

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

Treaty Essential Learnings

Survey 2011

Analysis



**Saskatchewan Educational Leadership Unit
Department of Educational Administration
University of Saskatchewan**

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EXECUTIVE SUMMARY

In spring of 2011, 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 Grade 7 students participated in the Treaty Essential Learnings Survey, representing 490 schools from 28 public and separate school divisions as well as 26 First Nations schools from ten Tribal Councils/six independent First Nations. At the same time, over 2000 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 2011 Treaty Essential Learnings Survey was a form of the 2009 Treaty Essential Learnings Survey. The 2009 and 2010 Treaty Essential Learnings surveys were identical while the 2011 survey was similar and followed the same specifications used in the earlier form. 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. An equating process was used to place the 2011 scores on a comparative scale with the 2009 and 2010 survey administrations; however, interpretation of the changes may need to be tempered given the use of exactly the same form in 2009 and 2010. On average, Grade 7 students' score of understanding treaties was 54.6% which is consistent with, if slightly lower than, the 2010 average score (55.1%) and slightly higher than the 2009 average result (52.6%).

In regards to the average student survey subscores over the past three years, Treaty Contemporary Issues (TEL6) continues to be a weak area for most students. On the other hand, Worldview (TEL4) continues to be an area of relative strength for most students.

Study group differences in the 2011 Treaty Essential Learnings survey were significant. Similar to the 2010 and 2009 survey results, the student group that remembers studying about treaties is associated with more successful outcomes. Additionally, there was an increase of 6% in the percentage of students that recalled studying about treaties in school, from 87% in 2010 to 93% in 2011. This finding supports the indication that more students are receiving learning opportunities related to treaty education.

Treaty education has increasingly become part of the school improvement plan with a 43% increase since the introduction of mandatory K-12 Treaty education in September 2008; but, there remain a number of school administrators (36%) 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 slightly. These resources continue to be seen as accessible, satisfactory, and positive for a large majority of teachers and administrators. 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 slight improvements to implementation could be made along with implications to the continued need for training. Of the Grade 7 teachers that indicated that they did not use the resource materials, 61% had indicated that their Grade 7 teaching assignment was departmentalized and DID NOT teach treaty-related subject areas. Although resources were available to a very large majority, there was an association that lack of use of resources was associated with lack of accessibility to the materials or lack of training when materials were accessible. Of the Grade 4 and Grade 7 teachers that indicated that they did not use the resources, half of them agreed that they required training in teaching treaties.

In terms of professional development needs, the need for resources/support was similar to previous results with a continued slight decrease in the need for training on teaching about treaties was noted. About half of the teachers and two-thirds of the administrators continue to indicate a need for resources/support. In regards to administrators, the decrease in need for training concurs with the increase in the percentage of administrators that received training. While a higher percentage of the administrators perceive the need for resources over the need for training, just over half of the teachers and administrators continue to perceive a need for both training and resources to support teaching treaties.

STRUCTURE OF REPORT

This report of the 2011 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. In Chapter Three, the 2011 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 2010 and 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 2 to May 20, 2011 to assess all Grade 7 students in the provincial public and separate education system. First Nations schools were invited to participate. The survey was administered by the Saskatchewan Ministry of Education. The Saskatchewan Educational Leadership Unit at the University of Saskatchewan was contracted to conduct the analysis of the survey. The 2011 administration of the Treaty Essential Learnings Survey marks the third year of its province wide assessment.

As in previous years, 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 recognize 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 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.

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 to 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 spring of 2010, a replication of the 2009 Treaty Essential Learnings Survey was administered. Over 9000 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 results were reported in *Treaty Essential Learnings 2010 Report*.

GRADE 7 STUDENT SURVEY

The 2011 Grade 7 Treaty Essential Learnings Survey was a form of the previous 2009 and 2010 surveys. The first component of the survey focused on treaty knowledge and understanding of Grade 7 students in all provincially-funded schools and in participating First Nations schools. This survey was designed with the same table of specifications and content focus as the 2009/2010 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 2011 Grade 7 survey results to the results of the 2009 and 2010 surveys;
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,
- Government officials, as they evaluate treaty education programs, including the Office of the Treaty Commissioner, First Nations, the Ministry of Education, 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, preliminary forms of the instrument were field tested with participating students that represented urban, rural, northern, and First Nations schools. Item analysis and reliability estimates guided the decision of the best items to be used in the assessment.

Please refer to Appendix A for information on technical characteristics of reliability for the 2011 survey assessment.

SURVEY OF TREATY EDUCATION RESOURCES

The second component of the project consisted of the treaty education surveys 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 administrator survey consisted of 14 items and the teacher surveys consisted of 13 items. The items were 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 surveys were 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 (12,070) was provided by the Saskatchewan Ministry of Education. Expected numbers of Grade 4 (970) and Grade 7 (1152) teachers were derived from information provided by 2009 Treaty Essential Learnings Survey school division coordinators. Expected number of administrators (683) 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 (79%), administrators (62%), Grade 4 teachers (76%), and Grade 7 teachers (69%) as well as response rates from school divisions are shown in Table 2. Note that the provincial total response rate calculation excludes independent schools and First Nations schools.

Of the 81 First Nations schools in Saskatchewan, 31 schools accepted the invitation to participate. Response was received from 235 Grade 7 students (from 26 schools), eight administrators (from eight schools), 18 Grade 4 teachers (from 14 schools), and 16 Grade 7 teachers (from 14 schools).

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

School Division	Administrators	Grade 4 Teachers	Grade 7 Teachers	Grade 7 Students
Chinook SD 211	63%	75%	82%	84%
Christ the Teacher RCSSD 212	50%	70%	77%	82%
Conseil des écoles francsaskoises 310	0%	9%	10%	4%
Creighton SD 111	100%	50%	0%	86%
Englefeld Protestant Separate SD 132	100%	100%	100%	100%
Good Spirit SD 204	65%	90%	72%	92%
Holy Family RCSSD 140	67%	86%	86%	100%
Holy Trinity RCSSD 22	88%	90%	89%	92%
Horizon SD 205	83%	93%	89%	86%
Ile a la Crosse SD 112	100%	100%	50%	66%
Light of Christ RCSSD 16	71%	100%	100%	74%
Living Sky SD 202	43%	38%	43%	68%
Lloydminster RCSSD 88	75%	45%	100%	95%
Lloydminster SD 99	30%	44%	43%	84%
North East SD 200	67%	85%	95%	93%
Northern Lights SD 113	47%	73%	82%	68%
Northwest SD 203	60%	90%	86%	55%
Prairie South SD 210	88%	89%	92%	63%
Prairie Spirit SD 206	33%	46%	25%	60%
Prairie Valley SD 208	75%	87%	86%	94%
Prince Albert RCSSD 6	100%	100%	100%	89%
Regina RCSSD 81	73%	63%	33%	59%
Regina SD 4	43%	84%	78%	79%
Saskatchewan Rivers SD 119	63%	90%	87%	88%
Saskatoon SD 13	82%	93%	90%	91%
South East Cornerstone SD 209	50%	73%	42%	63%
St. Paul's RCSSD 20	76%	77%	79%	92%
Sun West SD 207	59%	78%	60%	77%
PROVINCIAL TOTAL	62%	76%	69%	79%
First Nations Schools				
First Nations Schools	8 SCHOOLS	14 SCHOOLS	14 SCHOOLS	26 SCHOOLS

Note. Provincial Total Response rate excludes independent schools and First Nations schools.

Administrator Total Expected = 683

*Expected Number Of Administrators Based On One Administrator Per School With A Grade 4 and/or Grade 7 Classrooms.
(657 @1 Per School Plus Adjustment If More Than One Administrator In School Responded)*

Grade 4 Teachers Expected = 970

Grade 7 Teachers Expected = 1152

Expected Numbers For Grade 4 And Grade 7 Teachers were derived from information provided by 2009 TEL Survey School Division Coordinators

Grade 7 Students Expected = 12070

Grade 7 Students provided by Ministry Of Education Teacher Services

DATA COLLECTION

Data collection occurred over a period of three weeks from May 2 to May 20, 2011. The surveys were made available through the Ministry of Education Blackboard Online Assessment Services. Less than 2% of the students ($n = 178$) responded on paper surveys where no online system was available. About 7% of the administrators ($n = 30$) and 5% of the teachers responded on paper surveys ($n = 38$ for Grade 4 teachers and $n = 38$ for Grade 7 teachers).

A total of 9767 students participated from 490 schools (235 students of 26 First Nations schools and ten Tribal Councils/six independent First Nations, 9532 students of 464 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 20 First Nations schools, and the South region consisted of ten school divisions and eight First Nations schools.

In regards to the survey component that pertained to the treaty education resources, participation was as follows: 434 administrators (eight administrators from First Nations schools), 752 Grade 4 teachers (18 teachers from First Nations schools), and 816 Grade 7 teachers (16 teachers from First Nations schools).

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, 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. Generalization between education systems should be done with caution since the response from First Nations schools was not universal (less than 50% of the student population).

Comparability between the year to year results is strengthened by elements of test equity and commonality; however, measurement error is inevitable as a result of variations between the

test administrations. The 2011 Treaty Essential Learnings Survey was an equivalent form of the previous survey administrations. Even though the forms were constructed using a common table of specifications, differences in item difficulty and in the total test score may occur. Equating procedures were conducted to adjust for these differences in order to eliminate confounding factors in interpretation of yearly change in performance total scores. Equating procedures were limited to total score and not to the level of TEL sub-scores. 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, random variations due to differences in the populations are minimized by the large sample size. However, because identical forms were administered in 2009 and 2010, item exposure and some systemic difference are possible. Therefore, the interpretation of change analysis may need to be tempered for these years.

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 9767 Grade 7 students; 97.6% of the students were from public/separate schools and 2.4% of the students were from First Nations schools. See Table 3 for details. Participation from the First Nations schools was not randomly acquired and low (less than 50% of the student population); consequently, system comparison was not conducted.

Gender representation was equally represented in total and within central and southern regions, (Total male = 50.5%; Total female = 49.5%). In the northern region, there were slightly more male students that responded to the survey, (North male = 55.1%; North female = 44.9%).

In regards to the regions, student participation was proportionate to regional expectations; 56.1% of the student participants were from the central region; 41.3% of the student participants were from the southern region; and, 2.6% of the student participants were from the northern region.

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 (22.1%) self-declared as Aboriginal. Within the First Nations and northern region subsamples, a majority of students self-declared as Aboriginal (96.6% and 85.5%, 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, almost two-thirds of the students (62.1%) perceived Grade 7 as the last time they remembered studying about treaties, followed by about a third of the students (30.8%) that perceived ‘Grade 1 to Grade 6’. The remaining 7.1% did not remember studying about treaties.

When comparing this result to previous survey administrations, there is an indication of an upward shift of the percentage of students that remember studying about treaties from Grade 1 to Grade 7, the 2008 to 2009 increase from 64% to 85%, the 2009 to 2010 increase from 85% to 87%, and the 2010 to 2011 increase from 87% to 93%. 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%, to 13% in 2010, and to 7% in this 2011 administration. This finding provides an indication that more students are receiving learning opportunities related to treaty education.

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

Year	2011	Gender		Self Identified Aboriginal		Study Group			Total
System		Male	Female	Yes	No	Grade 7	Grade 1-6	Not at all	
First Nation	n	120	115	227	8	163	55	17	235
	%	51.1%	48.9%	96.6%	3.4%	69.4%	23.4%	7.2%	2.4%
Public/ Separate	n	4817	4715	1934	7598	5900	2953	679	9532
	%	50.5%	49.5%	20.3%	79.7%	61.9%	31.0%	7.1%	97.6%
Region		Male	Female	Yes	No	Grade 7	Grade 1-6	Not at all	
North	n	141	115	219	37	170	62	24	256
	%	55.1%	44.9%	85.5%	14.5%	66.4%	24.2%	9.4%	2.6%
Central	n	2772	2702	1282	4192	3386	1710	378	5474
	%	50.6%	49.4%	23.4%	76.6%	61.9%	31.2%	6.9%	56.1%
South	n	2024	2013	660	3377	2507	1236	294	4037
	%	50.1%	49.9%	16.3%	83.7%	62.1%	30.6%	7.3%	41.3%
Total	n	4937	4830	2161	7606	6063	3008	696	9767
	%	50.5%	49.5%	22.1%	77.9%	62.1%	30.8%	7.1%	100.0%

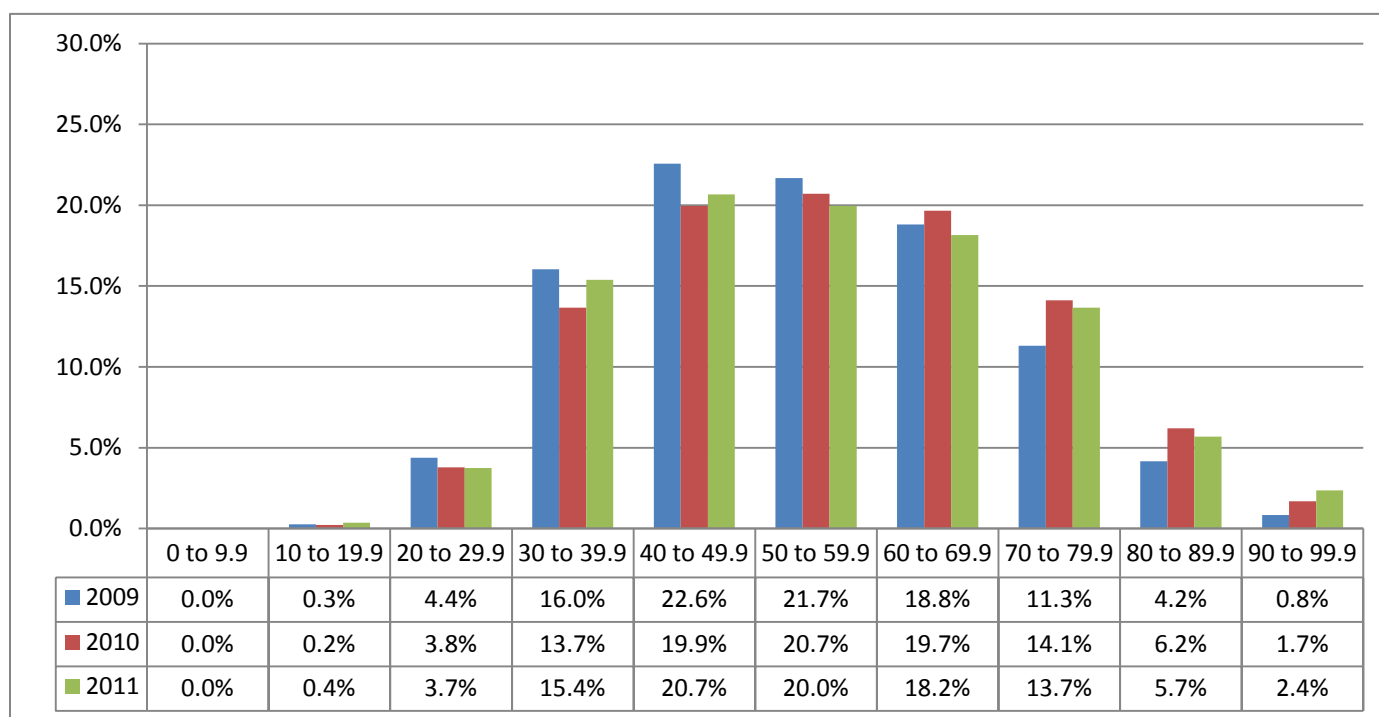
Note. Percentages are presented as proportions across the row by category, except for the last column where percentages are within the column by system and by region.

DISTRIBUTION OF SCORES

It is important to note that total score percentage in this report is based on the equivalent raw score scale rather than weighted score percentage determined by weighting the items differentially. The decision was based on the equating process used and evidence that total raw score correlated with the weighted score almost perfectly in the three years (2011: $r = 0.98$), (2010: $r = 0.98$), and (2009: $r = 0.98$). Following the procedure to determine the equating relationship of the 2011 Treaty Essential Learnings Survey form to the previous 2010 survey, each total raw score was adjusted to the equated total score. On the other hand, the equating process was not conducted at the TEL subscore level; rather, the decision to use the raw subscore percentage for the reporting of the 2011 TEL subscores is supported by the higher association to the equated total score. Due to lower reliability and lack in equating subscores, caution is advised in interpretation of the year to year comparability of TEL subscores.

On average, Grade 7 students' score of understanding treaties was 54.6% which is consistent with, if slightly lower than, the 2010 average score (55.1%) and slightly higher than the 2009 average result (52.6%). Figure 1 illustrates the distribution of percentage of students by score range by year. Within the distribution of the total scores, the 2011 and 2010 distributions indicate a higher percentage of students with scores more than 70, with 21.7% and 22.0% of the students in 2011 and 2010 compared to 16.3% of the students in 2009. Conversely, a lower percentage of students in 2011 (40.2%) and 2010 (37.6%) scored less than 50 as compared to 43.2% of the students in 2009. In 2011, a little more than half of the students (50.4%) scored at or lower than the average percentage score of 54.6%.

Figure 1: Distribution of Percentage of Students by Score Range for 2009, 2010, and 2011



MEAN SCORES

The average 2011 TEL survey score for the total sample was 54.6%. The Treaty Essential Learnings where the group on average had relative strengths and scored higher were TEL1 Treaties at 58.4% and TEL4 Worldview at 57.3%. On the other hand, the Treaty Essential Learnings areas where the group on average had weaknesses were TEL2 Treaty Relationship at 48.6% and TEL6 Contemporary Issues at 50.9%. Table 4 provides an overview of the mean percentage scores for the total group.

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

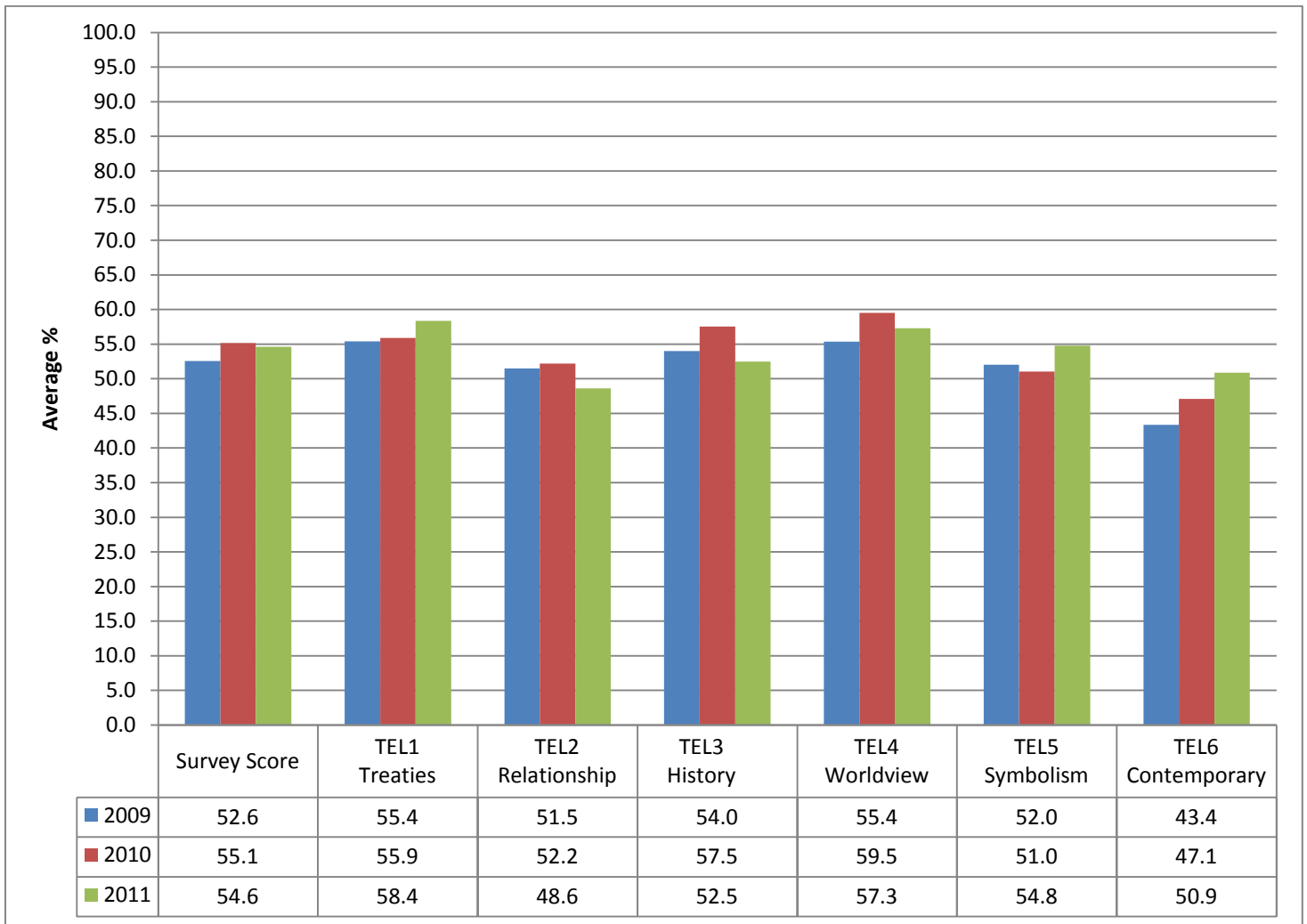
<i>N=9767</i>	<i>Mean%</i>	<i>SE</i>	<i>SD</i>
Survey Score	54.6	0.17	16.7
TEL1 Treaties	58.4	0.23	22.8
TEL2 Treaty Relationship	48.6	0.26	25.6
TEL3 History	52.5	0.23	22.4
TEL4 Worldview	57.3	0.21	21.0
TEL5 Symbolism	54.8	0.28	27.3
TEL6 Contemporary Issues	50.9	0.24	23.6

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 comparisons of the average student survey subscores over the past 3 years are illustrated in Figure 2. Worldview (TEL4) continues to be an area of relative strength for most students. While Treaty Contemporary Issues (TEL6) continues to be a weak area for most students, there is a trend for continued improvement over the years.

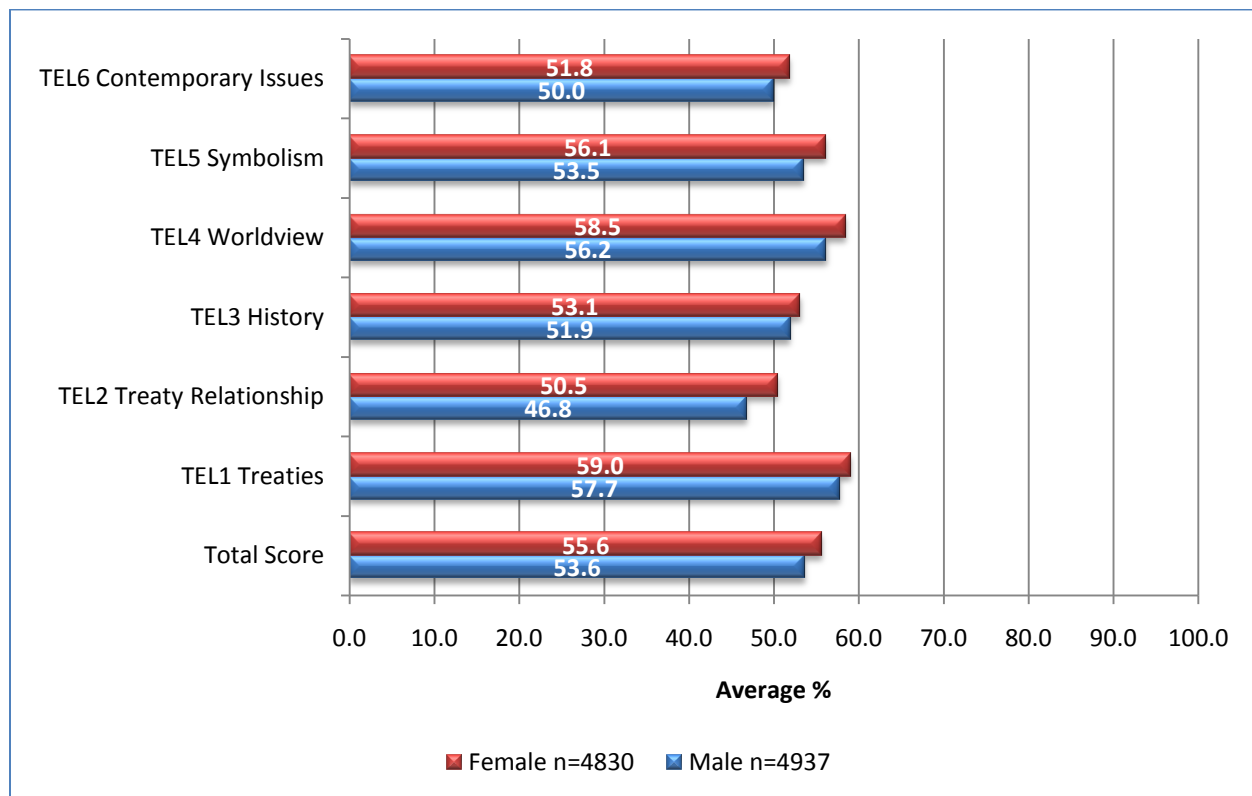
Figure 2: Average Score and TEL SubScores: 2009, 2010, and 2011



GENDER DIFFERENCES

Although there was a statistically significant difference, average total score for females was similar to the average total score for males (55.6% versus 53.6%) from a practical significance perspective. Females on average scored higher statistically in the six TELs: TEL1 Treaties at 59.0% to 57.7%, 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%, TEL5 Symbolism at 46.5% to 42.5%, and TEL6 Contemporary issues at 51.8% to 50.0%. Again, practical significance is questionable as the effect size in all cases would be interpreted as trivial. 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.

Figure 3: Gender Differences

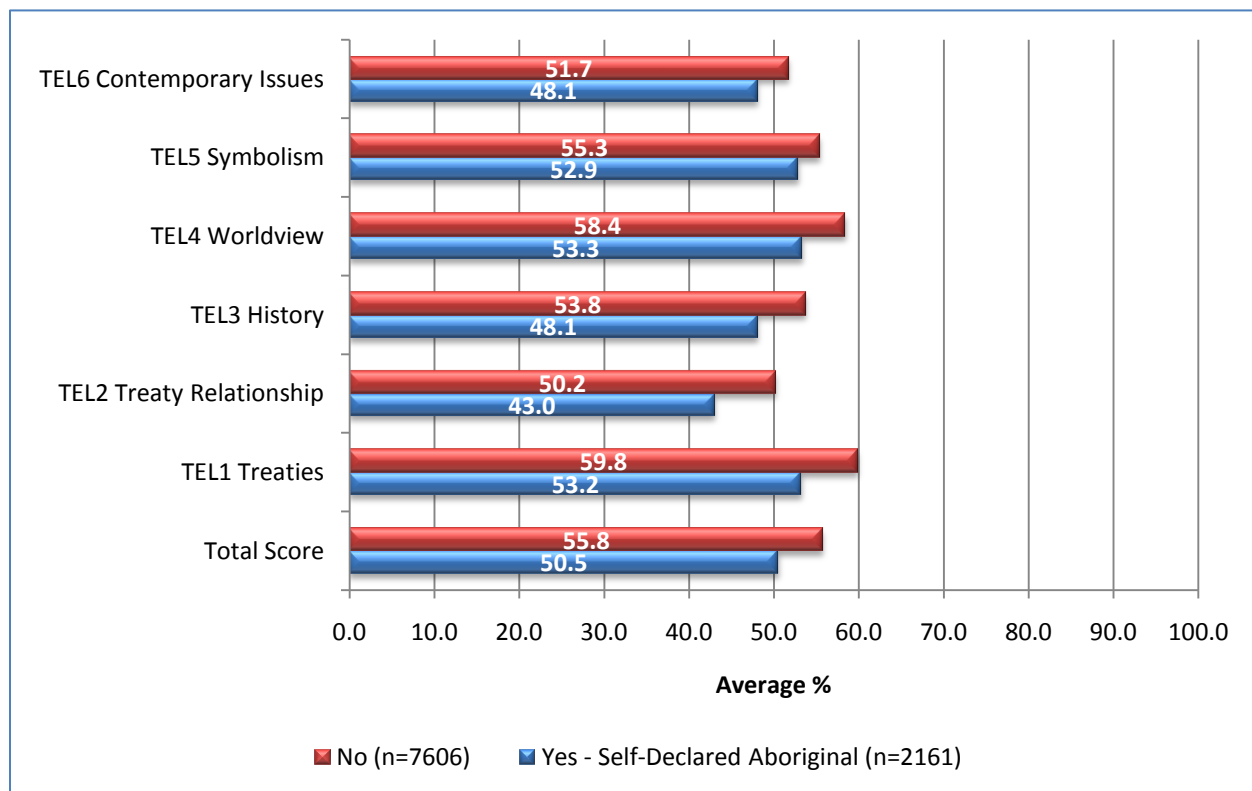


Average total scores for the female subgroup were slightly higher than the male subgroup each of the three years of administering the survey. See Figure 7 for average Total score comparisons by year.

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', 50.5% versus 55.8% for those who responded 'no'. Additionally, 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.

Figure 4: Aboriginal/Non-Aboriginal Differences

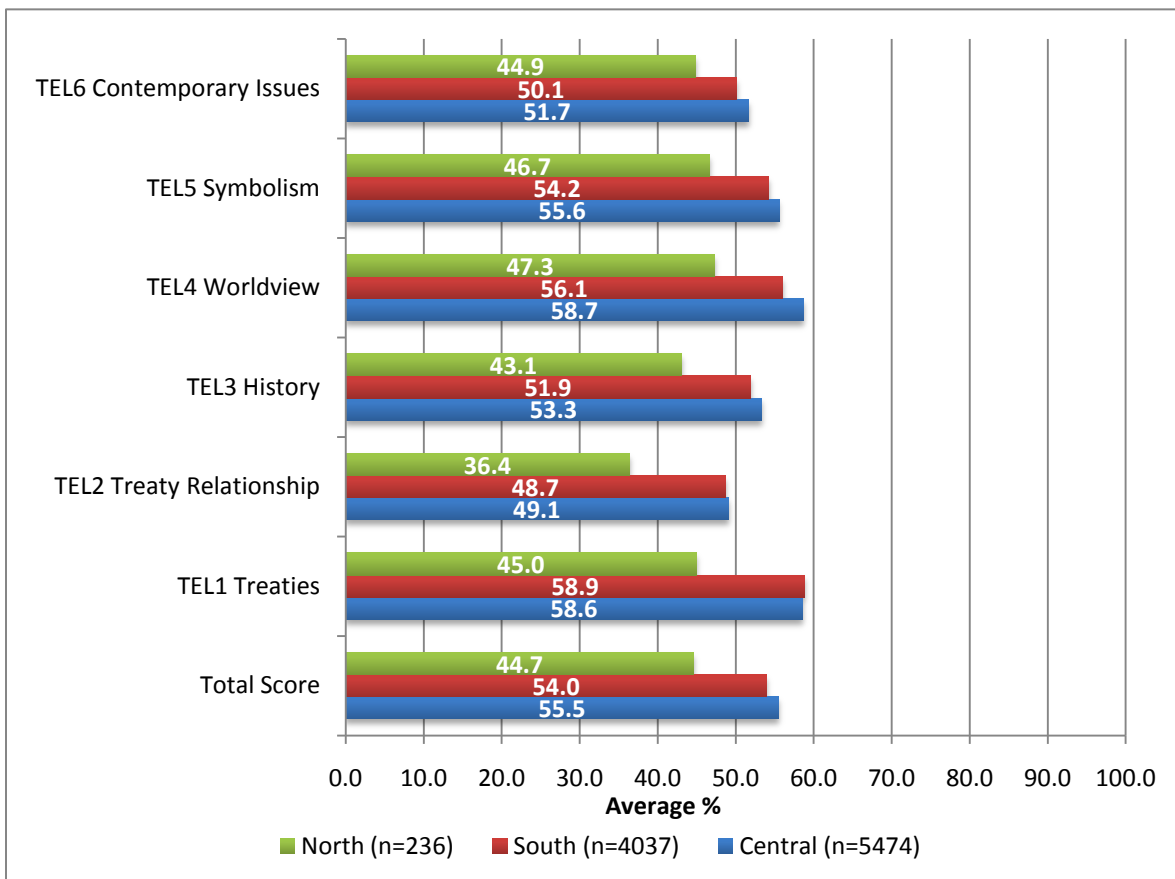


The 2011 findings for subgroups defined by Aboriginal self-declaration were notably similar to the 2010 and 2009 results in that, on average, those who self-declared as Aboriginal had lower scores. The average total score of those who self-declared as Aboriginal showed an increase from 2009 and a decrease from 2010 whereas those who responded 'no' showed a similar average score as in 2010. See Figure 7 for Total score comparisons by year.

REGION DIFFERENCES

Average scores by region are illustrated in Figure 5. On average, the North region scored lower than the regional counterparts, North region average total score 44.7% versus the South region at 54.0% and the Central region at 55.5%. Central and South regions' average scores were similar except for TEL4 Worldview with average subscore in Central region (58.7%) as statistically higher than the South region (56.1%). ANOVA table summary by region is presented in Appendix D, along with measures of effect size.

Figure 5: Region Differences



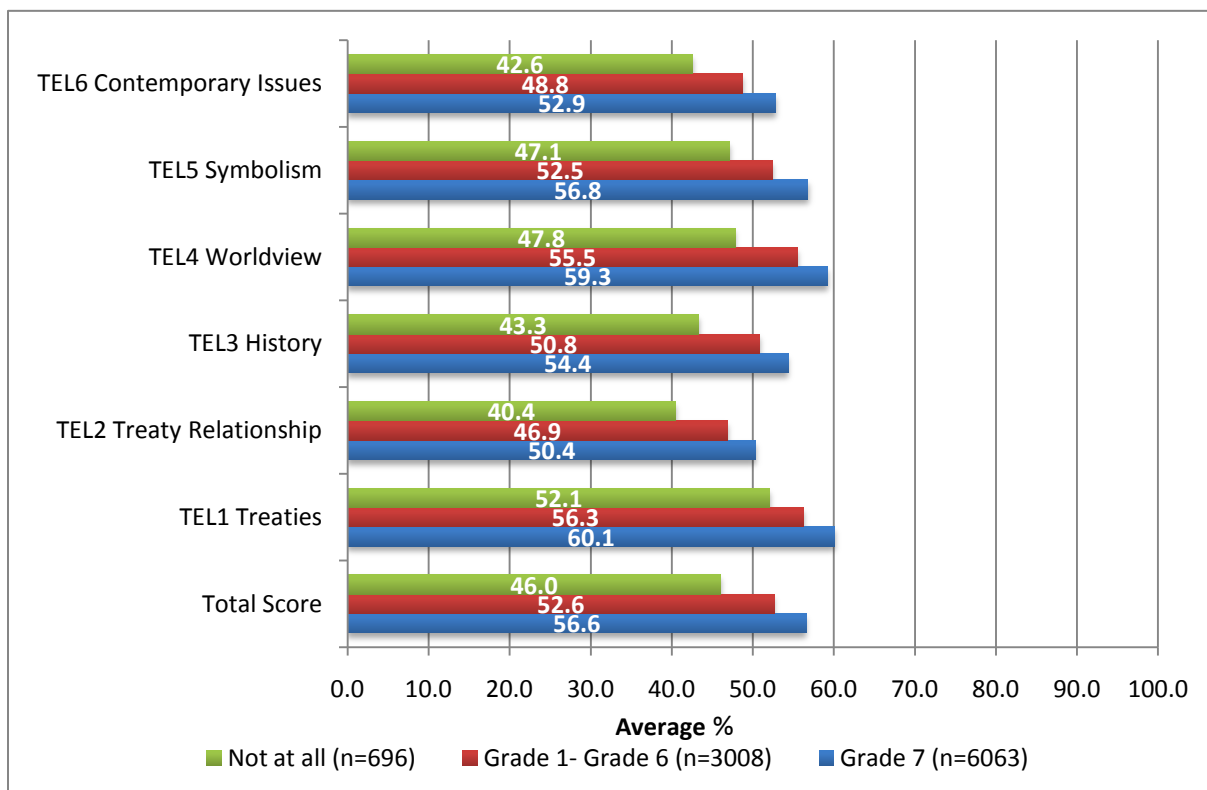
While regions started out with similar average scores in 2009, the Central region has shown growth in 2010 and 2011, South region showed growth in 2010 and a slight loss in 2011, and the North region showed a loss in 2010 and 2011. See Figure 7 for Total score comparison by year.

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’

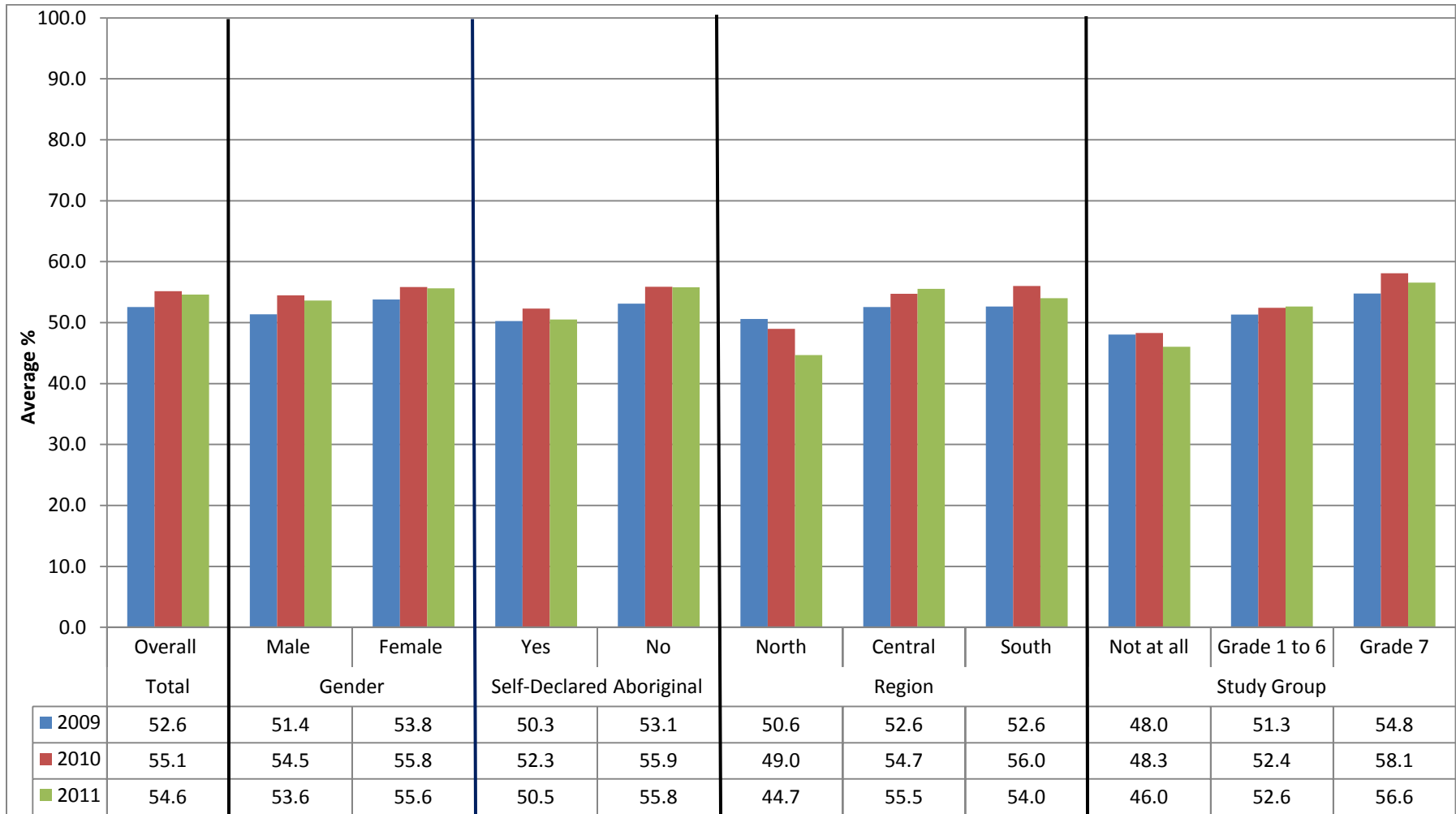
There were differences between average total scores and all average subscores between all the subgroups within their perception of when they last remembered studying information on treaties. The ‘Grade 7’ study subgroup average scores were highest, followed by the ‘Grade 1 to 6’ study subgroup, and further decreasing for the ‘Not at all’ study subgroup. The average survey total scores for the three subgroups were 56.6% for the ‘Grade 7’ study subgroup, 52.6% for the ‘Grade 1 to 6’ study subgroup, and 46.0% 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.

Figure 6: Study Group Differences



Study group differences in the 2011 Treaty Essential Learnings survey were significant. Similar to the 2010 and 2009 survey results, the student group that remembers studying about treaties is associated with more successful outcomes. See Figure 7.

Figure 7: Average Total Score comparison by Demographic for 2009, 2010, and 2011



CHAPTER THREE – TREATY EDUCATION RESOURCES SURVEY RESULTS

ADMINISTRATOR AND TEACHER DESCRIPTIVES

Survey responses were received from 434 administrators, 725 Grade 4 teachers, and 816 Grade 7 teachers. Response rates from expected numbers submitted were 62%, 76%, and 69% respectively. About 98% of the respondents represent the Saskatchewan provincial public and separate schools while 2.0% of the administrators and teachers represent the First Nations schools. Overall, a little more than half of the administrators and teachers were from the Central region and about 45% were from the South region. About 3% of the administrators, Grade 4 teachers, and Grade 7 teachers were from the North region. About one-fifth of the Grade 4 Teachers, one-third of the Grade 7 Teachers, and one-half of the administrators were male.

In the South and Central regions, less than 12% of the administrators and teachers had declared themselves as Aboriginal, ranging from 3.1% of the administrators in Southern region to 11.6% of the Grade 7 teachers in the Central region. In the North region, about 35% of the Grade 4 teachers and Grade 7 teachers had self-declared as Aboriginal compared to 46% of the administrators. 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

2011		Total			Self Declared Aboriginal					
		Admin	Gr4T	Gr7T	Administrator		Grade 4 Teachers		Grade 7 Teachers	
System					Yes	No	Yes	No	Yes	No
<i>First Nations</i>	n	8	18	16	5	3	16	2	15	1
	%	1.8%	2.4%	2.0%	62.5%	37.5%	88.9%	11.1%	93.8%	6.3%
<i>Public/ Separate</i>	n	426	734	800	27	399	64	670	67	733
	%	98.2%	97.6%	98.0%	6.3%	93.7%	8.7%	91.3%	8.4%	91.6%
Region										
<i>North</i>	n	13	23	20	6	7	8	15	7	13
	%	3.0%	3.1%	2.5%	46.2%	53.8%	34.8%	65.2%	35.0%	65.0%
<i>Central</i>	n	225	411	439	20	205	46	365	51	388
	%	51.8%	54.7%	53.8%	8.9%	91.1%	11.2%	88.8%	11.6%	88.4%
<i>South</i>	n	196	318	357	6	190	26	292	24	333
	%	45.2%	42.3%	43.8%	3.1%	96.9%	8.2%	91.8%	6.7%	93.3%
Total		434	752	816	32	402	80	672	82	734
	%	100%	100%	100%	7%	93%	11%	89%	10%	90%

Note. Percentages are presented as proportions down Total columns and across the row by Self-Declared category within each subgroup.

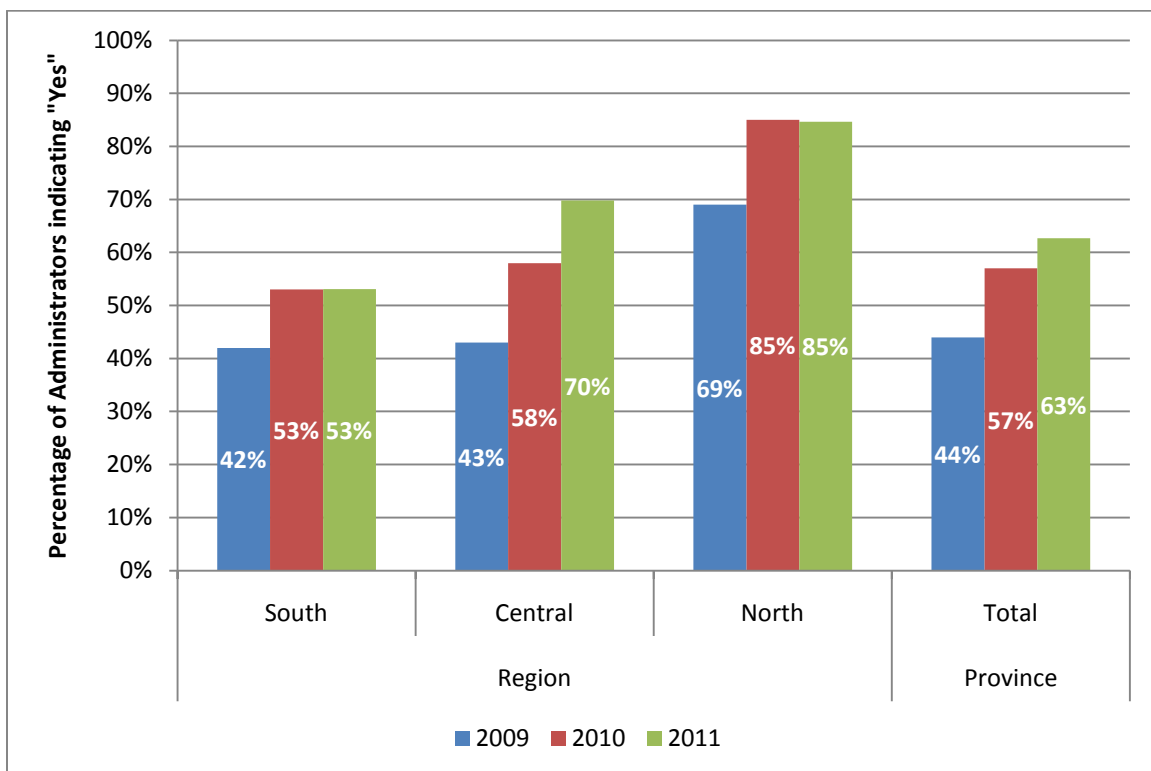
MANDATORY TREATY EDUCATION

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

Almost two-thirds (63%) 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 an increase from the 44% result in 2009 and 57% in 2010, and indicates a continued growth since the introduction of mandatory K-12 Treaty education in September of 2008.

Since the 2010 survey, growth is noted primarily from administrators’ responses in the Central region, from 58% to 70%. The percentage of administrators with treaty education as part of the school’s learning improvement plan from the South (53%) and North (85%) regions were similar to 2010. 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

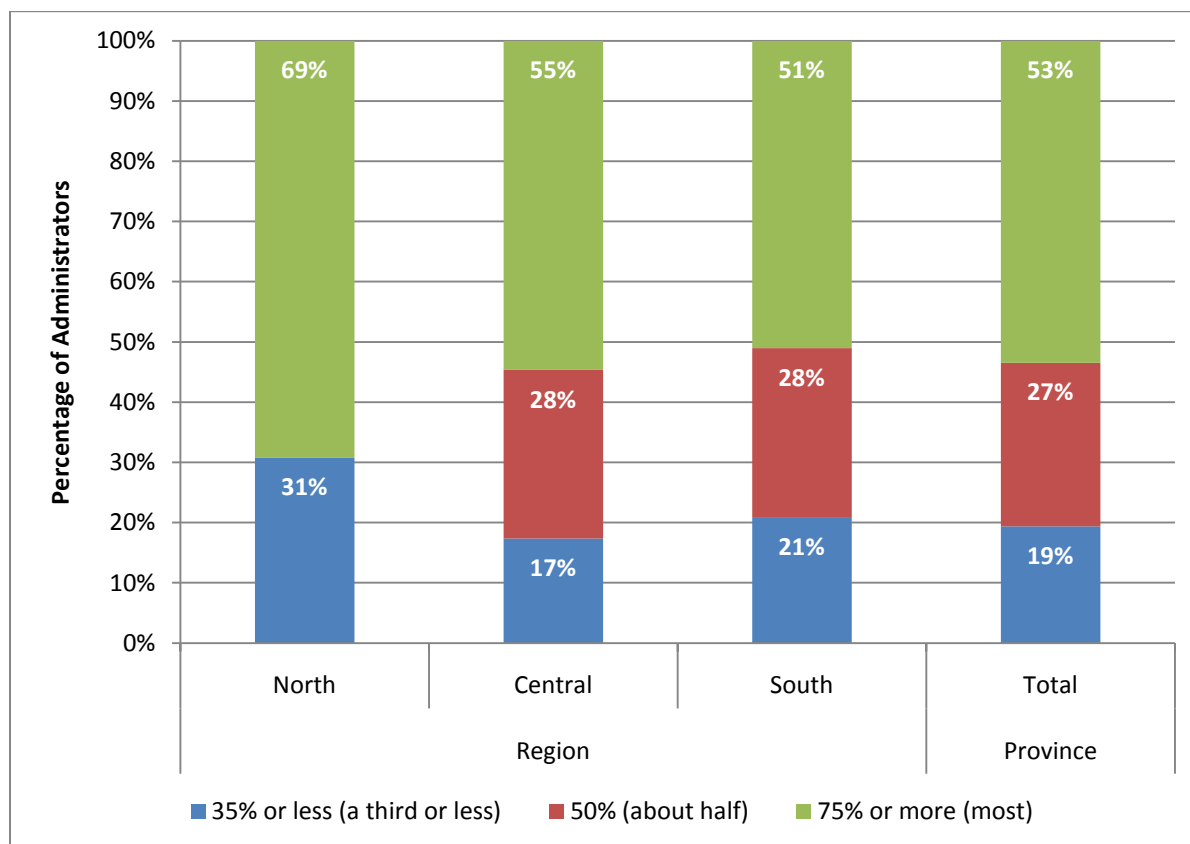


PERCENTAGE OF TEACHERS TEACHING TREATIES

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

In total, a little more than half (53%) of the administrators indicated that most of their teachers in their school show evidence of teaching treaties. Similar to 2010 results, in both the South and Central regions, around three-quarters of the administrators had indicated that about half or more of the teachers show evidence of teaching about treaties versus around two-thirds of the administrators in the North region². Results are illustrated in Figure 9.

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



²Note: A small number (13) of administrators responded from North region in comparison to 434 administrators overall.

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 school³. 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.*”

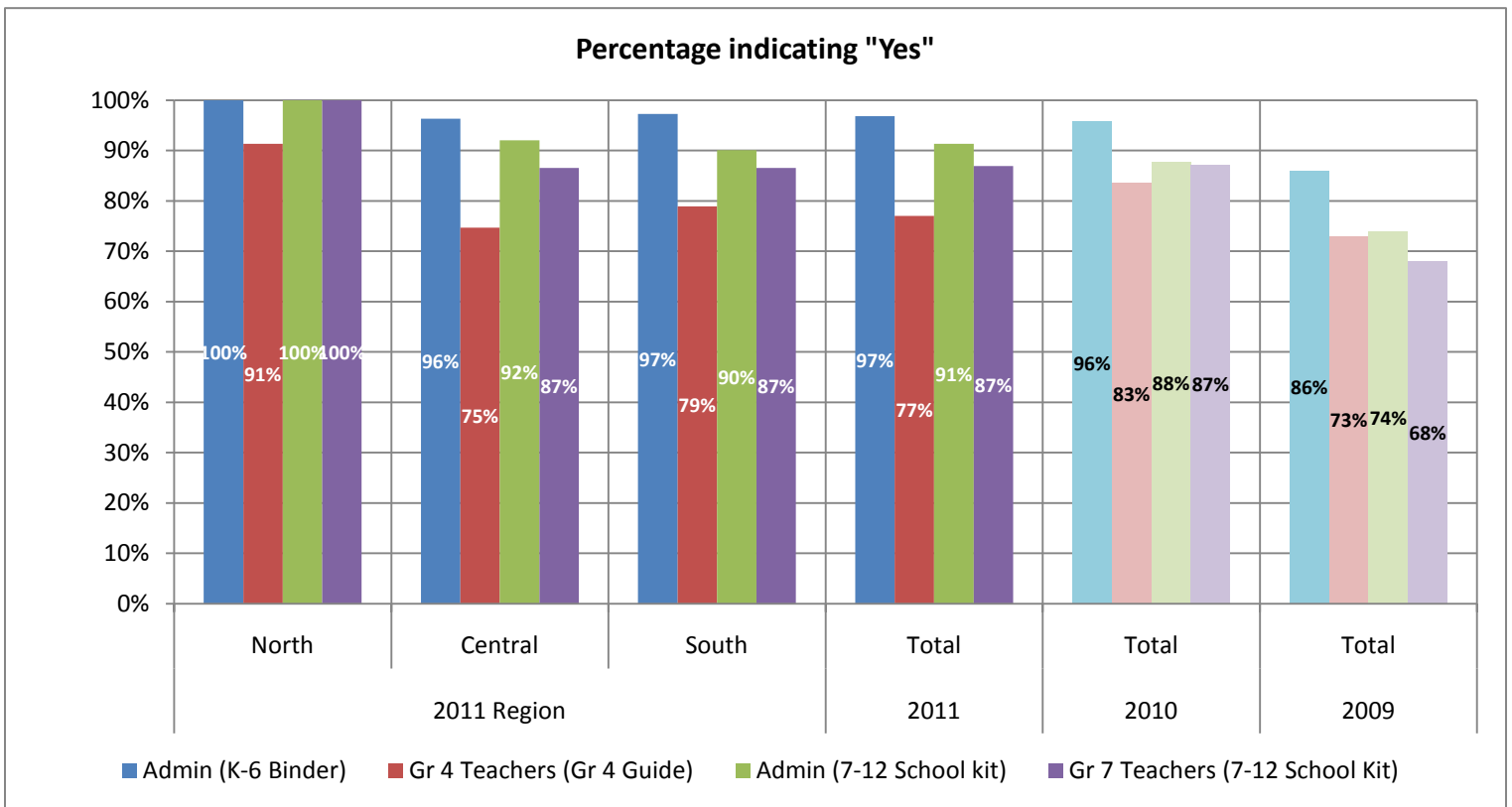
A high percentage of the respondents in total and within regions indicated they received the OTC resource materials (97% of 412 administrators applicable to receipt of K -6 resources, 77% of Grade 4 teachers to the receipt of their OTC Grade 4 resource guide, 87% of the Grade 7 teachers, and 92% of corresponding 392 school administrators to 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 2011 survey with a comparison to overall in 2010 and 2009.

³ 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). One-quarter of the Grade 4 teachers from the Central and South regions either did not or did not know that they received the Grade 4 OTC resource guide. Almost all the administrators and a large majority of the Grade 7 teachers were in agreement that the school received the OTC resources. The 2011 results are similar to 2010 and show maintained growth from 2009.

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



Note. 2011 Survey results are in darker shade by Region and Respondent Group as well as by Total Province by Respondent Group while 2010 and 2009 Survey results are in lighter shade by Total Province by Respondent Group. In the 2009 survey, all 534 administrators responded as ‘Does not apply’ option was not available.

ACCESSIBILITY OF OTC RESOURCES

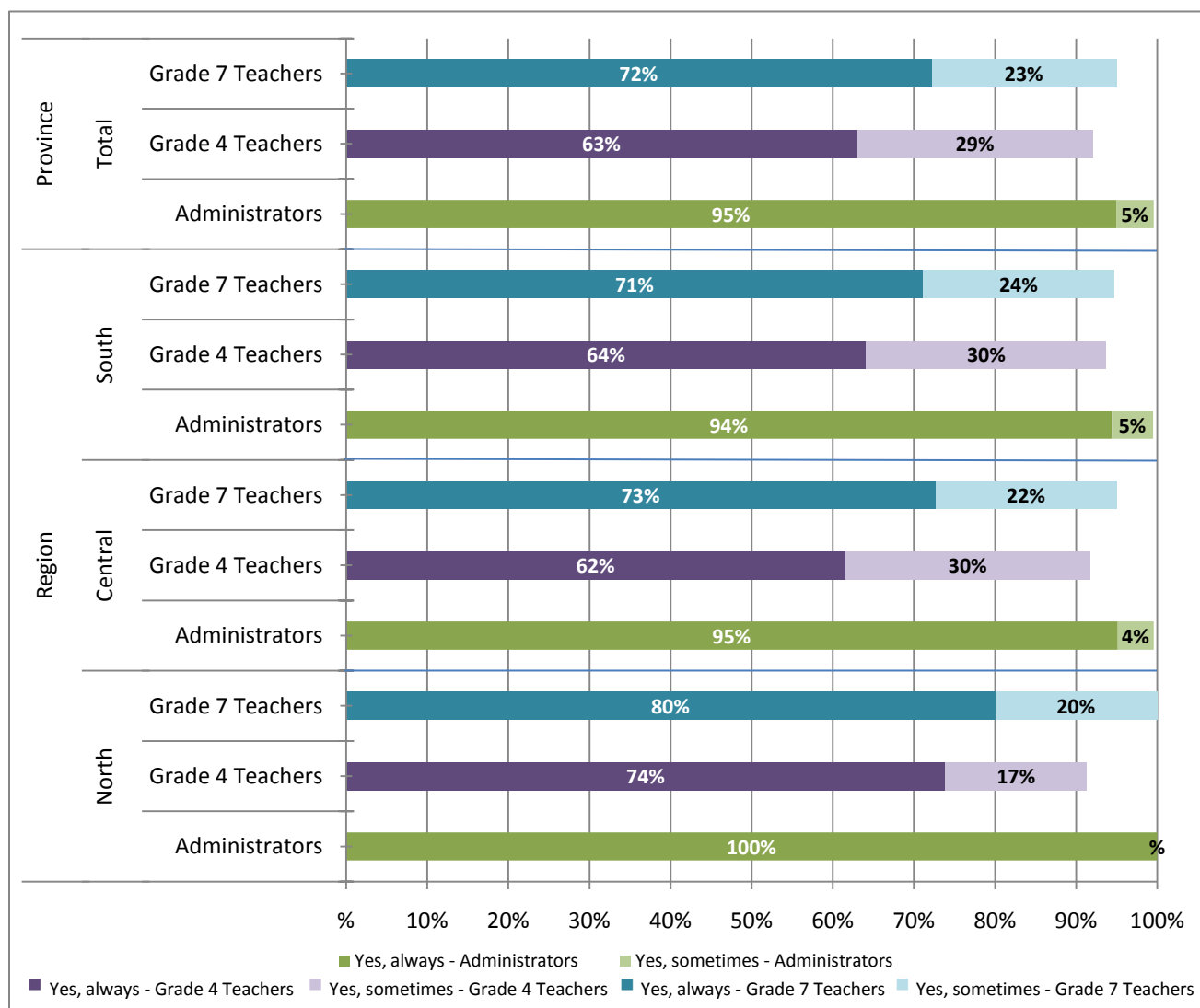
Administrators were asked to rate the statement: *'The OTC 'Teaching Treaties' resource materials are accessible to all teachers in the school.'* while Grade 4 teachers were asked to rate the statement: *'I have access to other OTC Teaching Treaty resource materials.'* and Grade 7 teachers rated the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

A large majority of administrators reported high levels of accessibility ('always' ranged from 94% in the South to 100% in the North) while both Grade 4 teachers and Grade 7 teachers were slightly less positive. While 92% of the Grade 4 teachers and 95% of the Grade 7 teachers indicated at least some degree of accessibility to treaty education resource materials, a higher percentage of Grade 7 teachers indicated 'always' accessible (ranging from 71% in the South region to 80% in the North region) versus the Grade 4 teachers ('always' ranging from 62% in the Central region to 74% in the North region).

Although a small percentage overall, 8% of Grade 4 teachers and 5% of Grade 7 teachers indicated that OTC materials were not accessible. This lack of accessibility to materials was not reflected in the administrators' responses. See Figure 11.

The 2011 findings indicated a similar pattern to 2010. A slight growth was noted in that more than 90% of all subgroups indicated accessibility to the resources. 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



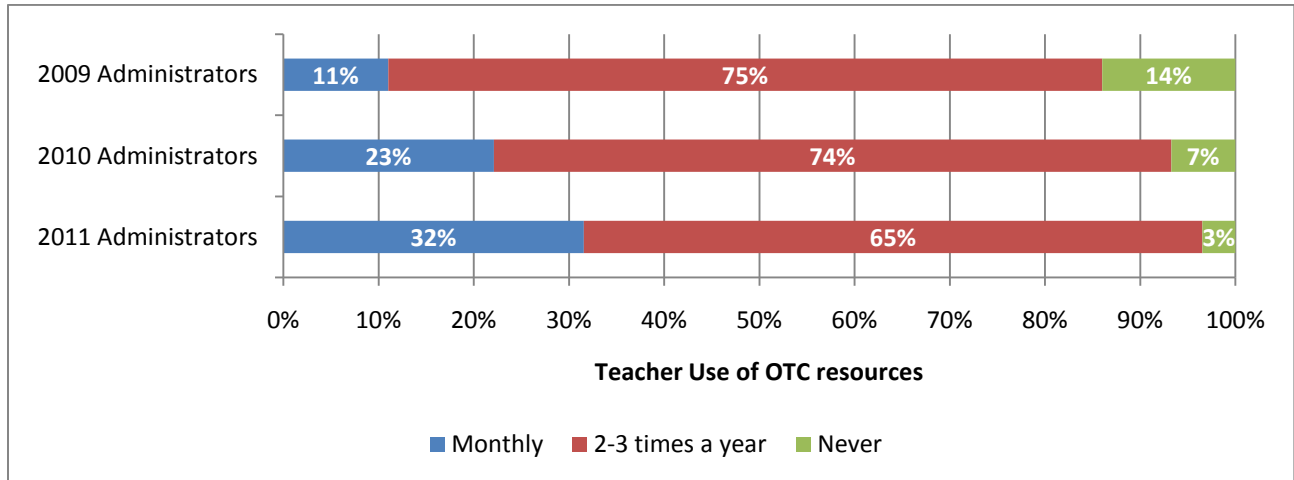
USE OF RESOURCES

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 95% in the South region to 100% in the North region. Almost a third of the Central and South region administrators reported their teachers use the resources monthly. Only 3% of the administrators reported 'no use' of the OTC resource materials which

has continued to decrease over the three years (from 14% in 2009 and 7% in 2010). See Figure 12.

Figure 12: Administrator Rating of Teacher Use of OTC Resources, 2009, 2010, and 2011

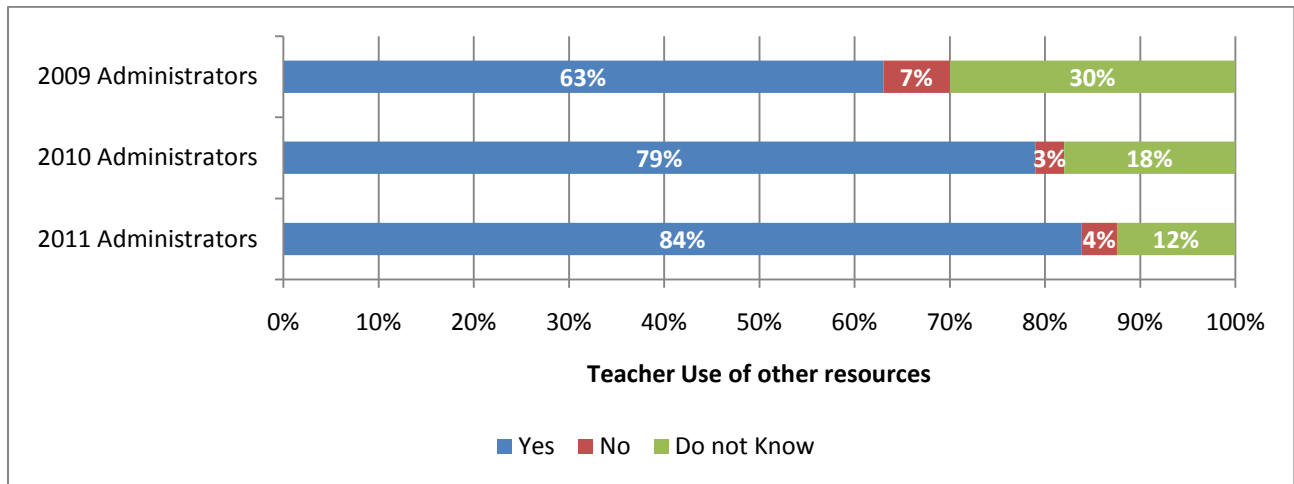


Administrators were asked their perception about whether their teachers use other resources to teach treaties: *‘The teachers in the school use other resource materials to teach treaties.’* The options were ‘yes’, ‘no’, or ‘do not know’.

A large majority (88%) of the administrators indicated that their teachers use other materials to teach treaties. There were 12% of the administrators that indicated ‘do not know’, ranging from 0% in the North region to 15% in the Central region.

In comparison to the previous survey results, administrators continue to be more confident of teacher use of other resources for teaching about treaties. The percentage of administrators’ uncertainty as to whether teachers use other resources continued to decrease from 30% in 2009 to 12% in 2011. See Figure 13.

Figure 13: Administrator Rating of Teacher Use of Other Resources, 2009, 2010, and 2011



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.'*

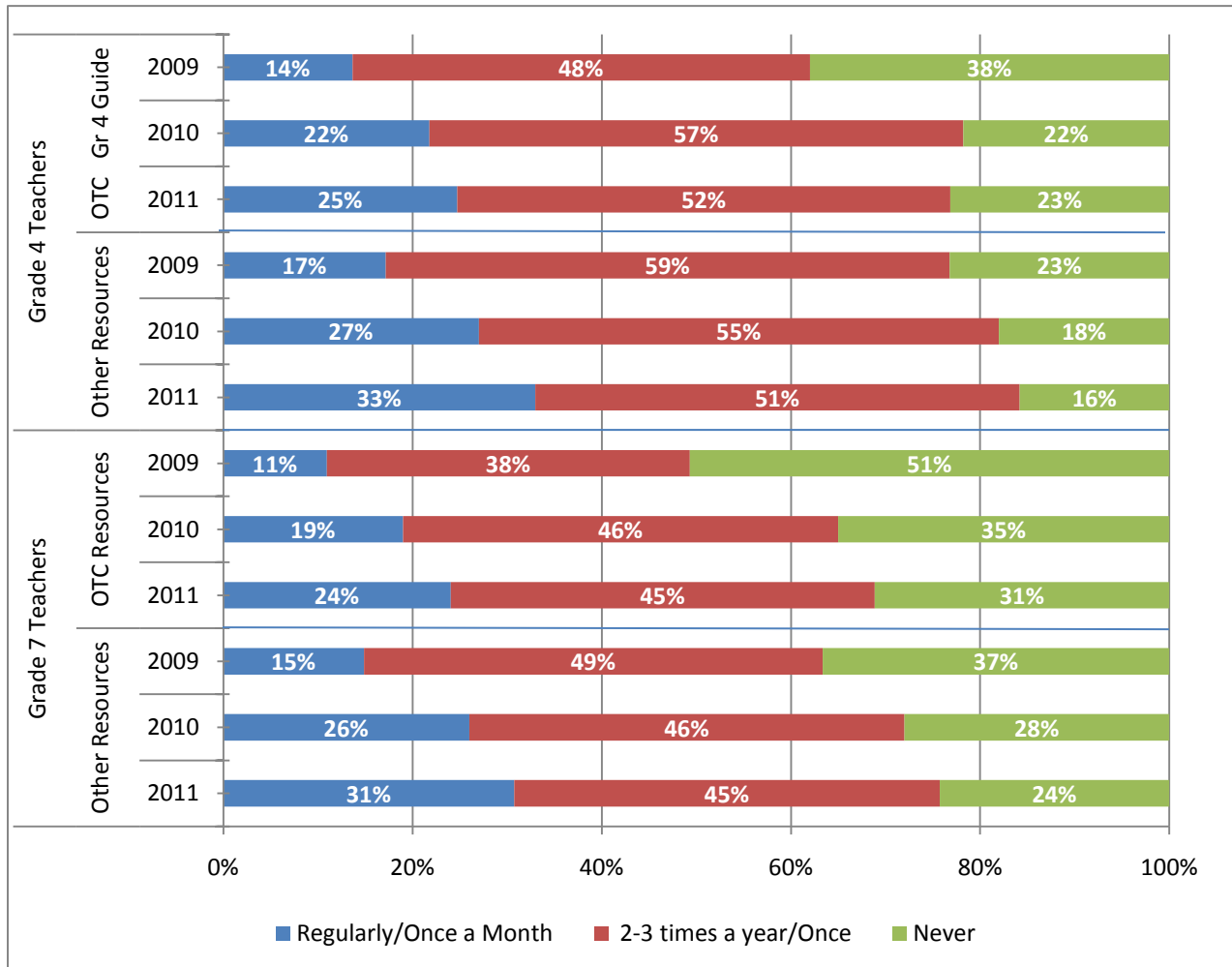
Overall, 77% of the Grade 4 teachers and 69% of the Grade 7 teachers reported using the OTC materials more than once. One-quarter of the Grade 4 teachers (23%) and about one-third of the Grade 7 teachers (31%) reported never using the materials. A higher percentage of the Grade 4 teachers (96%) and Grade 7 teachers (100%) in the North region 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, 16% of the Grade 4 teachers and 24% 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 83% in the Central region to 100% in the North region. The percentage of Grade 7 teachers that used other resources more than once was similar in both the Central region (75%) and South region (76%) versus slightly more in the North region (85%).

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 and other treaty resource materials since the 2009 Treaty Essential Learnings Survey along with a continued decrease in the percentage of administrators and teachers indicating ‘Never’ used as illustrated in Figure 14.

Figure 14: Teacher Use of Resources: 2009, 2010, and 2011



SOME CHARACTERISTICS OF TEACHER THAT INDICATED 'NEVER' TO USE OF RESOURCES

As the use of the treaty education resource materials has increased from the 2009 Treaty Essential Learnings Survey to the 2011 survey, the lack of use of these materials is slowly decreasing. 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 that indicated that they did not use the resource materials (n=239), 61% (n=145) had indicated that their Grade 7 teaching assignment was departmentalized and DID NOT teach treaty-related subject areas. This result is similar to the 2010 finding. Of these 145 Grade 7 teachers, 47% indicated that they required training in teaching about treaties. Further investigation would be helpful to clarify what subject areas are not treaty-related and the implication of teaching assignment to that perception. Further investigation could shed light on how decisions are made at the school level on who would provide treaty education. A further examination was conducted of the Grade 7 teachers that did not use the materials AND DID have teaching assignment either all subject areas or departmentalized with treaty-related subjects. Eleven percent of this subgroup (n = 3 out of 27) had also indicated no accessibility of resource materials; 78% of these Grade 7 teachers (n = 21) indicated that they had not received training; and, 67% of this subgroup (n = 18) agreed that they required training.

Of the Grade 4 teachers (n = 97) that indicated they did not use the resource materials, 26% (n = 25) had no accessibility to resource materials while 74% (n = 72) indicated they did not receive training in teaching about treaties, and 54% (n = 52) agreed 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, 5% of the administrators and 3% of the teachers disagreed that the OTC resources support the curriculum goals. A large majority of the administrators (86%) and about two-thirds of the teachers (69% Grade 4 and 60% Grade 7) 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.

2011 results are notably similar to 2010 survey results which show an increase since 2009. See illustration in Figure 16 for comparison of agreement by year.

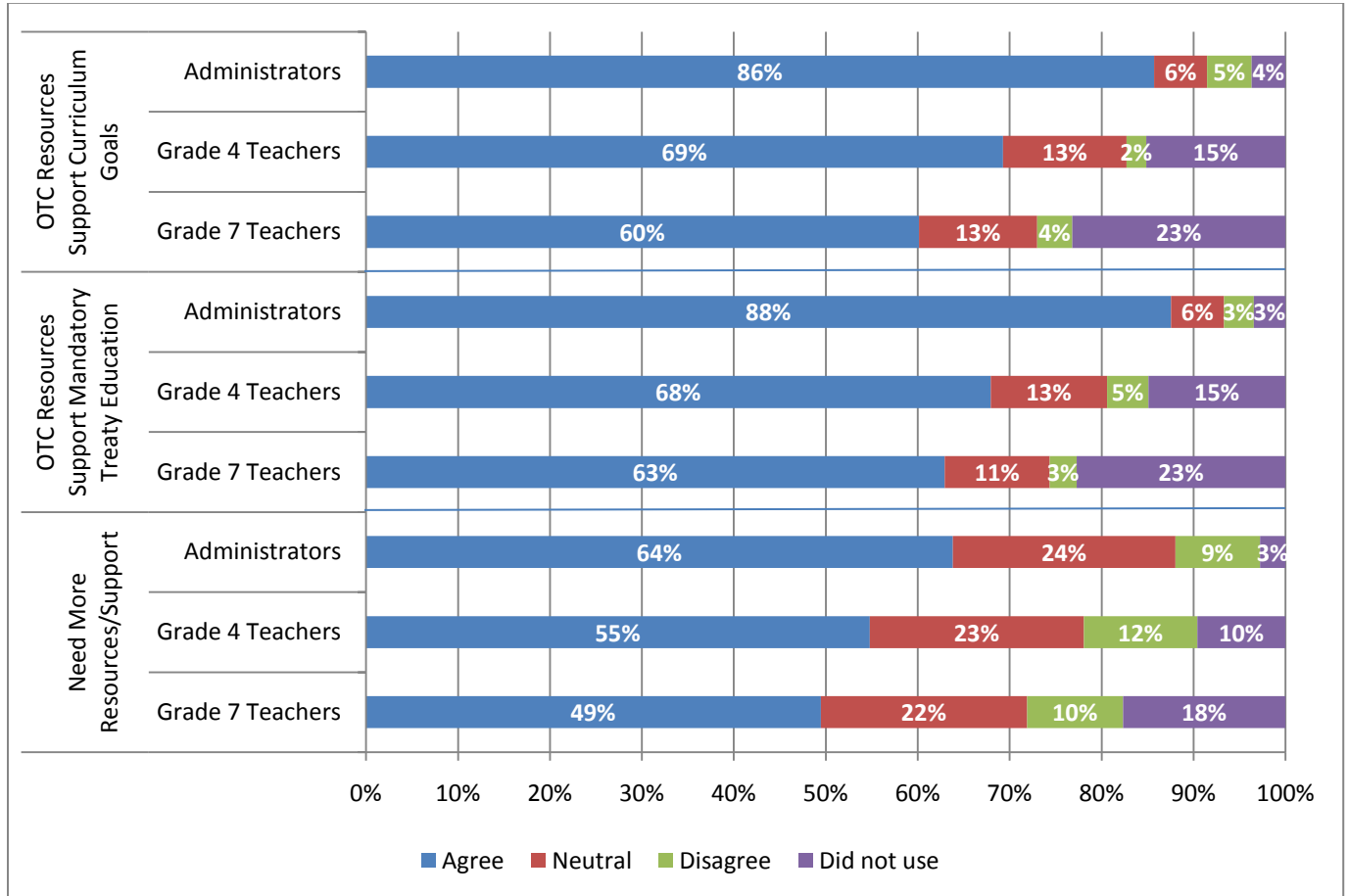
MANDATORY TREATY EDUCATION

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 (88%) and about two-thirds of the teachers agreed (68% of the Grade 4 teachers and 63% 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.

2011 results are notably similar to 2010 survey results. Along with a slight 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.

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



NEED FOR RESOURCES

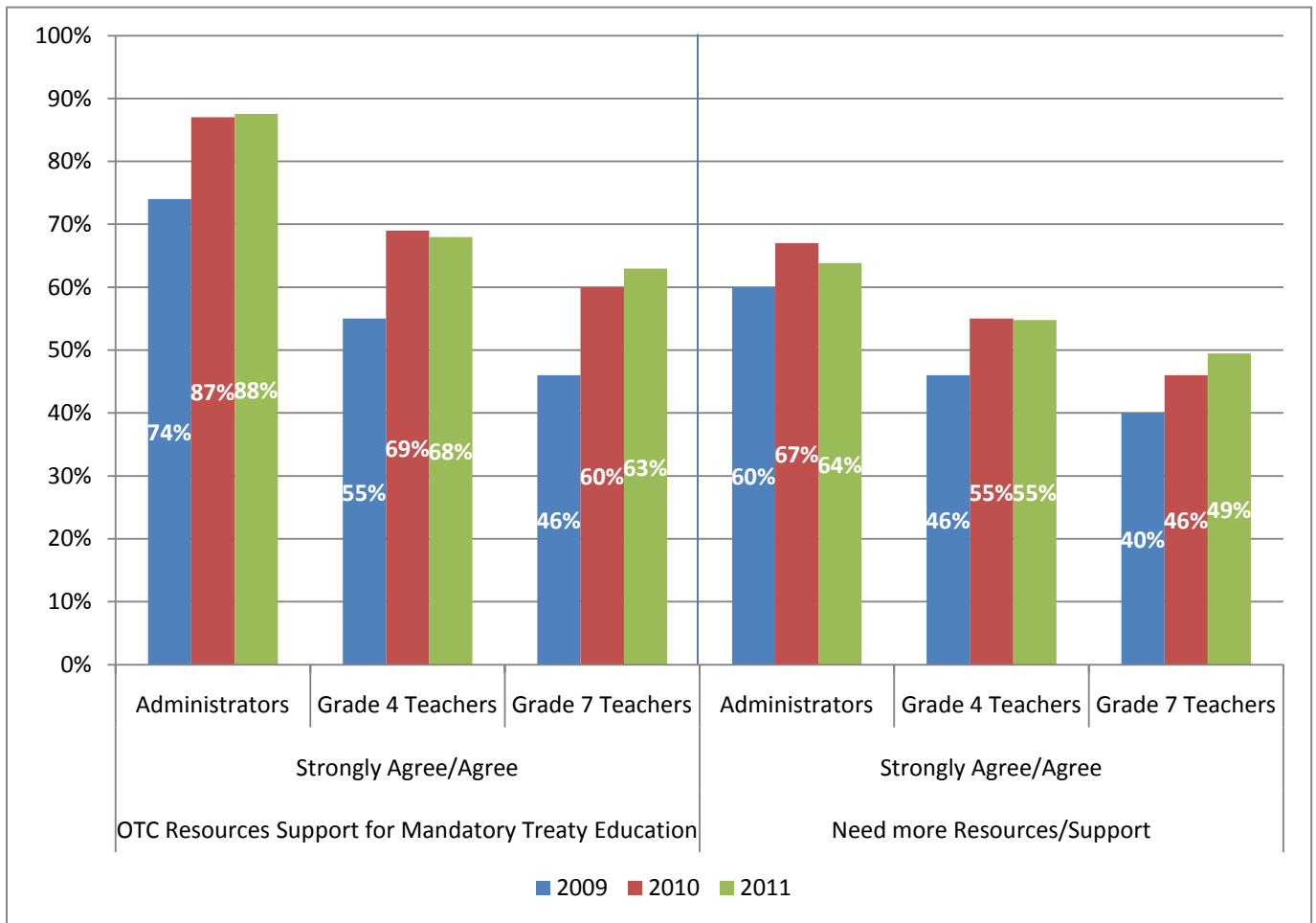
Administrators were asked to rate the statement: *“Teachers in my school require more resources/support to help with their teaching about treaties.”*. The Grade 4 and Grade 7 teachers were asked to rate the statement: *“I require more resources/support to help me with my teaching about treaties.”*

A majority of the administrators and teachers would agree there is a need for more resources/support to help with teaching treaties: 64% of the administrators, 49% 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: about 10% of the administrators and teachers.

See Figure 15 for results by respondent group. See Appendix F for table of results by region and by respondent group.

The 2009 to 2011 comparison is illustrated in Figure 16. 2011 are similar to 2010 responses to this item. 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, 2010, and 2011



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 15% of the Grade 4 teachers and 23% of the Grade 7 teachers) were excluded from this portion of the analysis⁴.

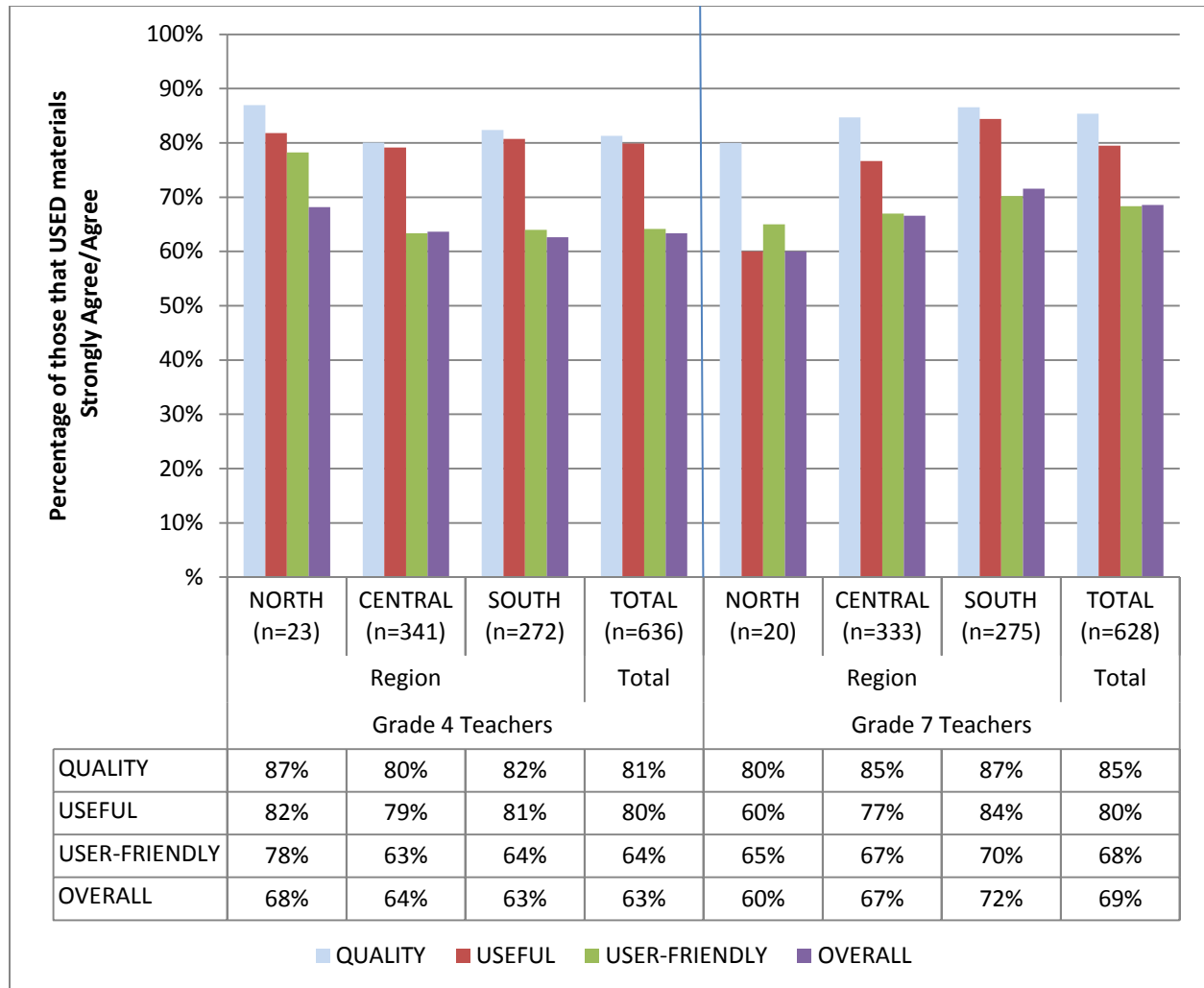
Of the Grade 4 teachers and Grade 7 teachers that indicated that they used the OTC resource materials, two-thirds of the teachers were satisfied with the materials and about 20% indicated a neutral response. For overall satisfaction, a small percentage (13%) of the teachers indicated they were not satisfied.

A large majority of the teachers were in agreement that the resources provide quality content information, ranging from 80% to 87% within the regions. Overall, 80% of the teachers agreed that the resources are useful for teaching about treaties. In comparison, two-thirds of the teachers 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 remarkably similar to 2010 survey results. Overall satisfaction with OTC resource materials continues to be rated favourably by about two-thirds of the teachers. A larger percentage of the Grade 4 and Grade 7 teachers rated the quality and usefulness of the resources favourably, (76% in 2009, 82% in 2010, and 81% in 2011), as compared to two-thirds of the teachers with a favourable rating of user-friendliness, (67% in 2009, 66% in 2010, and 66% in 2011).

⁴ In 2009 and 2010, a greater number of teachers indicated that they did not use the resources and were excluded from the analysis on satisfaction (2009: about 30% of the Grade 4 teachers and 40% of the Grade 7 teachers; 2010: about 20% of the Grade 4 teachers and 30% of the Grade 7 teachers).

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



TRAINING

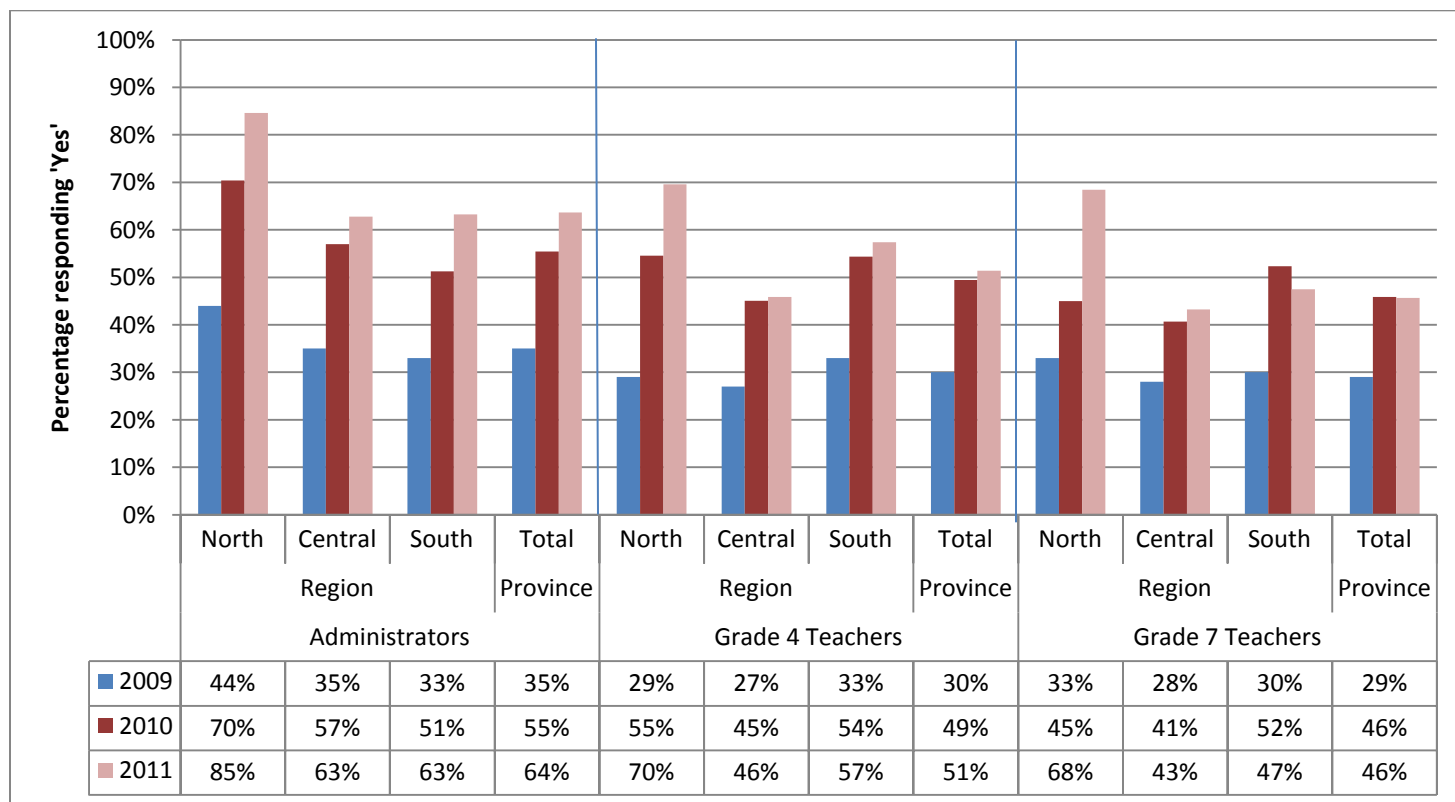
RECEIVED TRAINING

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

About two-thirds of the administrators and approximately half of Grade 4 and Grade 7 teachers indicated that they had received training, 64%, 51%, and 46%, respectively. Figure 18 illustrates the percentage of respondents that responded affirmatively by region and by year.

Most growth in receipt of training is noted in the administrators overall and by region. The percentage of Grade 4 teachers has increased slightly in the regions and overall whereas the Grade 7 teachers is similar to the 2010 overall result. Note the yearly comparison by respondent group and region as illustrated in Figure 18.

Figure 18: Received Treaty Education Training by Administrators and Teachers: 2009, 2010 and 2011

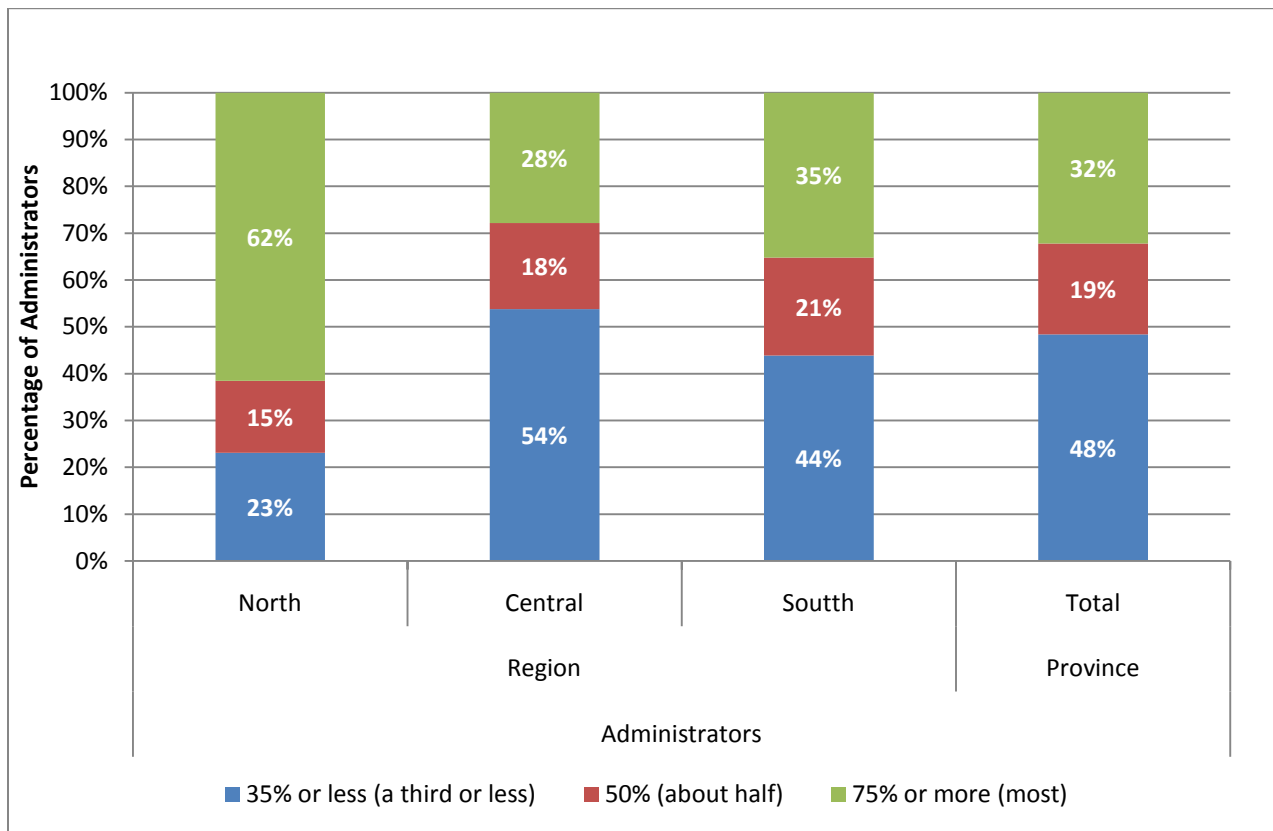


PERCENTAGE OF TEACHERS THAT RECEIVED TRAINING FROM ADMINISTRATORS' PERSPECTIVE

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

Overall, 48% of the administrators indicated that 'a third or less' of their teachers received training, ranging from 23% of the administrators from the North region to 54% 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. This finding is similar to 2010 and 2009 survey results.

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



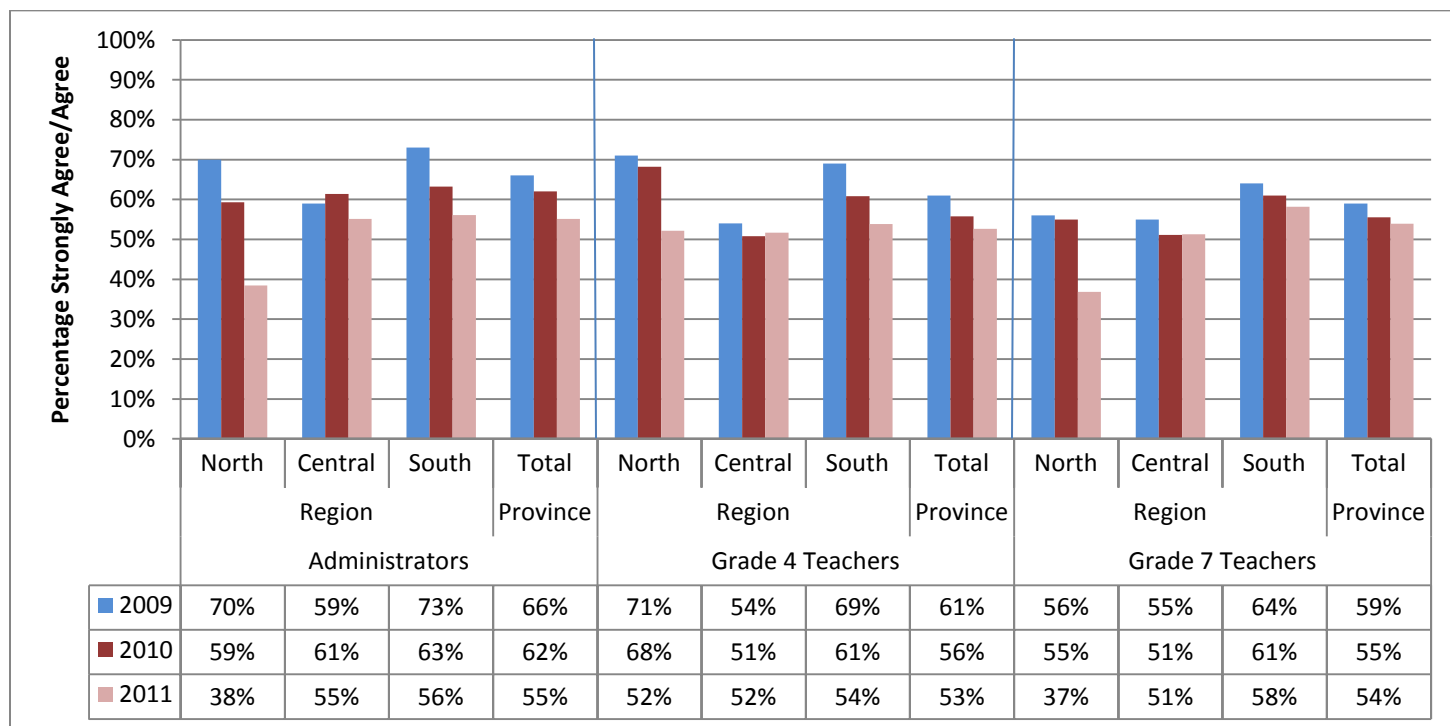
REQUIRE MORE TRAINING

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

Overall, about half of the respondents within all groups agree that they require more training about teaching treaties. In this regard, 55% of the administrators, 53% of the Grade 4 teachers, and 54% of the Grade 7 teachers felt more training was required. Figure 20 shows the percentages that agreed along with the 2010 and 2009 comparisons by respondent group and region. See Appendix G for detail of percentages by response option for each respondent group and by region. While a higher percentage of the administrators perceive the need for resources over the need for training, just over half of the teachers and administrators perceive a need for both training and resources to support teaching treaties.

While there continues to be a perceived need for training from a majority of the respondents, there is a slight decrease in the perceived need for training since 2009. In regards to administrators, this finding concurs with the increase in the percentage of administrators that received training as noted earlier in the report.

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

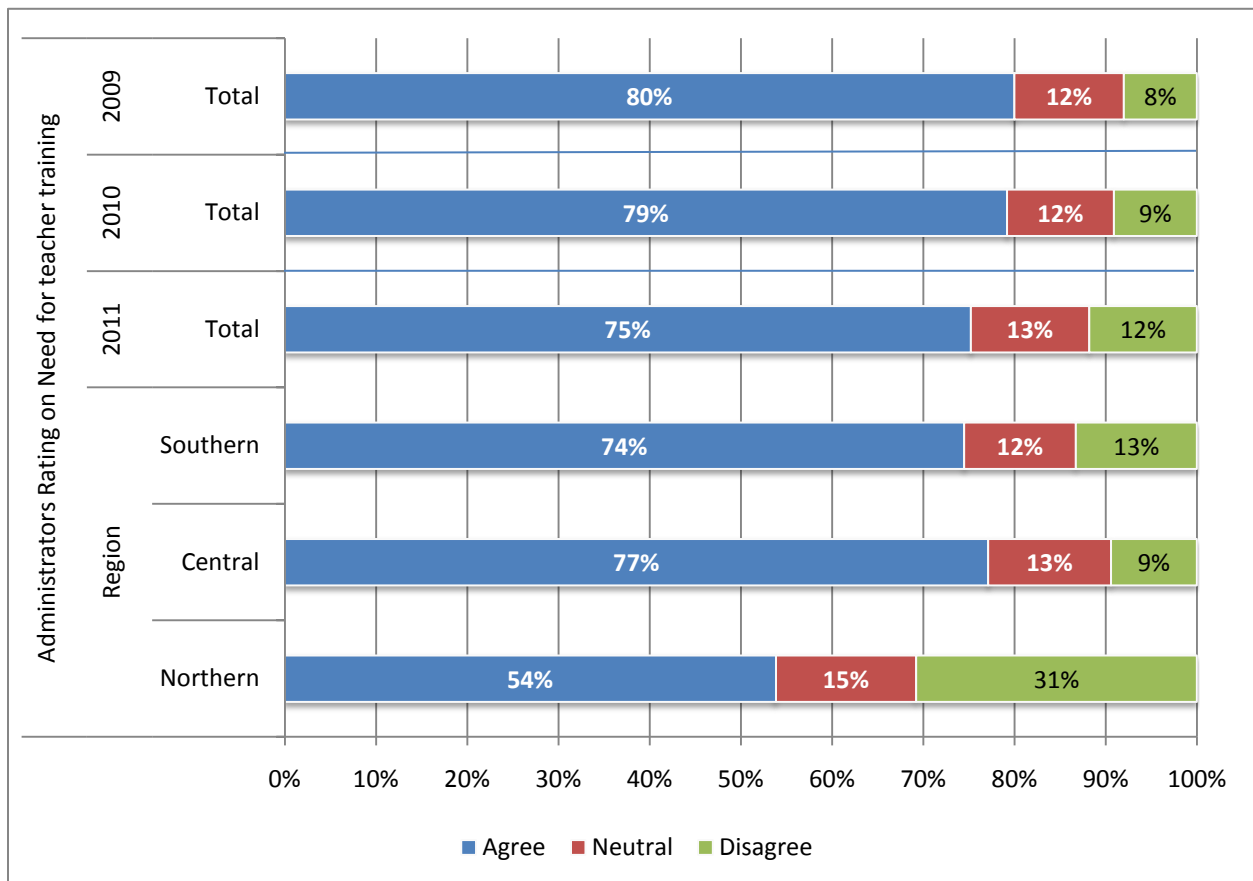


In addition, the administrators were asked whether teachers in the school require training to help with their teaching about treaties.

A majority of the administrators agreed that their teachers require training to help with their teaching about treaties, ranging from 54% of the administrators in the North region to 77% of the administrators in the Southern region. About one-quarter of the administrators were either neutral (13%) or disagreed (12%).

In regards to the administrators’ perceptions of the need for teacher training in treaty education, the 2011 survey results indicated a slight shift to an increase disagreement position in comparison to the 2009 and 2010 survey results. See Figure 21.

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



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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 2011 survey, the reliability of the overall score was examined and determined to be good, (Cronbach's alpha coefficient = 0.81, N=9767, 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 0.12 for TEL2 Treaty Relationship to 0.64 for TEL4 Worldview.

Treaty Essential Learnings (TEL)	Survey Items that contribute to TEL Subscore	# Items	N	Mean % ^a	SE	Cronbach's alpha
<i>TEL1. Treaties</i>	TF1, TF2, MC1, MC2, MC3, MH4	6	9767	58.4	0.23	0.34
<i>TEL2. Treaty Relationship</i>	TF3, TF4, MC5, MH6	4	9767	48.6	0.26	0.12
<i>TEL3. History</i>	TF5, TF6, MC7, MC8, MC9, MC10, MC11, MH12	8	9767	52.5	0.23	0.51
<i>TEL4. Worldviews</i>	TF7, TF8, TF9, TF10, MC13, MC14, MC15, MC16, MC17, MC18, MC19, MH21	12	9767	57.3	0.21	0.64
<i>TEL5. Symbolism</i>	TF11, TF12, MC20, MH22	4	9767	54.8	0.28	0.28
<i>TEL6. Contemporary Issues</i>	TF13, TF14, MC23, MC24, MC26, MH25	6	9767	50.9	0.24	0.38
<i>Total Score</i>	all items	40	9767	54.4	0.17	0.81

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

^a Mean% is based on total correct and not the weighted percent score.

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	10166.4	36.466	<.001	.004
	Within	9765	278.8			
	Total	9766				
%TEL1 * Gender	Between	1	4386.7	8.458	.004	.001
	Within	9765	518.6			
	Total	9766				
%TEL 2 * Gender	Between	1	33458.7	51.355	<.001	.005
	Within	9765	651.5			
	Total	9766				
%TEL3 * Gender	Between	1	3464.3	6.925	.009	.001
	Within	9765	500.3			
	Total	9766				
%TEL 4 * Gender	Between	1	12630.9	28.840	<.001	.003
	Within	9765	438.0			
	Total	9766				
%TEL 5 * Gender	Between	1	17075.1	22.988	<.001	.002
	Within	9765	742.8			
	Total	9766				
%TEL 6 * Gender	Between	1	8406.1	15.157	<.001	.002
	Within	9765	554.6			
	Total	9766				

Note. Data analyses were performed using SPSS version 18. 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 and all six TEL subscores; however, effect sizes are trivial with an indication that practical significance to the difference in scores is lacking.

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	46737.059	169.925	<.001	.017
	Within	9765	275.045			
	Total	9766				
%TEL1 * Self-Declared Aboriginal	Between	1	73393.507	143.469	<.001	.014
	Within	9765	511.563			
	Total	9766				
%TEL 2 * Self-Declared Aboriginal	Between	1	88030.963	136.286	<.001	.014
	Within	9765	645.927			
	Total	9766				
%TEL3 * Self-Declared Aboriginal	Between	1	54558.887	110.207	<.001	.011
	Within	9765	495.057			
	Total	9766				
%TEL 4 * Self-Declared Aboriginal	Between	1	43925.265	101.034	<.001	.010
	Within	9765	434.759			
	Total	9766				
%TEL 5 * Self-Declared Aboriginal	Between	1	10312.137	13.870	<.001	.001
	Within	9765	743.467			
	Total	9766				
%TEL 6 * Self-Declared Aboriginal	Between	1	21597.582	39.037	<.001	.004
	Within	9765	553.257			
	Total	9766				

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 and the six TELs. The effect sizes were small for Total Score and TEL 1 to TEL 4 subscores; and, they were trivial for TEL5, and TEL6.

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	15644.560	56.549	<.001	.011
	Within	9764	276.655			
	Total	9766				
%TEL1	Between	2	23632.123	45.951	<.001	.009
	Within	9764	514.292			
	Total	9766				
%TEL 2	Between	2	19683.792	30.237	<.001	.006
	Within	9764	650.977			
	Total	9766				
%TEL3	Between	2	13771.609	27.661	<.001	.006
	Within	9764	497.875			
	Total	9766				
%TEL 4	Between	2	21181.905	48.698	<.001	.010
	Within	9764	434.963			
	Total	9766				
%TEL 5	Between	2	10723.948	14.445	<.001	.003
	Within	9764	742.403			
	Total	9766				
%TEL 6	Between	2	7535.892	13.603	<.001	.003
	Within	9764	553.982			
	Total	9766				

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 than the other two regions for total score and the six TEL subscores. Average scores of the Central and South regions were statistically similar except for Central region average subscore for TEL4 Worldview was significantly higher than the South region.

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	43295.290	159.767	<.001	.032
	Within	9764	270.991			
	Total	9766				
%TEL1	Between	2	29855.105	58.195	<.001	.012
	Within	9764	513.017			
	Total	9766				
%TEL 2	Between	2	37351.823	57.699	<.001	.012
	Within	9764	647.358			
	Total	9766				
%TEL3	Between	2	44351.334	90.216	<.001	.018
	Within	9764	491.611			
	Total	9766				
%TEL 4	Between	2	48195.841	112.232	<.001	.022
	Within	9764	429.430			
	Total	9766				
%TEL 5	Between	2	41215.345	55.987	<.001	.011
	Within	9764	736.157			
	Total	9766				
%TEL 6	Between	2	42590.556	77.890	<.001	.016
	Within	9764	546.802			
	Total	9766				

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 .032 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	85%	85%	87%	86%	92%	88%	87%	88%	54%	71%	57%	64%
Neutral	0%	8%	3%	6%	0%	8%	4%	6%	38%	21%	27%	24%
Disagree/ Strongly Disagree	15%	5%	4%	5%	8%	3%	3%	3%	8%	8%	11%	9%
Did not use	0%	2%	6%	4%	0%	1%	6%	3%	0%	1%	5%	3%
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	83%	67%	72%	69%	78%	67%	69%	68%	57%	54%	56%	55%
Neutral	9%	15%	12%	13%	9%	12%	14%	13%	30%	23%	23%	23%
Disagree/ Strongly Disagree	4%	2%	2%	2%	9%	5%	4%	5%	13%	13%	12%	12%
Did not use	4%	16%	15%	15%	4%	16%	14%	15%	0%	10%	9%	10%
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	85%	58%	61%	60%	90%	61%	64%	63%	80%	45%	53%	49%
Neutral	10%	14%	12%	13%	10%	11%	11%	11%	5%	24%	21%	22%
Disagree/ Strongly Disagree	5%	3%	4%	4%	0%	4%	2%	3%	15%	13%	8%	10%
Did not use	0%	24%	23%	23%	0%	24%	22%	23%	0%	18%	18%	18%

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>North</i>	<i>Central</i>	<i>South</i>	<i>Total</i>	<i>North</i>	<i>Central</i>	<i>South</i>	<i>Total</i>	<i>North</i>	<i>Central</i>	<i>South</i>	<i>Total</i>
<i>Strongly Disagree</i>	15%	2%	5%	4%	%	3%	2%	3%	%	5%	4%	4%
<i>Disagree</i>	31%	22%	18%	20%	13%	16%	14%	15%	21%	17%	13%	16%
<i>Neutral</i>	15%	22%	20%	21%	35%	29%	30%	29%	42%	27%	24%	26%
<i>Agree</i>	38%	41%	47%	44%	39%	34%	39%	36%	21%	35%	40%	37%
<i>Strongly Agree</i>	0%	14%	9%	11%	13%	17%	15%	16%	16%	16%	18%	17%

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