in subgroups by region indicated slightly more difference in favour of the Central and South regions as compared to 2009 results with the exception within TEL3 History where the North region continued to have a strong result that was similar to the other regions. See Figure 7 for Total score comparison by year.

Figure 5: Region Differences



STUDY GROUP DIFFERENCES

Students were asked for their perception of when they last remembered studying information on treaties. The three response options were ‘Not at all’, ‘Grade 1 to Grade 6’, or ‘Grade 7’

There were differences between average total scores and all average subscores between all the subgroups within their perception of when they last remembered studying information on treaties. The ‘Grade 7’ study subgroup average scores were highest, followed by the ‘Grade 1 to 6’ study subgroup, and further decreasing for the ‘Not at all’ study subgroup. The average survey total scores for the three subgroups were 54.8% for the ‘Grade 7’ study subgroup, 48.6% for the ‘Grade 1 to 6’ study subgroup, and 44.4% for the ‘Not at all’ study subgroup. See Figure 6 for illustrated score averages by study group. ANOVA table summary by region is presented in Appendix E, along with measures of effect size.

Study group differences in the 2010 Treaty Essential Learnings survey were significant and notably similar to the 2009 survey results. See Figure 7.

Figure 6: Study Group Differences

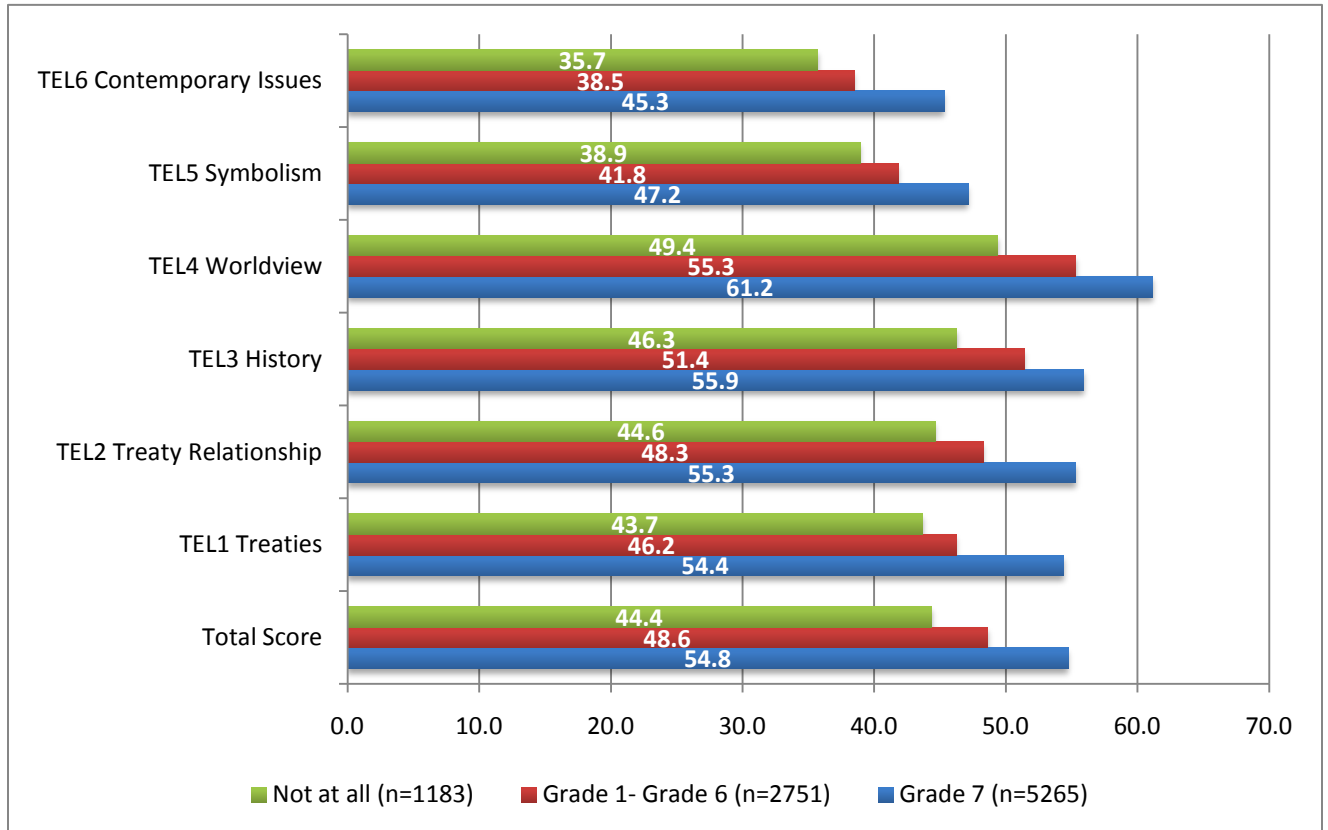
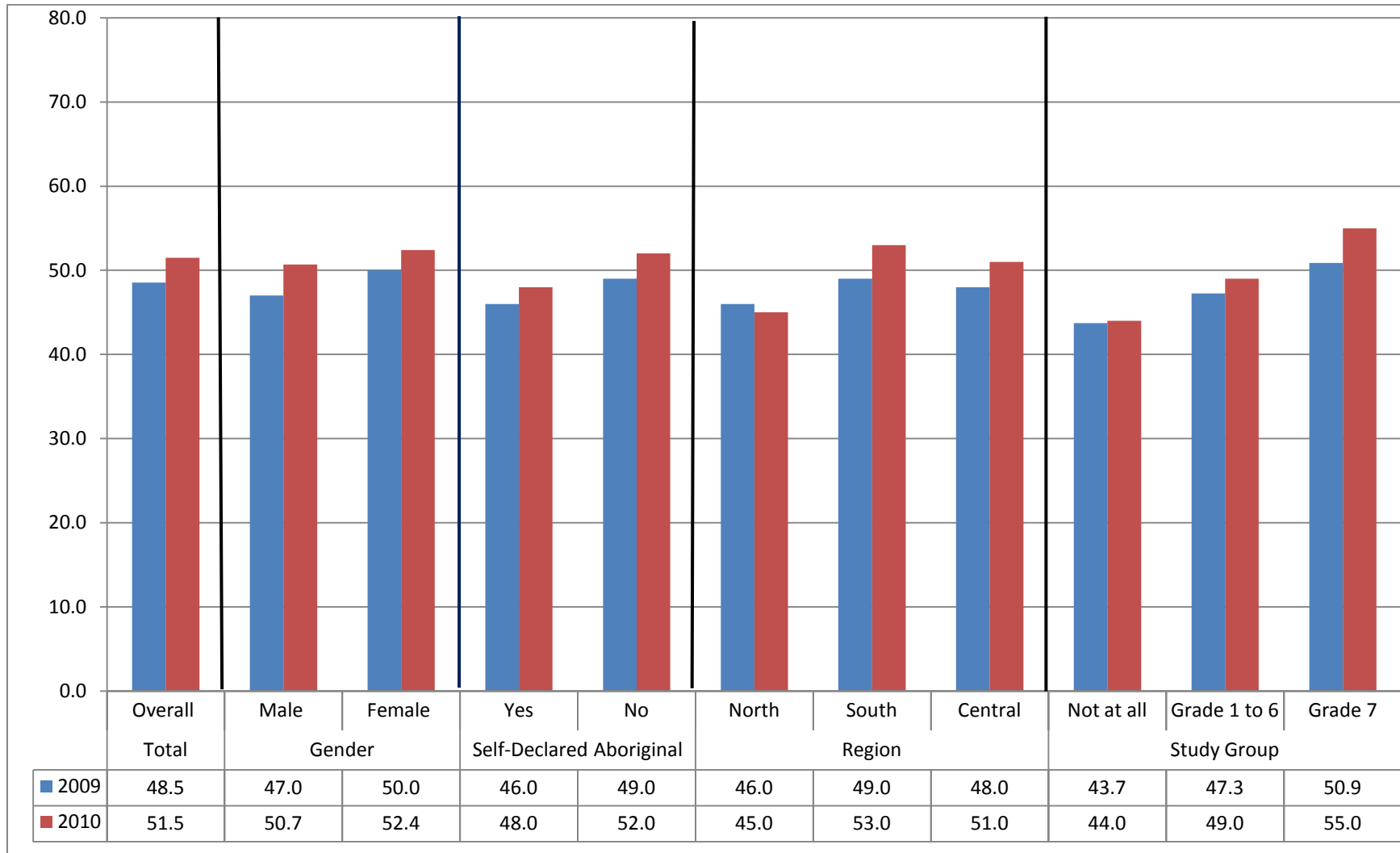


Figure 7: Average Total Score comparison by Demographic, 2009 and 2010



CHAPTER THREE – TREATY EDUCATION RESOURCES SURVEY RESULTS

ADMINISTRATOR AND TEACHER DESCRIPTIVES

Survey responses were received from 498 administrators, 612 Grade 4 teachers, and 752 Grade 7 teachers. Response rates from expected numbers submitted were 69%, 69%, and 68% respectively. Over 99% of the respondents represent the Saskatchewan provincial public and separate schools while less than 1% of the respondents represent the First Nations schools.

Overall, a little more than half of the administrators and teachers were from the Central region and about 40% were from the South region. About 5% of the administrators, 4% of the Grade 4 teachers, and 3% of the Grade 7 teachers were from the North region.

In the South and Central regions, less than 10% of the administrators and teachers had declared themselves as Aboriginal with the exception of 11% of the Grade 7 teachers in the Central region. In the North region, 41% of the Grade 4 teachers had self-declared as Aboriginal compared to 26% of the administrators and 20% of the Grade 7 teachers. See Table 5 for details. Note that the Region category includes the First Nations schools.

Table 5: Administrator and Teacher Frequency by System, Region, and Self-Declared Aboriginal

		Total			Self Declared Aboriginal								
		Admin	Gr4T	Gr7T	Administrator			Grade 4 Teachers		Grade 7 Teachers			
System					Yes	No	Missing	Yes	No	Yes	No	Missing	
First Nations	n	3	1	1	2	1		1	0	1	0		
	%	0.6	0.2	0.1	67	33		100		100			
Public/ Separate	n	495	611	751	36	458	1	45	566	61	688	2	
	%	99.4	99.8	99.9	7	93		7	93	8	92		
Region													
North	n	27	22	20	8	19		9	13	4	16		
	%	5.4	3.6	2.7	26	74		41	59	20	80		
Central	n	273	325	406	20	252	1	26	299	46	359	1	
	%	54.8	53.1	54	7	93		8	92	11	89		
South	n	198	265	326	11	187		11	254	12	313	1	
	%	39.8	43.3	43.3	6	94		4	96	4	96		
Total	n	498	612	752	38	459	1	46	566	62	688	2	
	%	100	100	100	8	92		7	93	8	92		

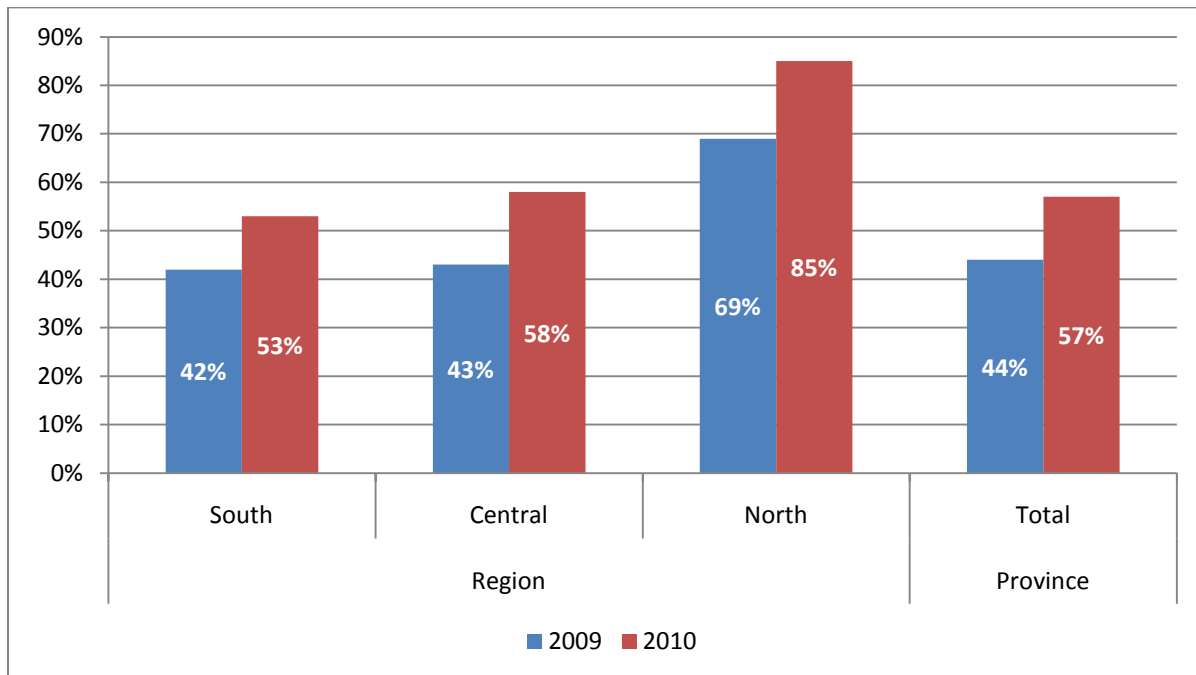
MANDATORY TREATY EDUCATION

Administrators were asked to indicate ‘yes’ or ‘no’ to the statement: “*Mandatory Treaty education is part of the school's learning improvement plan.*”

More than half (57%) of the administrators in the provincial system indicated that they had mandatory treaty education as part of their school’s learning improvement plan. This finding represents a large increase from the 44% result in 2009, and indicates a significant growth since the introduction of mandatory K-12 Treaty education in September of 2008.

Similar percentages and growth patterns are seen in the Central (58%) and South (53%) regions, while a large majority (85%) of the school administrators in the North region indicated mandatory treaty education as part of their school learning improvement plan. Figure 8 illustrates the comparison by year and by regions.

Figure 8: Percentage of Administrators by Mandatory Treaty Education as part of Learning Improvement Plan by Year and by Region

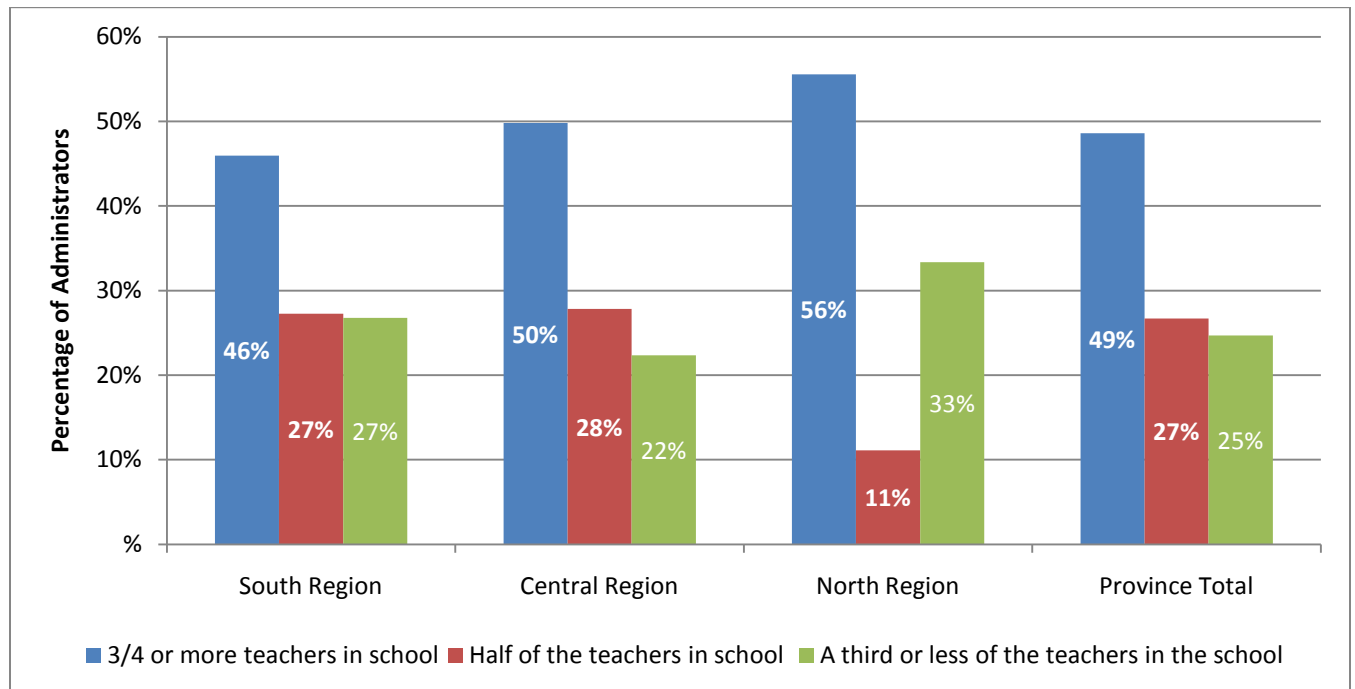


PERCENTAGE OF TEACHERS TEACHING TREATIES

Administrators were asked to indicate the percentage of teachers in their schools that show evidence of teaching treaties from three options: ‘75% or more (most)’, ‘50% (about half)’ or ‘35% or less (a third or less)’.

In total, almost half (49%) of the administrators indicated that most of their teachers in their school show evidence of teaching treaties. In both the South and Central regions, three-quarters of the administrators had indicated that about half or more of the teachers show evidence of teaching about treaties versus two-thirds of the administrators in the North region. Results are illustrated in Figure 9.

Figure 9: Percentage of Administrators with Range of Teachers Teaching Treaty Education



IMPLEMENTATION

RECEIPT OF OTC RESOURCES

School administrators were asked two questions related to the receipt of the OTC resource materials: 1) “*The school received the Office of the Treaty Commissioner (OTC) 'Teaching Treaties in the Classroom' Kindergarten to Grade 6 resource materials with resource guides.*” and, 2) “*The school received the Office of the Treaty Commissioner (OTC) Grade 7 to Grade 12 'Teaching Treaties in the Classroom' kit of resource materials with audio/visual materials, books, and resource guides.*” School administrators had an option to indicate that the ‘Kindergarten to Grade 6’ or the ‘Grade 7 to Grade 12’ resource materials did not apply to their school². These respondents have been excluded from the appropriate portions of the analysis (29 administrators excluded from the K-6 and 42 administrators from the 7-12 analysis).

Grade 4 teachers were asked if they received an OTC Grade 4 resource guide for teaching treaties: “*I have received the Office of the Treaty Commissioner (OTC) 'Teaching Treaties in the Classroom' resource guide for Grade 4.*”

Grade 7 teachers were asked if their school received OTC resource materials for teaching treaties: “*The school received Office of the Treaty Commissioner (OTC) 'Teaching Treaties in the Classroom' kit of resource materials with audio-visual materials, books, and resource guides.*”

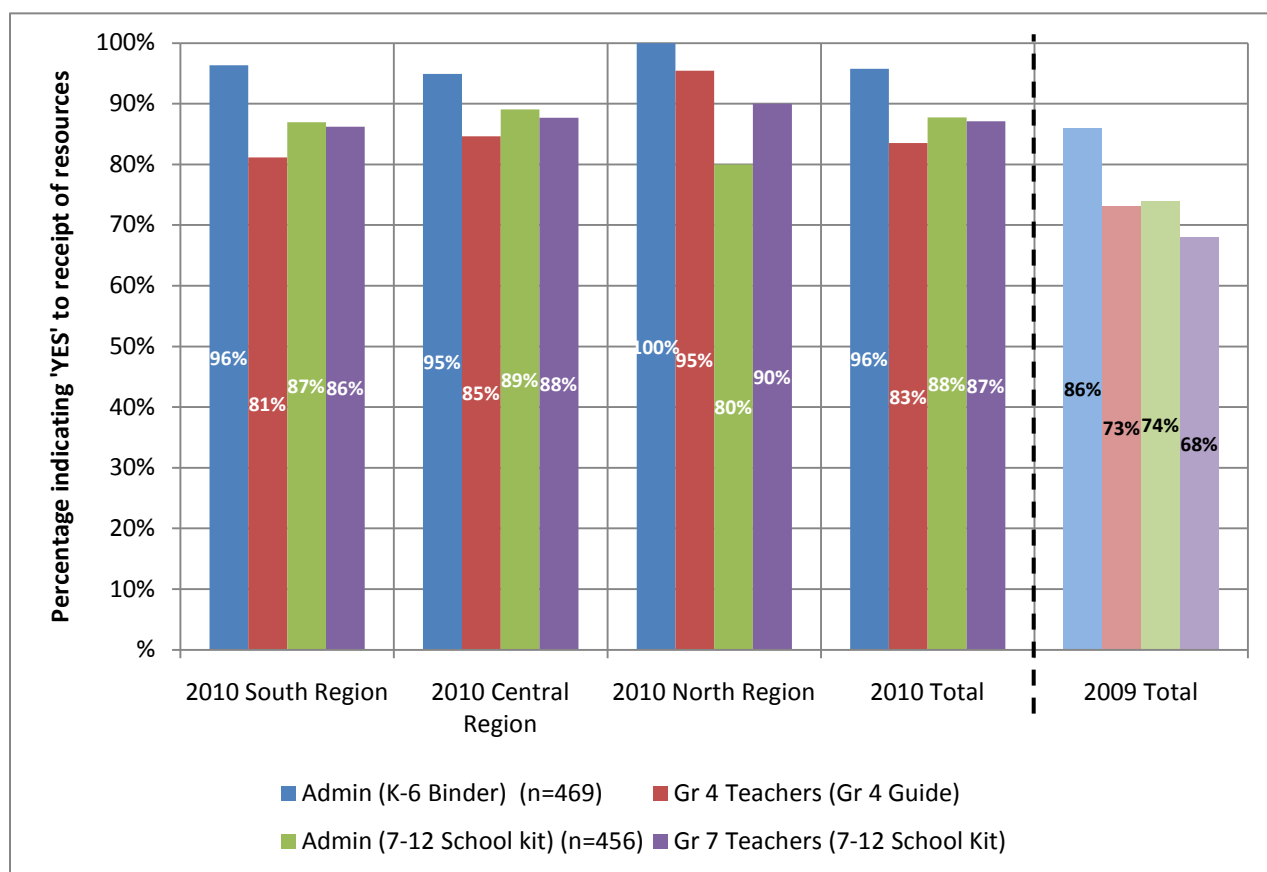
A high percentage of the respondents in total and within regions indicated they received the OTC resource materials (95% or more of the administrators to school receipt of K-6 materials, 83% of Grade 4 teachers to the receipt of their OTC Grade 4 resource guide, 87% of the Grade 7 teachers and 88% of the corresponding school administrators to school receipt of the ‘Grade 7 to 12’ kit). Figure 10 shows an illustration of the percentages that indicated ‘Yes’ by respondent group and by region in the 2010 survey.

² The ‘Does not apply’ option was not available to administrators in the 2009 survey.

While a majority of the teachers did indicate receipt of the resource materials, a small percentage did respond that they did not receive or were uncertain of the school’s receipt of the materials (12% of the Grade 4 teachers in the Central and South regions indicated they did not receive the Grade 4 OTC resource guide and about 10% of the administrators and Grade 7 teachers were uncertain or their school did not receive the OTC ‘Grade 7 to 12’ kit).

Figure 10 illustrates an increase from the 2009 to the 2010 results in the receipt of OTC resources as indicated by each respondent group (i.e., from 73% in 2009 to 81% in 2010 of the Grade 4 teachers and from 68% in 2009 to 86% in 2010 of the Grade 7 teachers).

Figure 10: Receipt of OTC Resources by Administrators and Teachers by Region and by 2009



Note. 2010 Survey results are in darker shade by Region and Respondent Group as well as by Total Province by Respondent Group while 2009 Survey results are in lighter shade by Total Province by Respondent Group. In the 2009 survey, all administrators responded as ‘Does not apply’ option was not available.

ACCESSIBILITY OF OTC RESOURCES

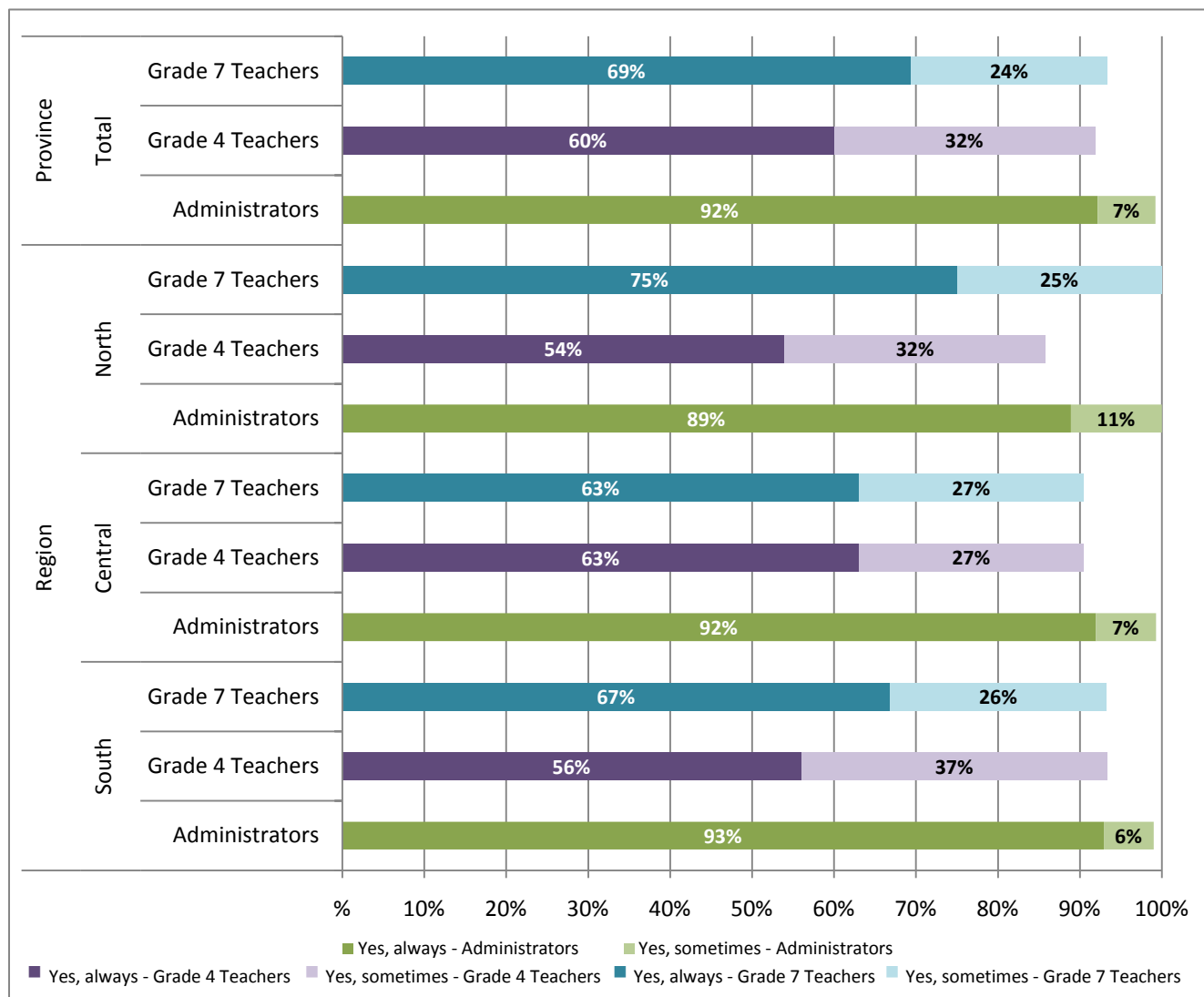
Administrators were asked to rate the statement: '*The OTC 'Teaching Treaties' resource materials are accessible to all teachers in the school.*' while Grade 4 teachers were asked to rate the statement: '*I have access to other OTC Teaching Treaty resource materials.*' and Grade 7 teachers rated the statement: '*I have access to OTC Teaching Treaty resource materials.*'

A large majority of administrators reported high levels of accessibility ('always' ranged from 89% to 93%) while both Grade 4 teachers and Grade 7 teachers were slightly less positive. While 82% of the Grade 4 teachers and 93% of the Grade 7 teachers indicated some degree of accessibility to treaty education resource materials, a higher percentage of Grade 7 teachers indicated 'always' accessible (ranging from 67% in the South region to 75% in the North region) versus the Grade 4 teachers ('always' ranging from 54% in the North region to 63% in the Central region).

Although a small percentage overall, 8% of Grade 4 teachers and 7% of Grade 7 teachers indicated no materials accessible (a high at 14% of the Grade 4 teachers in the North region). This lack of accessibility to materials was not reflected in the administrators' responses. See Figure 11.

While 2010 findings indicated a similar pattern to 2009 accessibility of the OTC treaty education resources, there was an increase in the percentage across all respondent groups that indicated accessibility. Similar to the 2009 survey, a large majority of administrators reported 'always' accessibility to OTC *Teaching Treaties in the Classroom* resource materials, (85% in 2009 and 92% in 2010) and 7% from both years indicated some accessibility. There was a ten percent increase of Grade 4 teachers that indicated always or some accessibility (from 74% to 82%) as well as a 15% increase of Grade 7 teachers (from 81% to 93%) that indicated accessible materials. This finding is positive and continues to indicate that treaty education materials were accessible to the large majority of professional staff.

Figure 11: School Accessibility of OTC Resources Ratings by Administrators and Teachers



USE OF RESOURCES

Administrators were asked to rate the frequency of use of OTC materials: ‘*The teachers in the school use the OTC 'Teaching Treaties' resource materials.*’

Overall, almost all administrators in all regions reported a frequency of at least two to three times per year, ranging from 93% in the North region to 98% in the Central region. Almost a third of the North region administrators reported their teachers use the resources monthly. On the other hand, 8% of the administrators in the North region reported ‘no use’ of the OTC resource materials.

Administrators were asked their perception about whether their teachers use other resources to teach treaties: *‘The teachers in the school use other resource materials to teach treaties.’* The options were ‘yes’, ‘no’, or ‘do not know’.

A large majority (79%) of the administrators indicated that their teachers use other materials to teach treaties. There was a notable percentage of administrators that indicated ‘do not know’, totaling 18% with a range` from 16% in the Central region to 26% in the North region.

In comparison to the 2009 survey results, administrators were more confident of teacher use of resources for teaching about treaties. The percentage of administrators that indicated their teachers ‘Never’ use the OTC resources decreased from 14% to 3%. See Figure 12 illustration of results by year. Also, the percentage of administrators’ uncertainty as to whether teachers use other resources decreased from 30% to 18%. See Figure 13.

Figure 12: Administrator Rating of Teacher Use of OTC Resources, 2009 and 2010

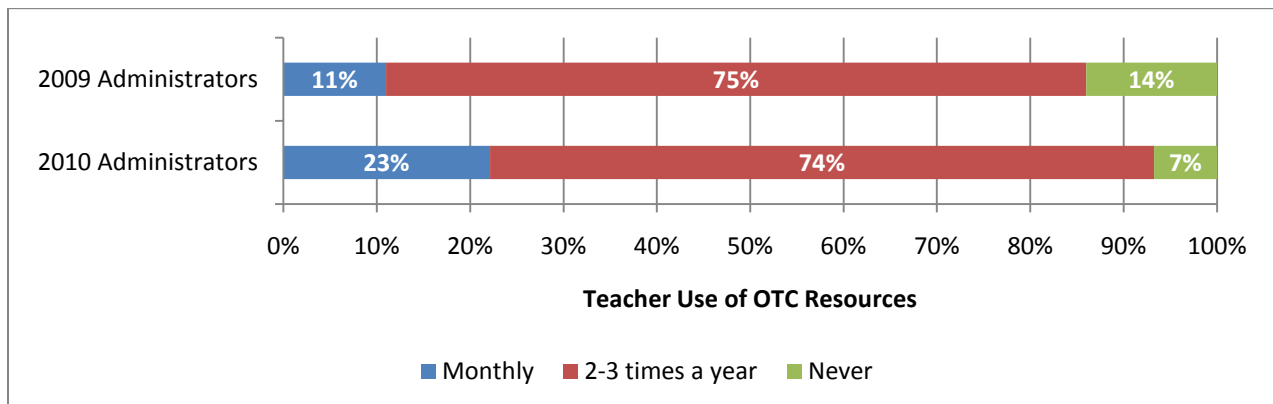
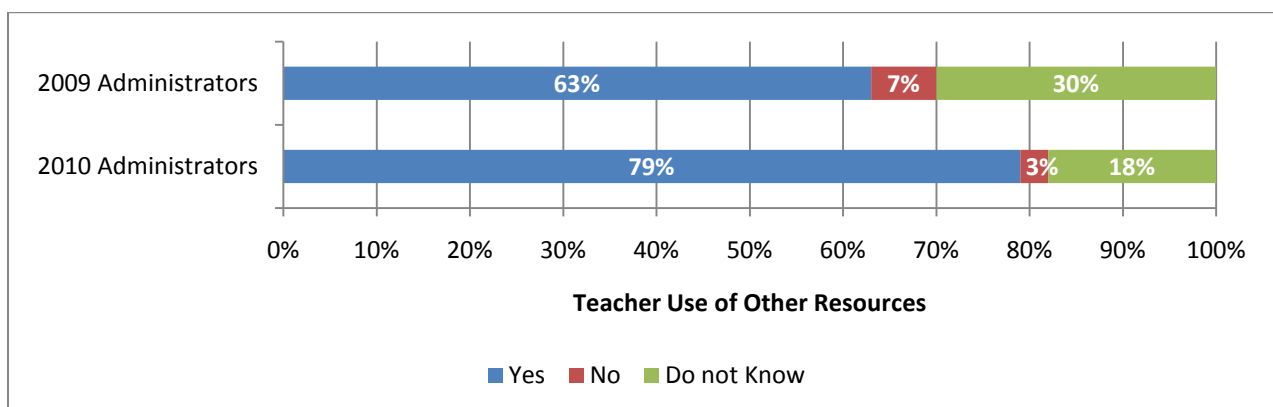


Figure 13: Administrator Rating of Teacher Use of Other Resources, 2009 and 2010



Grade 4 teachers were asked how frequently they used the OTC Grade 4 resource materials: *'I use the OTC 'Teaching Treaties in the Classroom' Grade 4 resource guide in my teaching.'* Options to choose from were: 'Regularly, more than once a month', 'Once a month', '2 to 3 times a year', 'Once', or 'Never'. Similarly, Grade 7 teachers were asked their frequency using the OTC resource kit: *'I use the OTC 'Teaching Treaties in the Classroom' kit in my teaching.'*

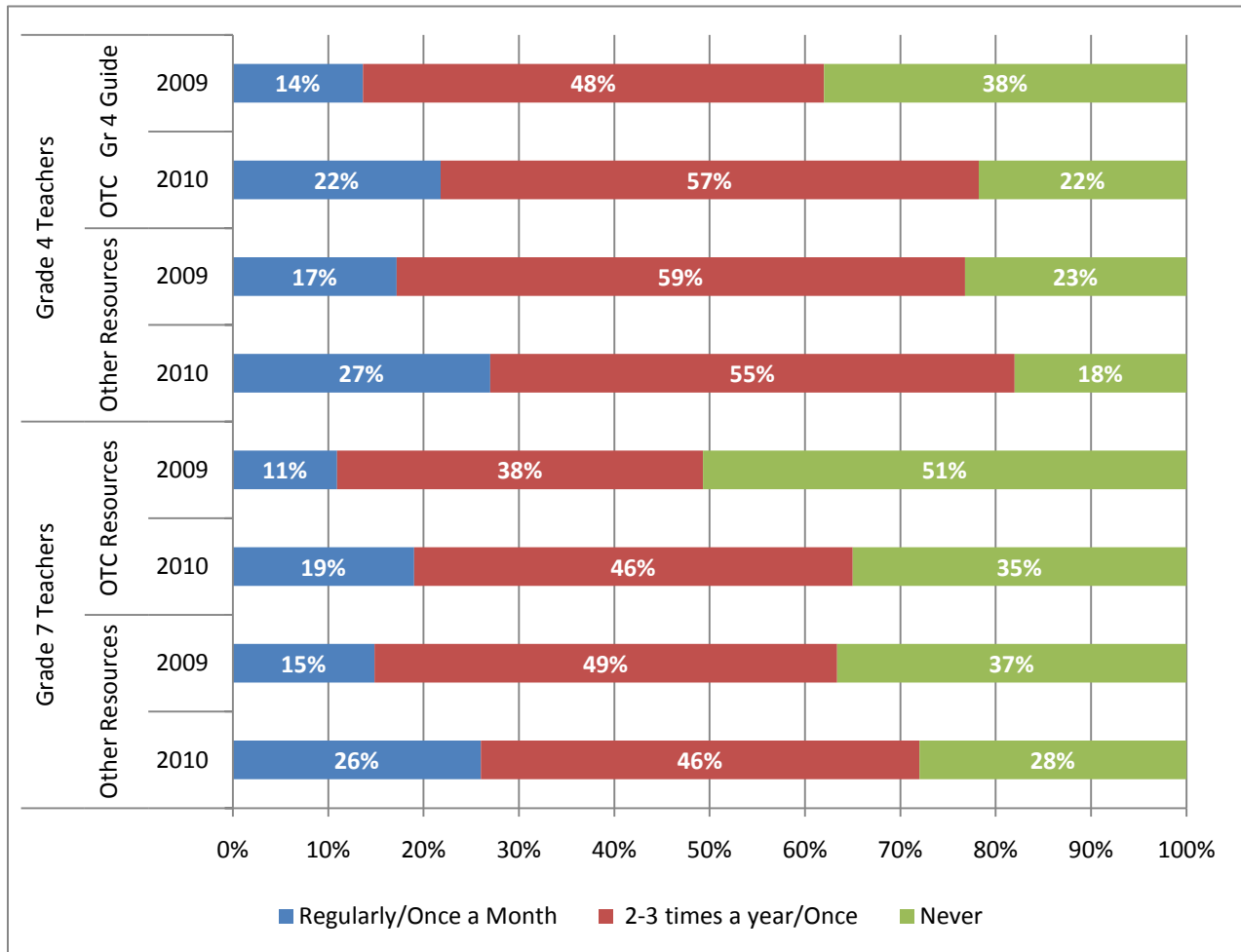
Overall, 65% of the Grade 4 teachers and 53% of the Grade 7 teachers reported using the OTC materials more than once. One-quarter of the Grade 4 teachers (22%) and just over a third of the Grade 7 teachers (35%) reported never using the materials. A higher percentage of the Grade 7 teachers in the North region (90%) indicated the use of the OTC materials as compared to their regional counterparts.

Grade 4 teachers and Grade 7 teachers were asked how frequently they use other resources to teach treaties: *'I use other resource materials in my teaching about treaties.'*

Overall, 18% of the Grade 4 teachers and 27% of the Grade 7 teachers indicated they did not use other resources to teach treaties. The percentage of Grade 4 teachers that used other resources to teach treaties more than once ranged from 67% in the Central region to 72% in the North region. The percentage of Grade 7 teachers that used other resources more than once was similar in both the North region (72%) and South region (73%) versus slightly less in the Central region (65%).

The implementation of the OTC materials to support the teaching of treaties continues to be successful with the majority of teachers and administrators having receipt and access to the resource materials. There is evidence of increased use of the OTC resource materials since the 2009 Treaty Essential Learnings Survey along with a decrease in the percentage of administrators and teachers indicating 'Never' used as illustrated in Figures 12 and 14.

Figure 14: Teacher Use of Resources, 2009 and 2010



While the use of the treaty education resource materials has increased from the 2009 Treaty Essential Learnings Survey to the 2010 survey, the lack of use of these materials continues to be an issue. Lack of use of the resource materials was examined in relation to teaching assignment. Within the 2010 survey Grade 7 teachers were asked to indicate their teaching assignment with three options: 1) ‘to teach all subject areas’, 2) ‘departmentalized and did teach treaty related subject areas’, or 3) ‘departmentalized and DID NOT teach treaty related subject areas’.

Of the Grade 7 teachers (n=205) that indicated that they did not use the resource materials, 60% (n=121) had indicated that their Grade 7 teaching assignment was departmentalized and DID NOT teach treaty-related subject areas. Further investigation would be helpful to clarify what subject areas are not treaty-related and the implication of teaching

assignment to that perception as well as how decisions are made at the school level on who would provide treaty education.

Further examination was investigated of the Grade 7 teachers that had indicated not using the materials AND DID have teaching assignment either all subject areas or departmentalized with treaty-related subjects. Thirteen percent (n = 26) had no accessibility of resource materials while 15% (n = 30) indicated accessibility of materials and indicated that they required training. Of the Grade 4 teachers (n = 102) that indicated they did not use the resource materials, 30% (n = 31) had no accessibility of resource materials while 33% (n = 30) indicated accessibility of materials and indicated that they required training.

OTC RESOURCES SUPPORT

CURRICULUM

Using a six-option Likert-type rating, administrators, Grade 4 teachers, and Grade 7 teachers were asked to rate the statement: *'The OTC Teaching Treaties resource materials support the curriculum goals.'* The rating ranged from 'Strongly Disagree' to 'Strongly Agree' or 'Did Not Use'.

Overall, 3% of the administrators and 2% of the teachers disagreed that the OTC resources support the curriculum goals. A large majority of the administrators (87%) and Grade 4 (70%) teachers agreed that the materials support curriculum goals. See Figure 15 for results by respondent group. See Appendix F for table of results by region and by respondent group.

Overall, 59% of the Grade 7 teachers were in agreement that OTC resources support the curriculum goals; 28% of the Grade 7 teachers, primarily from the Central and South regions, indicated that they did not use the materials.

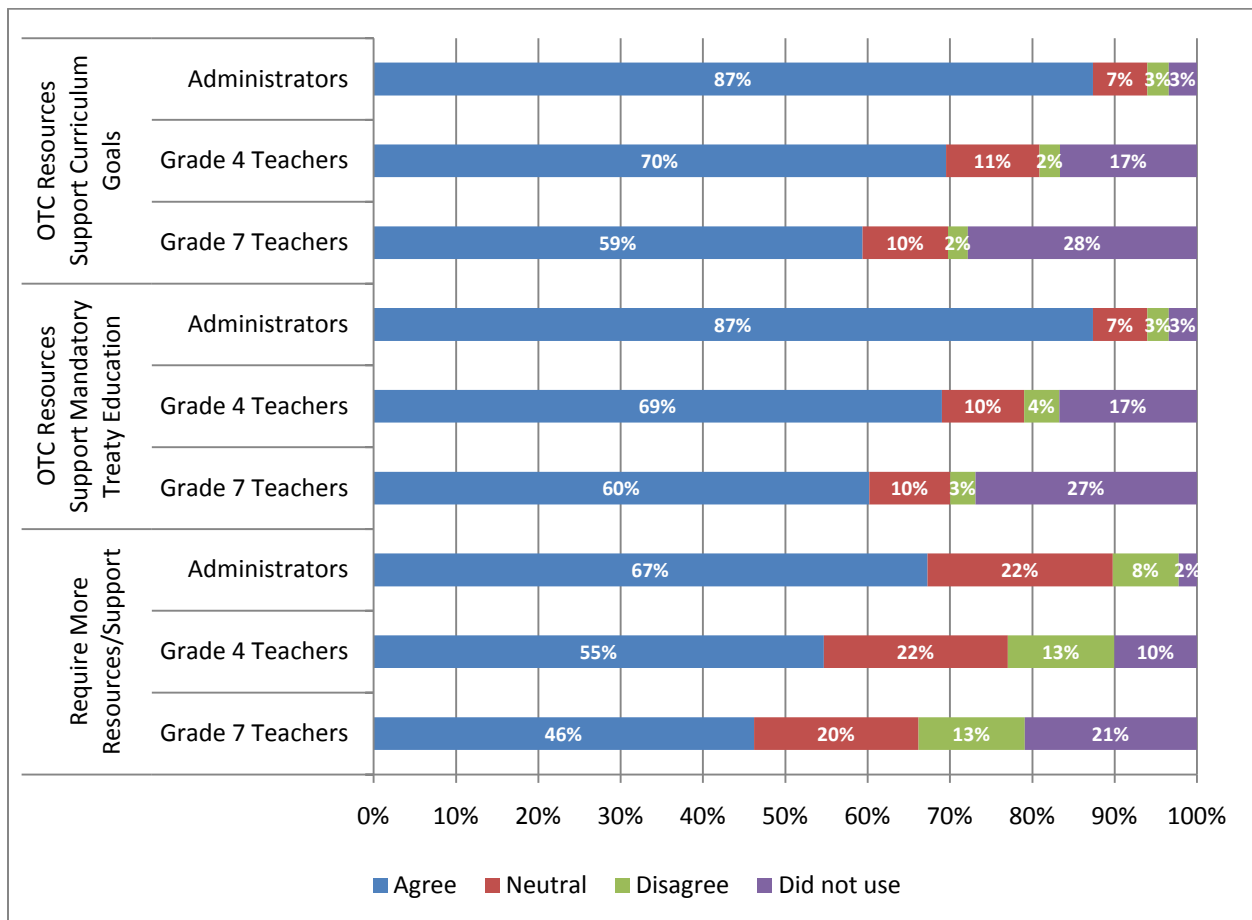
MANDATORY TREATY EDUCATION

Using the same Likert-type rating, the administrators, Grade 4 teachers, and Grade 7 teachers were also asked to rate: *'The OTC Teaching Treaties resource materials support*

implementation of mandatory treaty education.’ The response from all three perspectives was somewhat similar to the previous question on support for curriculum goals.

Overall, 3% to 4% of the administrators and teachers disagreed that the OTC resources support the implementation of mandatory treaty education. A large majority of the administrators (87%) and about two-thirds of the teachers agreed (69% of the Grade 4 teachers and 60% of the Grade 7 teachers). See Figure 15 for overall by respondent group. See Appendix F for table of results by region and by respondent group.

Figure 15: OTC Resources Support Curriculum Goals and Mandatory Treaty Education and Need More Resources/Support by Administrators and Teachers



One-quarter of the Grade 7 teachers indicated that they did not use the materials whereas one-third of the Grade 7 teachers from the North region indicated a neutral response to the statement.

Along with an increase in percentage of use in resource materials from all respondent groups, the percentage that agree the OTC resources support mandatory treaty education has increased from 2009. See illustration in Figure 16 for comparison of agreement by year.

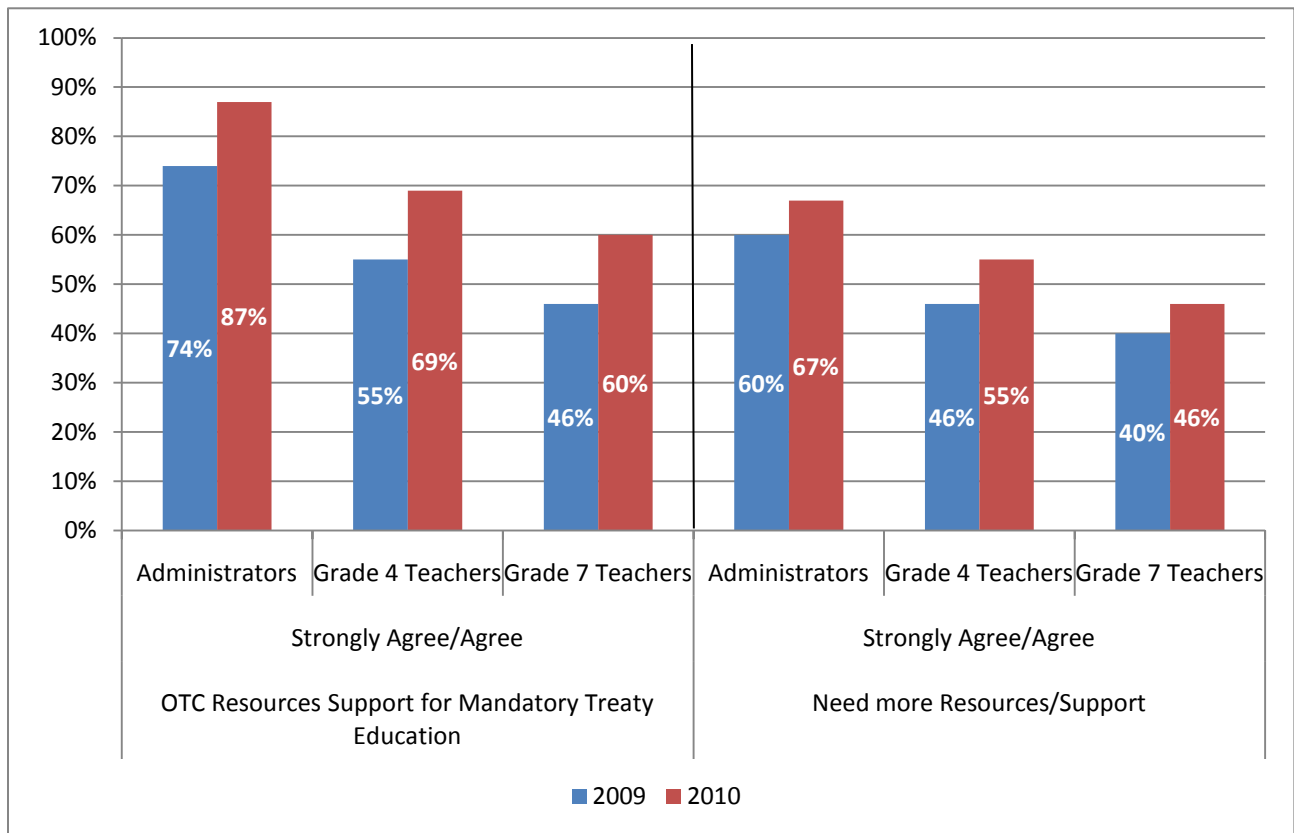
NEED FOR RESOURCES

Administrators were asked to rate the statement: “*Teachers in my school require more resources/support to help with their teaching about treaties.*”. The Grade 4 and Grade 7 teachers were asked to rate the statement: “*I require more resources/support to help me with my teaching about treaties.*”

A majority of the administrators and teachers would agree for the need of more resources/support to help with teaching treaties: 67% of the administrators, 46% of the Grade 7 teachers, and 55% of the Grade 4 teachers. Almost one-quarter of the administrators and teachers were neutral and a small percentage disagreed: 8% of the administrators, 13% of the teachers. About one-quarter of the Grade 7 teachers and 10% of the Grade 4 teachers indicated that they did not use the materials. See Figure 15 for results by respondent group. See Appendix F for table of results by region and by respondent group.

The 2009 to 2010 comparison is illustrated in Figure 16. There has been an increase in the percentage of respondents that perceive a need for more resources and support in treaty education. About half of the teachers and two-thirds of the administrators continue to indicate a need for resources/support.

Figure 16: OTC Resource Support for Mandatory Treaty Education and Need More Resources/Support by Respondent Group Agreement, 2009 and 2010



SATISFACTION

Grade 4 teachers and Grade 7 teachers were surveyed on their satisfaction with the OTC resources for teaching about treaties. Satisfaction was assessed by four items related to resource content quality, usefulness, user friendliness, and overall rating of satisfaction. Teachers had six options to rate the items in this category: ‘Strongly Disagree’, ‘Disagree’, ‘Neutral’, ‘Agree’, ‘Strongly Disagree’, or ‘Did Not Use’.

Teachers that indicated they did not use the materials (about 20% of the Grade 4 teachers and 30% of the Grade 7 teachers) were excluded from this portion of the analysis³.

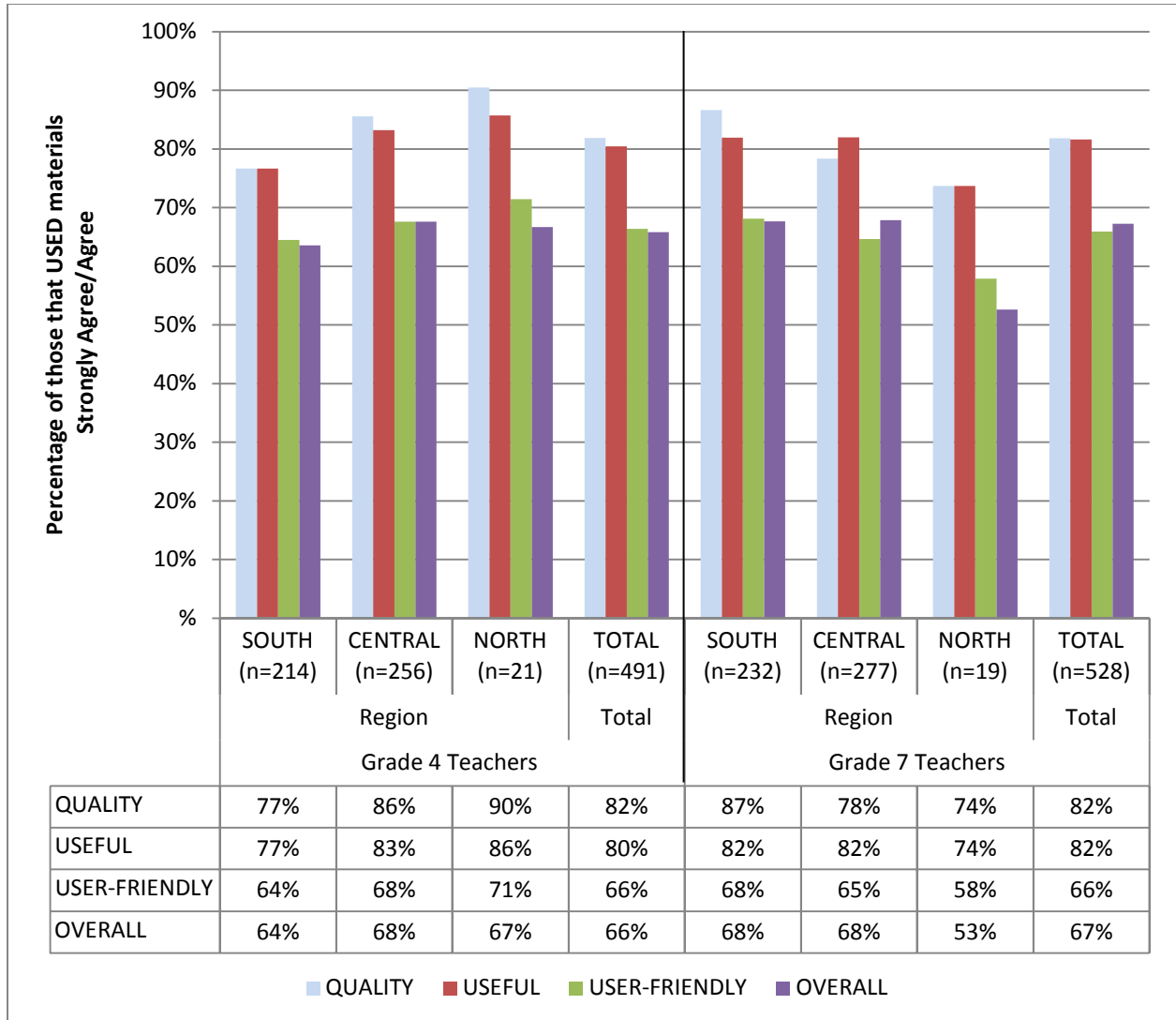
Of the Grade 4 teachers and Grade 7 teachers that indicated that they used the OTC resource materials, two-thirds of the teachers were satisfied with the materials and 20% indicated a neutral response. For overall satisfaction, a small percentage (14%) of the teachers indicated they were not satisfied.

A large majority of the teachers (80% to 82%) were in agreement that the resources provide quality content information and are useful for teaching about treaties. In comparison, two-thirds of the teachers (66%) were in agreement that the resources were provided in a user-friendly format. See Figure 17 for details on the percentage of teachers that ‘Strongly Agree’/‘Agree’ with each item by region and by grade.

Percentages of teachers in agreement were slightly higher in 2010 for all items with exception to the user-friendliness of the format where 71% in 2009 versus 66% in 2010 indicated agreement. The pattern of the 2010 survey results were notably similar to the 2009 survey results, overall satisfaction with OTC resource materials continues to be rated favourably by about two-thirds of the teachers. A larger percentage of teachers rated the quality and usefulness of the resources favourably (76% in 2009 and 82% in 2010) as compared to a favourable rating of user-friendliness (63% of Grade 4 Teachers in 2009, 71% of Grade 7 Teachers in 2009, 71% of Grade 4 Teachers in 2010, and 66% of Grade 7 Teachers in 2010).

³ In 2009, a larger number of teachers indicated that they did not use the resources and were excluded from the analysis on satisfaction (about 30% of the Grade 4 teachers and 40% of the Grade 7 teachers).

Figure 17: Quality, Usefulness, User Friendliness, and Overall Teacher Satisfaction of OTC Resources by Region



TRAINING

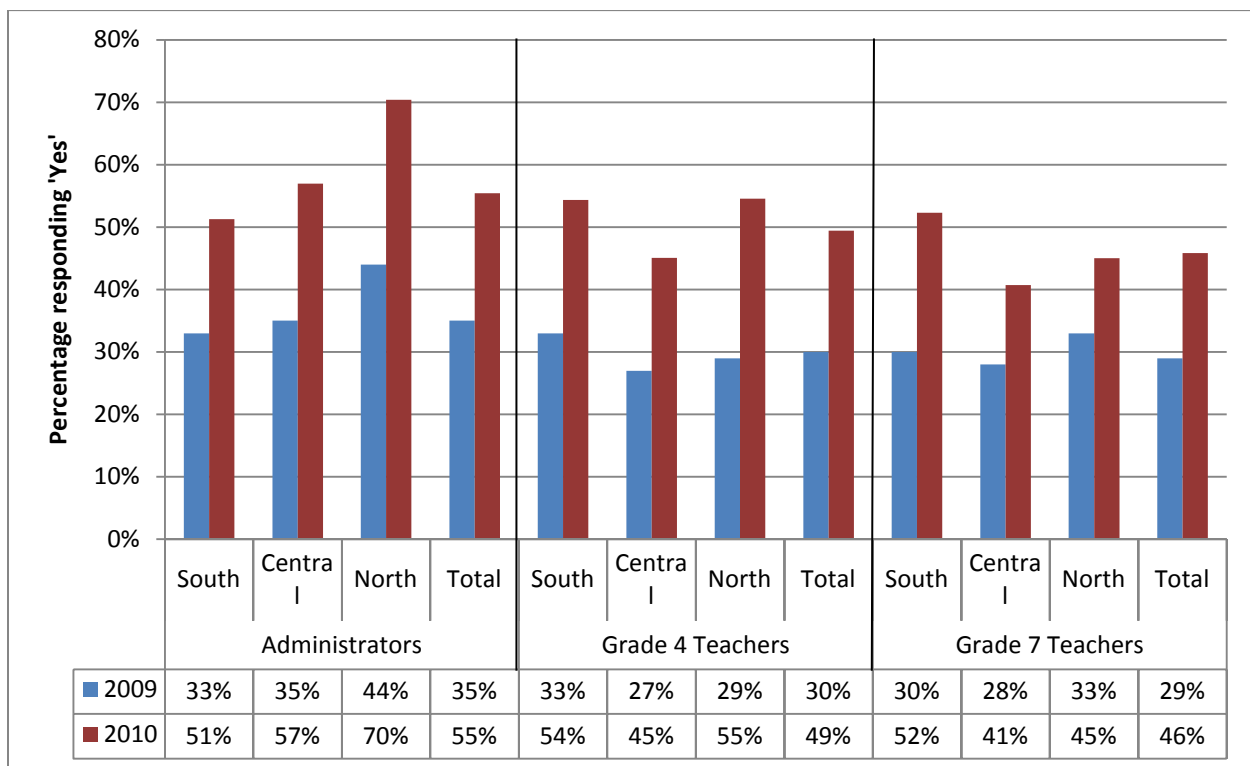
RECEIVED TRAINING

Administrators, Grade 4 teachers and Grade 7 teachers were asked whether they received training for teaching about treaties.

About half of all respondent groups indicated that they had received training: 55% of the administrators, 49% of the Grade 4 teachers, and 46% of the Grade 7 teachers. Figure 18 illustrates the percentage of respondents that responded affirmatively.

The 2010 finding indicates an increase of training for all respondent groups and regions in comparison to the 2009 survey results, about a 50% increase for all respondent groups. Note 2009 to 2010 comparison by respondent group illustrated in Figure 18.

Figure 18: Received Treaty Education Training by Administrators and Teachers, 2009 and 2010

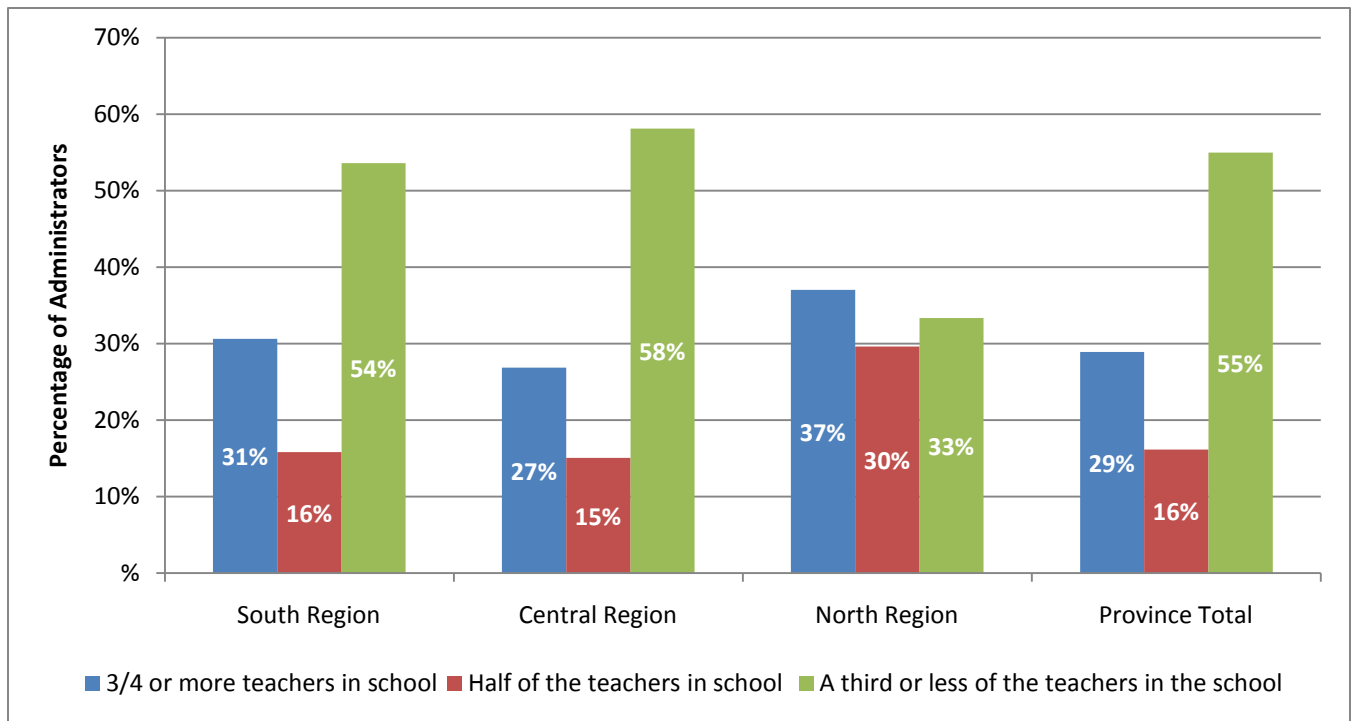


PERCENTAGE OF TEACHERS THAT RECEIVED TRAINING FROM ADMINISTRATORS' PERSPECTIVE

The administrators were asked to indicate: *'The percentage of teachers in the school that received training on teaching about treaties.'* from three options: '75% or more (most)', '50% (about half)' or '35% or less (a third or less)'.

Overall, a majority of the administrators indicated that less than a third of their teachers received training, ranging from 33% of the administrators from the North region to 58% of the administrators from the Central region. Overall, about one-third of the administrators indicated that most of their teachers received training on teaching about treaties. See Figure 19.

Figure 19: Administrator Perception of Percentage of Teachers with Treaty Education Training



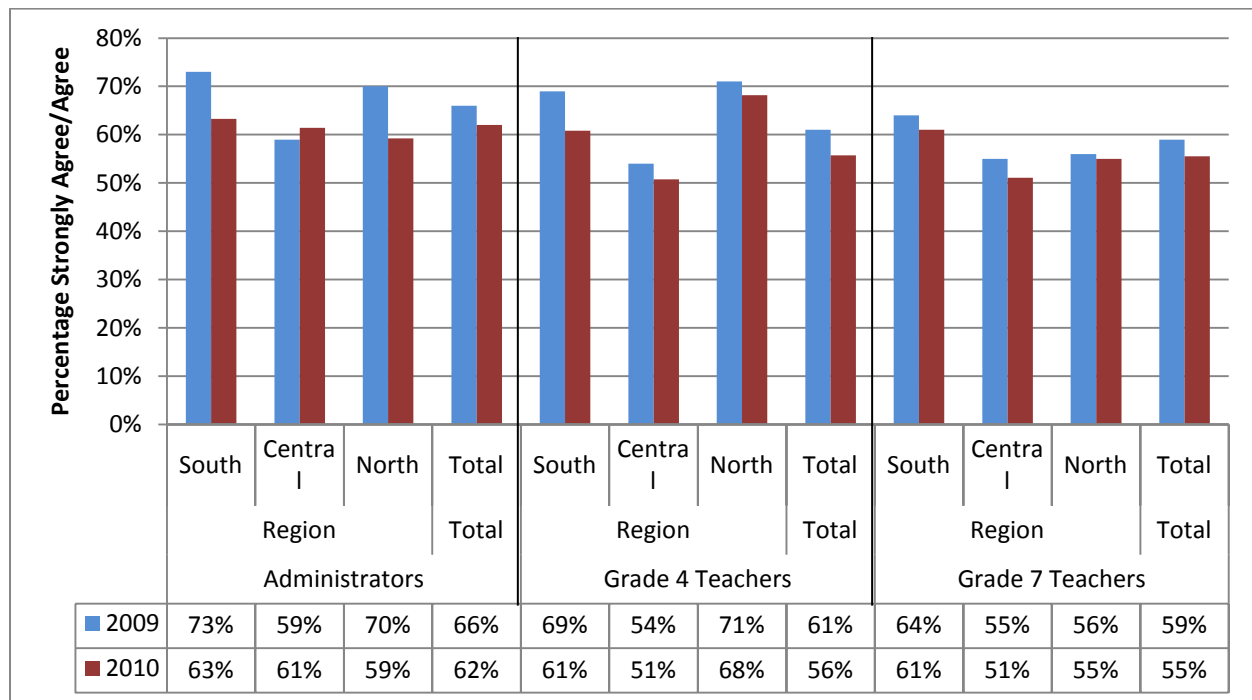
REQUIRE MORE TRAINING

Administrators, Grade 4 teachers, and Grade 7 teachers were asked whether they require training to help with the teaching about treaties.

Overall, the majority within all respondent groups agree that they require more training about teaching treaties. In this regard, 62% of the administrators, 56% Grade 4 teachers, and 55% of the Grade 7 teachers felt more training was required. Figure 20 shows the percentages that agreed along with the 2009 comparison by respondent group. See Appendix G for detail of percentages by response option for each respondent group and by region.

The 2010 results are notably similar to the 2009 survey results. The percentage of administrators and teachers indicating the need for training continues to be slightly higher than those indicating the need for resources.

Figure 20: Need Treaty Education Training by Administrators and by Teachers

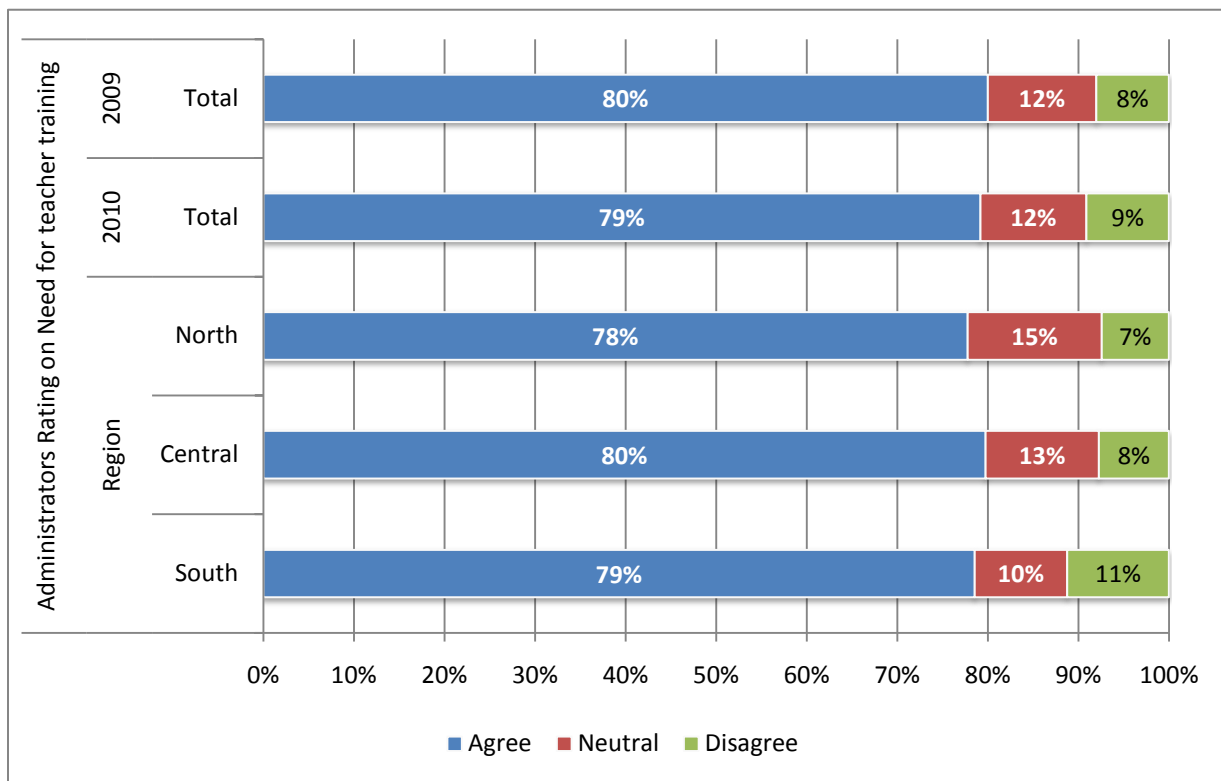


In addition, the administrators were asked whether teachers in the school require training to help with their teaching about treaties.

A large majority of the administrators agreed that their teachers require training to help with their teaching about treaties, ranging from 78% of the administrators in the North region to 80% of the administrators in the Central region. A small percentage of administrators were neutral (12%) and even less disagreed (9%).

The 2010 survey results for administrators’ perceptions of the need for teacher training were notably similar by region and in comparison to the 2009 survey result for total administrators. See Figure 21.

Figure 21: Need Treaty Education Training for Teachers as Perceived by Administrator



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APPENDICES

APPENDIX A: TEL SUBSCORE ITEM DISTRIBUTION AND RELIABILITY ESTIMATES

The TEL subscore item distribution and reliability coefficients are presented in the table below.

Reliability is a psychometric property of an instrument that refers to the degree that the same characteristic is being measured. One approach to assess reliability is to focus on the internal consistency of the items within the instrument. Cronbach's alpha is a technique to assess internal consistency that essentially is a mathematical calculation to determine how consistently a correct response on one item correlates to correct responses on other items.

In the 2010 survey, the reliability of the overall score was examined and determined to be good, (Cronbach's alpha coefficient = 0.81, N=9210, 40 items). In other words, a correct score on an item in the student survey was highly associated with a correct score in other items of the student survey.

Subscores for the six Treaty Essential Learnings (TEL) were calculated with the summations of respective items. Cronbach's alpha reliability estimates of the TEL subscores were low to moderate, ranging from 0.21 for TEL2 Treaty Relationship to 0.68 for TEL4 Worldview.

Treaty Essential Learnings (TEL)	Survey Items that contribute to TEL Subscore	# Items	N	Cronbach's alpha
<i>TEL1. Treaties</i>	TF1, TF2, MC1, MC2, MC3, MH4	6	9210	0.38
<i>TEL2. Treaty Relationship</i>	TF3, TF4, MC5, MH6	4	9210	0.21
<i>TEL3. History</i>	TF5, TF6, MC7, MC8, MC9, MC10, MC11, MH12	8	9210	0.40
<i>TEL4. Worldviews</i>	TF7, TF8, TF9, TF10, MC13, MC14, MC15, MC16, MC17, MC18, MC19, MH21	12	9210	0.68
<i>TEL5. Symbolism</i>	TF11, TF12, MC20, MH22	4	9210	0.24
<i>TEL6. Contemporary Issues</i>	TF13, TF14, MC23, MC24, MC26, MH25	6	9210	0.39
Total Score	all items	40	9210	0.81

[Note: Abbreviations are as follows: True/False (TF), Multiple Choice (MC), and MH (Higher Order).]

APPENDIX B: ANOVA TABLE BY GENDER

ANOVA Table TEL Score and Subscores by Gender						
	Source	df	MS	F	p	η^2
%Total Score * Gender	Between	1	6513.974	19.703	.000	.002
	Within	9199	330.606			
	Total	9200				
%TEL1 * Gender	Between	1	132.384	.195	.659	.000
	Within	9199	679.218			
	Total	9200				
%TEL 2 * Gender	Between	1	37975.478	37.773	.000	.004
	Within	9199	1005.352			
	Total	9200				
%TEL3 * Gender	Between	1	5003.407	10.429	.001	.001
	Within	9199	479.753			
	Total	9200				
%TEL 4 * Gender	Between	1	16429.870	26.731	.000	.003
	Within	9199	614.643			
	Total	9200				
%TEL 5 * Gender	Between	1	36822.854	40.569	.000	.004
	Within	9199	907.662			
	Total	9200				
%TEL 6 * Gender	Between	1	1607.617	2.389	.122	.000
	Within	9199	672.806			
	Total	9200				

Note. Data analyses were performed using SPSS version 17. Both descriptive and inferential procedures were completed. Descriptive statistics included means and standard deviations of total score and Treaty Essential Learnings sub-scores. Differences of means were investigated using analysis of variance (ANOVA) between gender, region (North, Central, South), self-declared Aboriginal, and Study Group. To determine statistical group differences for more than two subgroups, Tukey post hoc tests were conducted at an alpha level of 0.05.

Sampling methodology was not employed but rather the aim was to survey the total Grade 7 population in Saskatchewan. The result was the completion of data by a very large sample size that contributes to the increased probability of finding statistically significant results while practical significance or meaningfulness of the findings may be negligible. Therefore, effect size of association between two variables was examined and reported for statistically significant findings using eta-squared (η^2) and interpreted using Cohen guidelines: $<.01$ = “trivial”, $.01$ = “small”, $.059$ = “medium” and $.138$ = “large” (Huck, 2000). Cohen’s interpretation of effect size magnitude depends on the nature of the study; but, it could be further qualified that a “small” effect size could point to a meaningful difference that requires the need for magnified examination versus a “large” effect size could point to a real difference that could be seen with the naked eye (Walker, 2008).

Female average scores were statistically significantly higher for Total Score, TEL2, TEL3, TEL4, and TEL5; however, effect sizes are trivial with an indication that practical significance to the difference in scores is lacking. Gender scores were statistically similar for TEL1 and TEL6.

APPENDIX C: ANOVA TABLE BY SELF-DECLARED ABORIGINAL

ANOVA Table TEL Score and Subscores by Self-Declared Aboriginal						
	Source	<i>df</i>	<i>MS</i>	<i>F</i>	<i>p</i>	η^2
% Total Score * Self-Declared Aboriginal	Between	1	24793.925	75.488	.000	.008
	Within	9182	328.450			
	Total	9183				
%TEL1 * Self-Declared Aboriginal	Between	1	67069.917	99.761	.000	.011
	Within	9182	672.309			
	Total	9183				
%TEL2 * Self-Declared Aboriginal	Between	1	110907.963	111.198	.000	.012
	Within	9182	997.390			
	Total	9183				
%TEL3 * Self-Declared Aboriginal	Between	1	233.854	.487	.485	.000
	Within	9182	480.066			
	Total	9183				
%TEL4 * Self-Declared Aboriginal	Between	1	30357.367	49.517	.000	.005
	Within	9182	613.070			
	Total	9183				
%TEL5 * Self-Declared Aboriginal	Between	1	8752.512	9.612	.002	.001
	Within	9182	910.595			
	Total	9183				
%TEL6 * Self-Declared Aboriginal	Between	1	39351.931	58.807	.000	.006
	Within	9182	669.165			
	Total	9183				

Note. Discussion on data analyses in Appendix B.

The average scores of the subgroup that self-declared as Aboriginal were statistically significantly lower for Total Score, TEL1, TEL2, TEL4, TEL5, and TEL6. The effect sizes were small for TEL 1 and TEL2 average scores; and, they were trivial for Total Score, TEL4, TEL5, and TEL6. Non-Aboriginal and Aboriginal average scores were statistically similar for TEL3.

APPENDIX D: ANOVA TABLE BY REGION

ANOVA Table TEL Score and Subscores by Region						
	Source	<i>df</i>	<i>MS</i>	<i>F</i>	<i>p</i>	η^2
Percentage Score	Between	2	7121.961	21.596	.000	.005
	Within	9207	329.776			
	Total	9209				
%TEL1	Between	2	19127.860	28.340	.000	.006
	Within	9207	674.954			
	Total	9209				
%TEL 2	Between	2	23447.247	23.332	.000	.005
	Within	9207	1004.931			
	Total	9209				
%TEL3	Between	2	2472.098	5.151	.006	.001
	Within	9207	479.947			
	Total	9209				
%TEL 4	Between	2	7316.466	11.902	.000	.003
	Within	9207	614.728			
	Total	9209				
%TEL 5	Between	2	5504.414	6.046	.002	.001
	Within	9207	910.481			
	Total	9209				
%TEL 6	Between	2	13824.625	20.630	.000	.004
	Within	9207	670.126			
	Total	9209				

Note. Discussion on data analyses in Appendix B.

Regional average scores were statistically significantly different for all scores, however, effect sizes are trivial with an indication that practical significance is lacking. Note that the effect size of region is an omnibus calculation with consideration of the lack of difference between Central and South regions. As such post hoc comparisons were used to examine differences between subgroups.

Post hoc comparisons using the Tukey HSD test at the $p < .05$ level indicated that the average scores for the North region were significantly lower with the exception of TEL3 History. Average scores of the Central and South regions were statistically similar.

APPENDIX E: ANOVA TABLE BY STUDY GROUP

ANOVA Table TEL Score and Subscores by Study Group						
	Source	<i>df</i>	<i>MS</i>	<i>F</i>	<i>p</i>	η^2
Percentage Score	Between	2	69420.822	219.647	.000	.046
	Within	9196	316.057			
	Total	9198				
%TEL1	Between	2	92211.618	140.001	.000	.030
	Within	9196	658.647			
	Total	9198				
%TEL 2	Between	2	79775.413	80.376	.000	.017
	Within	9196	992.533			
	Total	9198				
%TEL3	Between	2	52178.694	111.282	.000	.024
	Within	9196	468.888			
	Total	9198				
%TEL 4	Between	2	80297.474	134.134	.000	.028
	Within	9196	598.637			
	Total	9198				
%TEL 5	Between	2	46802.522	51.909	.000	.011
	Within	9196	901.619			
	Total	9198				
%TEL 6	Between	2	69436.465	105.521	.000	.022
	Within	9196	658.035			
	Total	9198				

Note. Discussion on data analyses in Appendix B.

There was a statistically significant difference between study group average scores along with potentially meaningful significance as effect size was small for all scores (η^2 ranged from .011 for TEL5 Symbolism to .046 for Total Score).

Post hoc comparisons using the Tukey HSD test at the $p < .05$ level indicated that the average Total and TEL scores were significantly different between all subgroups, with highest scores in favor of the 'Grade 7' subgroup, gradually decreasing for the 'Grade 1 to 6' subgroup, and further decreasing for the 'Not at all' subgroup.

APPENDIX F: TABLE OF RESOURCE SUPPORT BY REGION AND RESPONDENT GROUP

Resource Support for Curriculum Goals												
	Administrators				Grade 4 Teachers				Grade 7 Teachers			
	Region			Total	Region			Total	Region			Total
	South	Central	North	Total	South	Central	North	Total	South	Central	North	Total
Strongly Agree/ Agree	88%	87%	74%	87%	70%	68%	77%	70%	63%	55%	85%	59%
Neutral	5%	7%	19%	6%	11%	11%	9%	11%	8%	12%	10%	10%
Disagree/ Strongly Disagree	2%	3%	7%	3%	3%	2%	0%	2%	3%	2%	0%	2%
Did not use	6%	3%	0%	4%	16%	18%	14%	17%	26%	30%	5%	28%
Resource Support for Mandatory Treaty Education												
	Administrators				Grade 4 Teachers				Grade 7 Teachers			
	Region			Total	Region			Total	Region			Total
	South	Central	North	Total	South	Central	North	Total	South	Central	North	Total
Strongly Agree/ Agree	87%	88%	81%	87%	70%	68%	73%	69%	65%	57%	60%	60%
Neutral	5%	7%	19%	7%	10%	10%	9%	10%	6%	12%	35%	10%
Disagree/ Strongly Disagree	3%	3%	0%	3%	5%	4%	5%	4%	4%	2%	0%	3%
Did not use	5%	3%	0%	3%	15%	18%	14%	17%	25%	29%	5%	27%
Need for Resources/Support												
	Administrators				Grade 4 Teachers				Grade 7 Teachers			
	Region			Total	Region			Total	Region			Total
	South	Central	North	Total	South	Central	North	Total	South	Central	North	Total
Strongly Agree/ Agree	64%	69%	74%	67%	57%	52%	64%	55%	48%	44%	65%	46%
Neutral	24%	22%	22%	22%	21%	24%	14%	22%	21%	19%	20%	20%
Disagree/ Strongly Disagree	9%	8%	4%	8%	13%	13%	14%	13%	14%	12%	10%	13%
Did not use	4%	1%	0%	2%	9%	11%	9%	10%	17%	25%	5%	21%

APPENDIX G: TABLE OF REQUIRE TRAINING BY REGION AND RESPONDENT GROUP

I require training to help me in the teaching about treaties.												
	<i>Administrators</i>				<i>Grade 4 Teachers</i>				<i>Grade 7 Teachers</i>			
	<i>Region</i>			<i>Total</i>	<i>Region</i>			<i>Total</i>	<i>Region</i>			<i>Total</i>
	<i>South</i>	<i>Central</i>	<i>North</i>	<i>Total</i>	<i>South</i>	<i>Central</i>	<i>North</i>	<i>Total</i>	<i>South</i>	<i>Central</i>	<i>North</i>	<i>Total</i>
<i>Strongly Agree</i>	13%	14%	22%	14%	20%	16%	9%	17%	17%	17%	25%	17%
<i>Agree</i>	50%	47%	37%	48%	41%	35%	59%	38%	44%	34%	30%	38%
<i>Neutral</i>	20%	24%	19%	22%	18%	27%	14%	23%	23%	27%	20%	25%
<i>Disagree</i>	13%	13%	19%	13%	15%	18%	18%	17%	11%	16%	25%	14%
<i>Strongly Disagree</i>	4%	2%	4%	3%	6%	5%	0%	5%	5%	7%	0%	6%

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As undertaken by the Office of the Treaty Commissioner and the Saskatchewan Ministry of Education.

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