

# Education

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Annual Report Update **2018–2019**

Education, Government of Alberta

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7th Floor, Commerce Place

10155 – 102 Street

Edmonton, AB T5J 4L5

Phone: 780-422-4495

Fax: 780-427-7733

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# Results Analysis

## Discussion and Analysis of Results

### Outcome One

#### Alberta's Students are successful

Student success was achieved through developing curriculum, monitoring student progress through assessments, and other targeted strategies to address student population health and supports, such as the school nutrition program and programming to support high school completion.

**Performance Measure 1.a:  
Overall Achievement Test Results in Language Arts*****Rationale***

- Overall student achievement of standards on provincial achievement tests is a sound indicator of whether elementary and junior high students are achieving high standards in Language Arts, an important outcome for Alberta's K–12 education system.

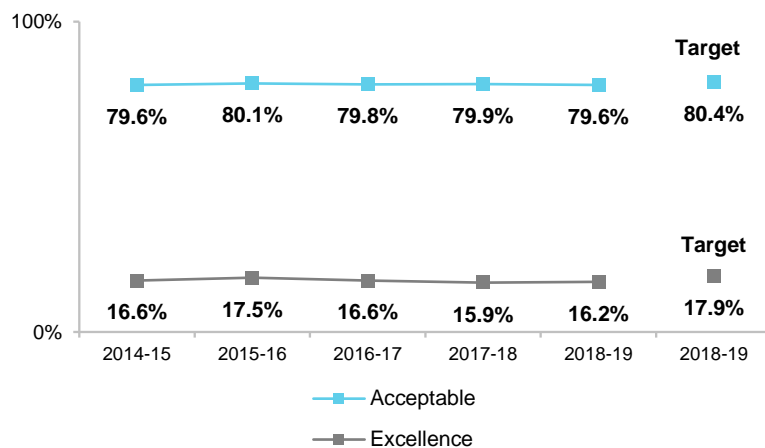
***Target***

- Targets for overall Language Arts results at the acceptable standard and at the standard of excellence were not met.

***Discussion***

- Overall results in Language Arts are calculated as an average of the results in the following seven subjects weighted by the number of individuals that were enrolled:
  - » English Language Arts 6 and 9
  - » French Language Arts 6 and 9
  - » Français 6 and 9
  - » English Language Arts 9 (Knowledge and Employability)
- The overall proportion of students achieving the acceptable standard in Language Arts has remained stable over time, while the proportion achieving the standard of excellence has decreased.
- To support student learning in core subjects, the ministry provides programs of study and implementation guides for teachers and develops or authorizes learning resources for students in all grades and subjects.

### Overall Percentages of Students Who Achieved Standards on Grade 6 and 9 Provincial Achievement Tests in Language Arts



**Source:** Alberta Education

#### Notes:

- The percentages of students who achieved the acceptable standard include the students who achieved the standard of excellence.
- Overall Language Arts results are a weighted average based on total enrolment in Grades 6 and 9 Language Arts courses.
- Participation in provincial achievement tests was impacted by the fire in Fort McMurray in May to June 2016. Caution should be exercised when interpreting the results over time.
- See Endnote A, page 97, for information on assessing results relative to targets, and results over time.
- See Endnote B, Provincial Achievement Tests, pages 102-103.

**Discussion (continued):**

- The overall participation rate for students taking Language Arts provincial achievement tests has remained stable over time.

**Participation Rates for Language Arts Provincial Achievement Tests** *(in percentages)*

Subject	2014-15	2015-16	2016-17	2017-18	2018-19
<b>Grade 6</b>					
English Language Arts	91	91	90	91	91
French Language Arts	98	98	96	96	98
Français	97	98	97	98	97
<b>Grade 9</b>					
English Language Arts	88	89	89	89	88
English Language Arts (Knowledge and Employability)	82	80	80	80	80
French Language Arts	96	97	96	96	97
Français	95	95	97	96	97
<b>Overall Language Arts</b>					
	<b>89.9</b>	<b>90.0</b>	<b>89.9</b>	<b>90.1</b>	<b>90.0</b>

**Source:** Alberta Education

**Notes:**

- Knowledge and Employability courses are designed for students who meet enrolment criteria and learn best through experiences that integrate essential and employability skills in occupational contexts.
- Participation in provincial achievement tests was impacted by the fire in Fort McMurray in May to June 2016. Caution should be exercised when interpreting the results over time.

**Performance Measure 1.a:**

**Achievement Test Results in Language Arts by Individual Subject for Students in Grades 6 and 9**

***Rationale***

- Student results on provincial achievement tests in each grade and subject provide detailed information on whether elementary and junior high students are achieving high standards in Language Arts, an important outcome for Alberta's K–12 education system.

***Target***

- Targets for individual Language Arts subject results were not set in the 2018-21 business plan.

***Discussion***

- Compared to the previous three-year average, the proportion of students achieving the acceptable standard has increased over time for French Language Arts 6 and remained stable for English Language Arts 6, Français 6, English Language Arts 9 (Knowledge and Employability), French Language Arts 9 and Français 9. The proportion of students achieving the acceptable standard for English Language Arts 9 has decreased over time.
- Compared to the previous three-year average, the proportion of students achieving the standard of excellence has increased over time for French Language Arts 6 and 9, and for Français 6. While the proportion has remained stable for English Language Arts 9, English Language Arts 9 (Knowledge and Employability) and Français 9. The proportion of students achieving the standard of excellence for English Language Arts 6 has decreased.
- As adult literacy studies are not conducted regularly, Grade 9 results in Language Arts are regarded as indicators of literacy. Students who achieve the acceptable standard have developed the foundational skills needed to become literate adults. As indicated above, compared to the previous three-year average, results at the acceptable standard for English Language Arts 9 have decreased while results for French Language Arts 9 have remained stable.
- Participation in provincial achievement tests was impacted by the fire in Fort McMurray in May to June 2016. Caution should be exercised when interpreting the results over time.



**Percentages of Students in Grades 6 and 9 Who Achieved Standards on Provincial Achievement Tests in Language Arts**

Subject	Standard	2014-15	2015-16	2016-17	2017-18	Previous 3-year average	2018-19	Targets 2018-19
<b>Grade 6</b>								
English Language Arts	excellence	19.5	20.4	18.9	17.9	19.1	17.8	
	acceptable	82.8	82.9	82.5	83.5	82.9	83.2	
French Language Arts	excellence	13.6	14.2	13.5	12.3	13.3	15.7	
	acceptable	87.5	87.7	85.1	85.2	86.0	87.7	
Français	excellence	15.0	17.2	21.6	23.1	20.6	24.6	
	acceptable	89.0	91.4	92.1	93.3	92.2	90.3	
<b>Grade 9</b>								
English Language Arts	excellence	14.4	15.2	14.9	14.7	14.9	14.7	
	acceptable	75.6	77.0	76.8	76.1	76.6	75.1	
English Language Arts (Knowledge and Employability)	excellence	4.5	6.2	5.9	5.9	6.0	5.4	
	acceptable	63.0	59.8	58.8	55.7	58.1	57.4	
French Language Arts	excellence	10.1	10.8	11.2	9.8	10.6	12.3	
	acceptable	85.8	83.0	83.1	81.4	82.5	82.9	
Français	excellence	20.2	26.8	26.1	22.3	25.1	26.0	
	acceptable	88.5	86.4	88.9	82.7	86.0	88.6	
<b>Overall Language Arts</b>								
	<b>excellence</b>	<b>16.6</b>	<b>17.5</b>	<b>16.6</b>	<b>15.9</b>	<b>16.7</b>	<b>16.2</b>	<b>17.9</b>
	<b>acceptable</b>	<b>79.6</b>	<b>80.1</b>	<b>79.8</b>	<b>79.9</b>	<b>79.9</b>	<b>79.6</b>	<b>80.4</b>

Source: Alberta Education

**Notes:**

- The percentages of students who achieved the acceptable standard include the students who achieved the standard of excellence.
- Knowledge and Employability courses are designed for students who meet enrolment criteria and learn best through experiences that integrate essential and employability skills in occupational contexts.
- Participation in provincial achievement tests was impacted by the fire in Fort McMurray in May to June 2016. Caution should be exercised when interpreting the results over time.
- See Endnote A, page 97, for information on assessing results relative to targets and results over time.
- See Endnote B, Provincial Achievement Tests, pages 102-103.

**Performance Measure 1.a:**  
**Overall Achievement Test Results in Mathematics**

***Rationale***

- Overall student achievement of standards on provincial achievement tests is a sound indicator of whether elementary and junior high students are achieving high standards in Mathematics, an important outcome for Alberta's K–12 education system.

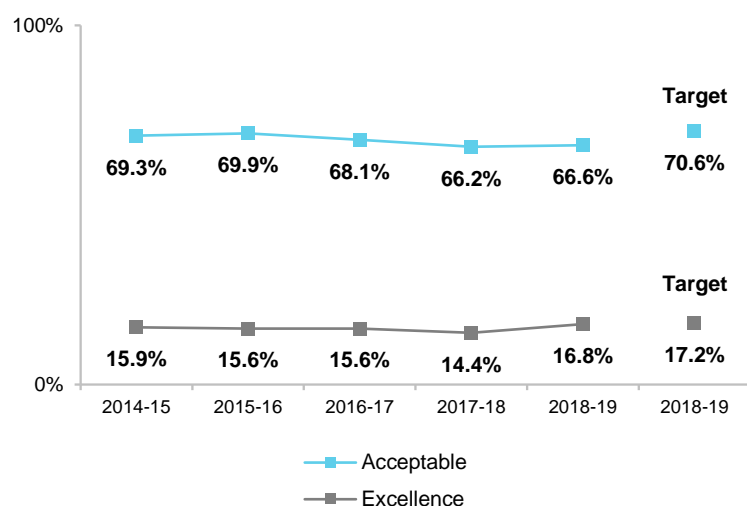
***Target***

- Targets for overall Mathematics provincial achievement test results at the acceptable standard and at the standard of excellence were not met.

***Discussion***

- Overall results in Mathematics are calculated as an average of the results in the following three subjects weighted by the number of individuals that were enrolled:
  - » Mathematics 6
  - » Mathematics 9
  - » Mathematics 9 (Knowledge and Employability)
- The overall proportion of students achieving the standard of excellence has increased over time with some fluctuations, while the proportion achieving the acceptable standard has declined. The decline in overall Mathematics results in 2016-17 and 2017-18 could have been due to the inclusion of number-operation questions without using calculators. These questions were added to Part A Mathematics 6 in 2016-17 and Mathematics 9 in 2017-18, respectively. Mathematics results have started to improve in 2018-19.
- To support student learning in core subjects, the ministry provides programs of study and implementation guides for teachers and develops or authorizes learning resources for students in all grades and subjects.

### Overall Percentages of Students Who Achieved Standards on Grade 6 and 9 Provincial Achievement Tests in Mathematics



Source: Alberta Education

#### Notes:

- The percentages of students who achieved the acceptable standard include the students who achieved the standard of excellence.
- Overall Mathematics results are a weighted average based on total enrolment in Grades 6 and 9 Mathematics courses.
- Part A, which requires students to complete number-operation questions without using calculators, was added to Mathematics 6 in 2016-17 and Mathematics 9 in 2017-18, respectively.
- Participation in provincial achievement tests was impacted by the fire in Fort McMurray in May to June 2016. Caution should be exercised when interpreting the results over time.
- See Endnote A, page 97, for information on assessing results relative to targets, and results over time.
- See Endnote B, Provincial Achievement Tests, pages 102-103.

**Discussion (continued):**

- The overall participation rate for students taking Mathematics provincial achievement tests has remained stable.

**Participation Rates for Provincial Achievement Tests in Mathematics (in percentages)**

Subject	2014-15	2015-16	2016-17	2017-18	2018-19
<b>Grade 6</b>					
Mathematics	91	91	90	91	91
<b>Grade 9</b>					
Mathematics	89	89	89	89	89
Mathematics (Knowledge & Employability)	86	87	85	85	87
<b>Overall Mathematics</b>	<b>90.0</b>	<b>90.2</b>	<b>89.7</b>	<b>89.9</b>	<b>89.9</b>

**Source:** Alberta Education

**Notes:**

- Knowledge and Employability courses are designed for students who meet enrolment criteria and learn best through experiences that integrate essential and employability skills in occupational contexts.
- Participation in provincial achievement tests was impacted by the fire in Fort McMurray in May to June 2016. Caution should be exercised when interpreting the results over time.

**Performance Measure 1.a:****Achievement Test Results in Mathematics by Individual Subject for Students in Grades 6 and 9*****Rationale***

- Student results on provincial achievement tests in each grade and subject provide detailed information on whether elementary and junior high students are achieving high standards in Mathematics, an important outcome for Alberta's K–12 education system.

***Target***

- Targets for individual Mathematics subject results were not set in the 2018-21 business plan.

***Discussion***

- Compared with the previous three-year average, the proportion of students achieving the acceptable standard has increased over time for Mathematics 6 and decreased for Mathematics 9. The proportion of students achieving the acceptable standard in Mathematics 9 (Knowledge and Employability) has remained stable.
- Compared with the previous three-year average, the proportion of students achieving the standard of excellence has increased for Mathematics 6 and 9, and remained stable for Mathematics 9 (Knowledge and Employability).
- Participation in provincial achievement tests was impacted by the fire in Fort McMurray in May to June 2016. Caution should be exercised when interpreting the results over time.

### Percentages of Students in Grades 6 and 9 Who Achieved Standards on Provincial Achievement Tests in Mathematics

Subject	Standard	2014-15	2015-16	2016-17	2017-18	Previous 3-year average	2018-19	Targets 2018-19
<b>Grade 6</b>								
Mathematics	excellence	14.1	14.0	12.6	14.0	13.5	15.0	
	acceptable	73.2	72.2	69.4	72.9	71.5	72.5	
<b>Grade 9</b>								
Mathematics	excellence	17.9	17.5	19.0	15.0	17.1	19.0	
	acceptable	65.3	67.8	67.2	59.2	64.7	60.0	
Mathematics (Knowledge and Employability)	excellence	14.4	13.0	13.3	13.6	13.3	13.2	
	acceptable	60.9	61.2	57.5	57.4	58.7	59.6	
<b>Overall Mathematics</b>								
	<b>excellence</b>	<b>15.9</b>	<b>15.6</b>	<b>15.6</b>	<b>14.4</b>	<b>15.2</b>	<b>16.8</b>	<b>17.2</b>
	<b>acceptable</b>	<b>69.3</b>	<b>69.9</b>	<b>68.1</b>	<b>66.2</b>	<b>68.1</b>	<b>66.6</b>	<b>70.6</b>

Source: Alberta Education

#### Notes:

- The percentages of students who achieved the acceptable standard include the students who achieved the standard of excellence.
- Knowledge and Employability courses are designed for students who meet enrolment criteria and learn best through experiences that integrate essential and employability skills in occupational contexts.
- Part A, which requires students to complete number-operation questions without using calculators, was added to Mathematics 6 in 2016-17 and Mathematics 9 in 2017-18, respectively.
- Participation in provincial achievement tests was impacted by the fire in Fort McMurray in May to June 2016. Caution should be exercised when interpreting the results over time.
- See Endnote A, page 97, for information on assessing results relative to targets, and results over time.
- See Endnote B, Provincial Achievement Tests, pages 102-103.

**Performance Measure 1.a:  
Overall Achievement Test Results in Social Studies*****Rationale***

- Overall student achievement of standards on provincial achievement tests is a sound indicator of whether elementary and junior high students are achieving high standards in Social Studies, an important outcome for Alberta's K–12 education system.

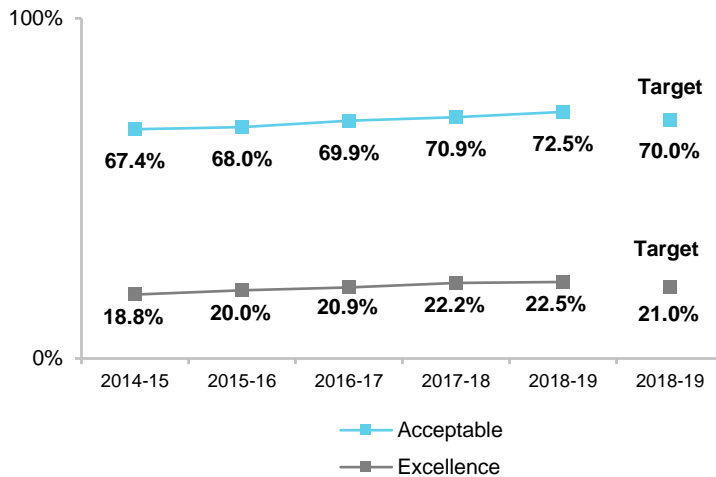
***Target***

- The targets for overall Social Studies provincial achievement test results at the acceptable standard and at the standard of excellence were exceeded.

***Discussion***

- Overall results in Social Studies are calculated as an average of the results in the following three subjects, weighted by the number of individuals that were enrolled:
  - » Social Studies 6
  - » Social Studies 9
  - » Social Studies 9 (Knowledge and Employability)
- The overall proportions of students achieving the acceptable standard and the standard of excellence in Social Studies have increased over time.

### Overall Percentages of Students Who Achieved Standards on Grades 6 and 9 Provincial Achievement Tests in Social Studies



**Source:** Alberta Education

#### Notes:

- The percentages of students who achieved the acceptable standard include the students who achieved the standard of excellence.
- Overall results are a weighted average based on total enrolment in Grades 6 and 9 Social Studies courses.
- Participation in provincial achievement tests was impacted by the fire in Fort McMurray in May to June 2016. Caution should be exercised when interpreting the results over time.
- See Endnote A, page 97, for information on assessing results relative to targets, and results over time.
- See Endnote B, Provincial Achievement Tests, pages 102-103.



**Discussion (continued):**

- The overall participation rate for students taking Social Studies provincial achievement tests has increased over time.

**Participation Rates for Provincial Achievement Tests in Social Studies (in percentages)**

Subject	2014-15	2015-16	2016-17	2017-18	2018-19
<b>Grade 6</b>					
Social Studies	90	90	90	91	91
<b>Grade 9</b>					
Social Studies	89	89	89	89	89
Social Studies (Knowledge & Employability)	85	83	83	85	86
<b>Overall Social Studies</b>	<b>89.2</b>	<b>89.6</b>	<b>89.6</b>	<b>90.0</b>	<b>89.9</b>

Source: Alberta Education

**Notes:**

- Knowledge and Employability courses are designed for students who meet enrolment criteria and learn best through experiences that integrate essential and employability skills in occupational contexts.
- Participation in provincial achievement tests was impacted by the fire in Fort McMurray in May to June 2016. Caution should be exercised when interpreting the results over time.

**Performance Measure 1.a:**

**Achievement Test Results in Social Studies by Individual Subject for Students in Grade 6 and 9**

***Rationale***

- Student results on provincial achievement tests in each grade and subject provide detailed information on whether elementary and junior high students are achieving high standards in Social Studies, an important outcome for Alberta's K-12 education system.

***Target***

- Targets for individual Social Studies subject results were not set in the 2018-21 business plan.

***Discussion***

- Compared to the previous three-year average, the proportion of students achieving the acceptable standard increased over time for Social Studies 6 and 9, and remained stable for Social Studies 9 (Knowledge and Employability).
- Compared to the previous three-year average, the proportions of students achieving the standard of excellence have increased for Social Studies 6 and 9, and Social Studies 9 (Knowledge and Employability).
- Participation in provincial achievement tests was impacted by the fire in Fort McMurray in May to June 2016. Caution should be exercised when interpreting the results over time.

### Percentages of Students in Grades 6 and 9 Who Achieved Standards on Provincial Achievement Tests in Social Studies

Subject	Standard	2014-15	2015-16	2016-17	2017-18	Previous 3-year average	2018-19	Targets 2018-19
<b>Grade 6</b>								
Social Studies	excellence	18.1	22.0	21.7	23.2	22.3	24.4	
	acceptable	69.8	71.4	72.9	75.1	73.1	76.2	
<b>Grade 9</b>								
Social Studies	excellence	19.8	18.0	20.2	21.5	19.9	20.6	
	acceptable	65.1	64.7	67.0	66.7	66.1	68.7	
Social Studies (Knowledge and Employability)	excellence	11.2	11.6	12.7	14.2	12.8	15.0	
	acceptable	57.3	58.0	56.3	55.2	56.5	55.9	
<b>Overall Social Studies</b>								
	excellence	18.8	20.0	20.9	22.2	21.0	22.5	21.0
	acceptable	67.4	68.0	69.9	70.9	69.6	72.5	70.0

Source: Alberta Education

#### Notes:

- The percentages of students who achieved the acceptable standard include the students who achieved the standard of excellence.
- Knowledge and Employability courses are designed for students who meet enrolment criteria and learn best through experiences that integrate essential and employability skills in occupational contexts.
- Participation in provincial achievement tests was impacted by the fire in Fort McMurray in May to June 2016. Caution should be exercised when interpreting the results over time.
- See Endnote A, page 97, for information on assessing results relative to targets, and results over time.
- See Endnote B, Provincial Achievement Tests, pages 102-103.

**Performance Measure 1.a:**  
**Overall Achievement Test Results in Science**

***Rationale***

- Overall student achievement of standards on provincial achievement tests is a sound indicator of whether elementary and junior high students are achieving high standards in Science, an important outcome for Alberta's K–12 education system.

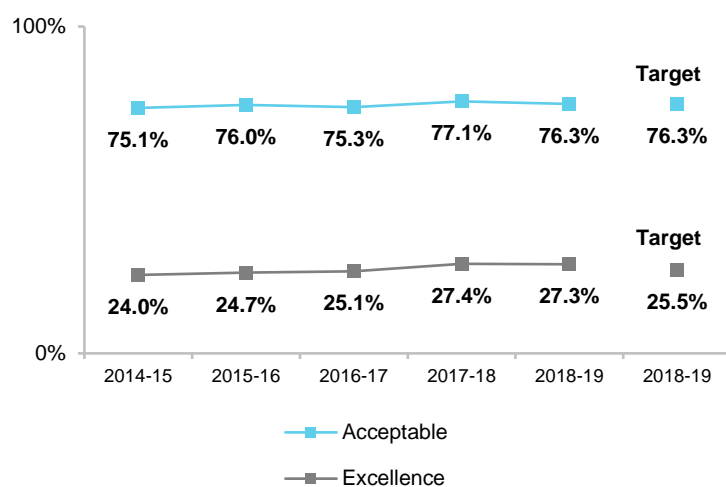
***Target***

- The target for overall Science provincial achievement test results at the acceptable standard was met and the target at the standard of excellence was exceeded.

***Discussion***

- Overall results in Science are calculated as an average of the results in the following three subjects, weighted by the number of individuals that were enrolled:
  - » Science 6
  - » Science 9
  - » Science 9 (Knowledge and Employability)
- The overall proportions of students achieving the acceptable standard and the standard of excellence in Science have increased over time.

### Overall Percentages of Students Who Achieved Standards on Grades 6 and 9 Provincial Achievement Tests in Science



Source: Alberta Education

#### Notes:

- The percentages of students who achieved the acceptable standard include the students who achieved the standard of excellence.
- Overall results are a weighted average based on total enrolment in Grades 6 and 9 Science courses.
- Participation in provincial achievement tests was impacted by the fire in Fort McMurray in May to June 2016. Caution should be exercised when interpreting the results over time.
- See Endnote A, page 97, for information on assessing results relative to targets, and results over time.
- See Endnote B, Provincial Achievement Tests, pages 102-103.

**Discussion (continued):**

- The overall participation rate for students taking Science provincial achievement tests has remained stable over time.

**Participation Rates for Science Provincial Achievement Tests** *(in percentages)*

Subject	2014-15	2015-16	2016-17	2017-18	2018-19
<b>Grade 6</b>					
Science	90	91	90	91	91
<b>Grade 9</b>					
Science	90	90	89	90	89
Science (Knowledge and Employability)	87	85	84	87	86
<b>Overall Science</b>					
	<b>90.0</b>	<b>90.2</b>	<b>89.5</b>	<b>90.3</b>	<b>89.9</b>

Source: Alberta Education

**Notes:**

- Knowledge and Employability courses are designed for students who meet enrolment criteria and learn best through experiences that integrate essential and employability skills in occupational contexts.
- Participation in provincial achievement tests was impacted by the fire in Fort McMurray in May to June 2016. Caution should be exercised when interpreting the results over time.

**Performance Measure 1.a:****Achievement Test Results in Science by Individual Subject for Students in Grade 6 and 9*****Rationale***

- Student results on provincial achievement tests in each grade and subject provide detailed information on whether elementary and junior high students are achieving high standards in Science, an important outcome for Alberta's K–12 education system.

***Target***

- Targets for individual Science subject results were not set in the 2018-21 business plan.

***Discussion***

- Compared to the previous three-year average, the proportion of students achieving the acceptable standard has increased for Science 9, decreased for Science 9 (Knowledge and Employability), and has remained stable for Science 6.
- Compared to the previous three-year average, the proportion of students achieving the standard of excellence has increased for Science 9, decreased for Science 9 (Knowledge and Employability), and remained stable for Science 6.
- Participation in provincial achievement tests was impacted by the fire in Fort McMurray in May to June 2016. Caution should be exercised when interpreting the results over time.

### Percentages of Students in Grades 6 and 9 Who Achieved Standards on Provincial Achievement Tests in Science

Subject	Standard	2014-15	2015-16	2016-17	2017-18	Previous 3-year average	2018-19	Targets 2018-19
<b>Grade 6</b>								
Science	excellence	25.3	27.1	29.0	30.5	28.9	28.6	
	acceptable	76.3	78.0	76.9	78.8	77.9	77.6	
<b>Grade 9</b>								
Science	excellence	22.8	22.4	21.4	24.4	22.7	26.4	
	acceptable	74.1	74.2	74.0	75.7	74.6	75.2	
Science (Knowledge and Employability)	excellence	15.1	14.3	13.3	12.3	13.3	10.7	
	acceptable	64.5	63.8	63.9	64.6	64.1	61.7	
<b>Overall Science</b>								
	<b>excellence</b>	<b>24.0</b>	<b>24.7</b>	<b>25.1</b>	<b>27.4</b>	<b>25.7</b>	<b>27.3</b>	<b>25.5</b>
	<b>acceptable</b>	<b>75.1</b>	<b>76.0</b>	<b>75.3</b>	<b>77.1</b>	<b>76.2</b>	<b>76.3</b>	<b>76.3</b>

Source: Alberta Education

#### Notes:

- The percentages of students who achieved the acceptable standard include the students who achieved the standard of excellence.
- Knowledge and Employability courses are designed for students who meet enrolment criteria and learn best through experiences that integrate essential and employability skills in occupational contexts.
- Participation in provincial achievement tests was impacted by the fire in Fort McMurray in May to June 2016. Caution should be exercised when interpreting the results over time.
- See Endnote A, page 97, for information on assessing results relative to targets, and results over time.
- See Endnote B, Provincial Achievement Tests, pages 102-103.

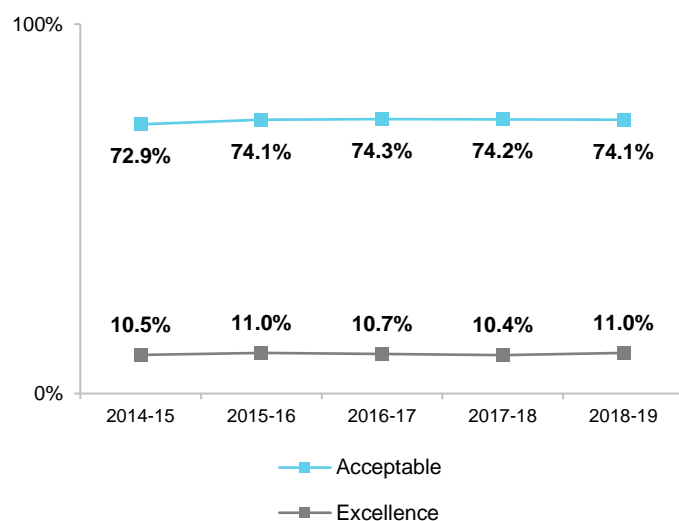


## Supplementary Information: English as a Second Language (ESL) Students Achievement Test Results in English Language Arts

### Discussion

- The goal of ESL programs is to provide students with planned systematic instruction and support that will enable them to speak the English language fluently, further their education and become productive and contributing members of Albertan and Canadian society. ESL programs are funded for both Canadian-born and foreign-born students.
- The overall proportion of ESL students achieving the acceptable standard in English Language Arts provincial achievement tests has increased over time, while the proportion achieving the standard of excellence has remained stable.
- Targets were not set for ESL students in the 2018-21 business plan.

### Overall Percentages of ESL Students Who Achieved Standards on Grade 6 and 9 Provincial Achievement Tests in English Language Arts



Source: Alberta Education

### Notes:

- The percentages of students who achieved the acceptable standard include the students who achieved the standard of excellence.
- Overall English Language Arts results are a weighted average based on total enrolment in Grades 6 and 9 English Language Arts courses.
- Participation in provincial achievement tests was impacted by the fire in Fort McMurray in May to June 2016. Caution should be exercised when interpreting the results over time.
- See Endnote A, page 97, for information on assessing results over time.
- See Endnote B, Provincial Achievement Tests, pages 102-103.

**Discussion (continued):**

- The participation rate for ESL students taking English Language Arts provincial achievement tests, 88.9 per cent in the current year, has remained stable over time.

**ESL Participation Rates for English Language Arts Provincial Achievement Tests (in percentages)**

Subject	2014-15	2015-16	2016-17	2017-18	2018-19
<b>Grade 6</b>					
English Language Arts	90	91	91	90	91
<b>Grade 9</b>					
English Language Arts	86	86	86	86	86
English Language Arts (Knowledge and Employability)	79	84	87	85	81
<b>Overall Language Arts</b>					
	<b>88.5</b>	<b>89.1</b>	<b>88.9</b>	<b>88.5</b>	<b>88.9</b>

Source: Alberta Education

**Notes:**

- Knowledge and Employability courses are designed for students who meet enrolment criteria and learn best through experiences that integrate essential and employability skills in occupational contexts.
- Participation in provincial achievement tests was impacted by the fire in Fort McMurray in May to June 2016. Caution should be exercised when interpreting the results over time.

## English Language Arts Achievement Test Results by Individual Subject for ESL Students in Grades 6 and 9

### Discussion

- Compared to the previous three-year average, the proportion of ESL students achieving the acceptable standard has increased for English Language Arts 6, and remained stable for English Language Arts 9.
- Compared to the previous three-year average, the proportion of ESL students achieving the standard of excellence has remained stable for English Language Arts 6 and 9.
- The number of ESL students in English Language Arts 9 (Knowledge and Employability) was too small to make comparisons over time.

### Percentages of ESL Students in Grades 6 and 9 Who Achieved Standards on Provincial Achievement Tests in English Language Arts

Subject	Standard	2014-15	2015-16	2016-17	2017-18	Previous 3-year average	2018-19
<b>Grade 6</b>							
English Language Arts	excellence	13.1	14.0	13.5	12.7	13.4	13.8
	acceptable	78.8	79.8	80.2	80.7	80.2	81.3
<b>Grade 9</b>							
English Language Arts	excellence	6.4	6.4	6.4	6.9	6.6	6.8
	acceptable	64.2	65.1	65.3	64.6	65.0	63.4
English Language Arts (Knowledge and Employability)	excellence	5.8	4.5	8.3	6.9	6.5	2.1
	acceptable	59.9	62.0	64.3	56.9	61.1	49.7
<b>Overall Language Arts</b>							
	<b>excellence</b>	<b>10.5</b>	<b>11.0</b>	<b>10.7</b>	<b>10.4</b>	<b>10.7</b>	<b>11.0</b>
	<b>acceptable</b>	<b>72.9</b>	<b>74.1</b>	<b>74.3</b>	<b>74.2</b>	<b>74.2</b>	<b>74.1</b>

Source: Alberta Education

### Notes:

- The percentages of students who achieved the acceptable standard include the students who achieved the standard of excellence.
- Knowledge and Employability courses are designed for students who meet enrolment criteria and learn best through experiences that integrate essential and employability skills in occupational contexts.
- Participation in provincial achievement tests was impacted by the fire in Fort McMurray in May to June 2016. Caution should be exercised when interpreting the results over time.
- See Endnote A, page 97, for information on assessing results over time.
- See Endnote B, Provincial Achievement Tests, pages 102-103.

## **Other Subjects (ESL Students)**

### ***Discussion***

- Compared to the previous three-year average, the proportion of ESL students achieving the acceptable standard has increased for Mathematics 6, Science 6, Social Studies 6 and Social Studies 9, decreased for Mathematics 9, and remained stable for Science 9.
- Compared to the previous three-year average, the proportion of ESL students achieving the standard of excellence has increased over time for Mathematics 6, Social Studies 6, Mathematics 9, Science 9 and Social Studies 9, and has remained stable for Science 6.
- The number of ESL students in French Language Arts, Français, and Knowledge and Employability courses was too small to make comparisons over time.

**Percentages of ESL Students in Grades 6 and 9 Who Achieved Standards on Provincial Achievement Tests in subjects other than English Language Arts**

Subject	Standard	2014-15	2015-16	2016-17	2017-18	Previous 3-year average	2018-19
<b>Grade 6</b>							
French Language Arts	excellence	12.1	21.6	17.6	11.5	16.9	21.5
	acceptable	88.5	88.3	83.8	81.3	84.5	89.5
Français	excellence	14.2	19.8	16.8	25.2	20.6	15.7
	acceptable	87.5	90.7	86.4	91.6	89.6	89.3
Mathematics	excellence	13.4	13.0	11.7	13.3	12.6	14.5
	acceptable	71.8	69.4	68.0	71.5	69.6	72.7
Science	excellence	19.3	21.1	23.2	25.3	23.2	23.5
	acceptable	71.6	74.5	73.6	75.5	74.6	76.4
Social Studies	excellence	14.0	18.6	18.2	19.0	18.6	20.5
	acceptable	65.8	67.9	70.2	72.0	70.0	74.8
<b>Grade 9</b>							
French Language Arts	excellence	12.5	13.3	13.4	9.7	12.1	13.9
	acceptable	81.3	76.3	71.1	75.0	74.1	79.1
Français	excellence	17.6	12.3	22.2	17.6	17.4	9.5
	acceptable	76.5	80.7	86.1	64.7	77.2	81.0
Mathematics	excellence	15.1	14.3	16.4	12.1	14.3	16.3
	acceptable	58.9	61.0	62.0	53.2	58.7	53.3
Mathematics (Knowledge and Employability)	excellence	15.8	19.8	25.4	19.8	21.7	15.0
	acceptable	55.9	64.6	64.2	59.4	62.8	54.0
Science	excellence	16.5	15.5	14.5	16.4	15.5	18.1
	acceptable	63.9	65.7	65.6	68.1	66.5	66.0
Science (Knowledge and Employability)	excellence	10.9	9.1	11.6	9.5	10.1	6.0
	acceptable	60.6	63.6	62.6	63.0	63.1	61.1
Social Studies	excellence	12.7	11.6	12.8	14.2	12.9	14.1
	acceptable	57.0	54.1	58.3	58.0	56.8	59.6
Social Studies (Knowledge and Employability)	excellence	8.6	11.4	19.6	13.4	14.8	12.3
	acceptable	61.2	59.7	59.4	54.5	57.9	57.7

**Source:** Alberta Education

**Notes:**

- The percentages of students who achieved the acceptable standard include the students who achieved the standard of excellence.
- Knowledge and Employability courses are designed for students who meet enrolment criteria and learn best through experiences that integrate essential and employability skills in occupational contexts.
- Part A, which requires students to complete number-operation questions without using calculators, was added to Mathematics 6 in 2016-17 and Mathematics 9 in 2017-18.
- Participation in provincial achievement tests was impacted by the fire in Fort McMurray in May to June 2016. Caution should be exercised when interpreting the results over time.
- See Endnote A, page 97, for information on assessing results over time.
- See Endnote B, Provincial Achievement Tests, pages 102-103.

**Performance Measure 1.b:**  
**Overall Diploma Examination Results in Language Arts**

***Rationale***

- Student results on diploma examinations are a solid indicator of whether high school students are achieving high standards.
- The Language Arts diploma examination measure is an aggregate of four Language Arts courses. This reflects a focus on fundamental literacy skills, an important outcome for Alberta's K–12 education system.

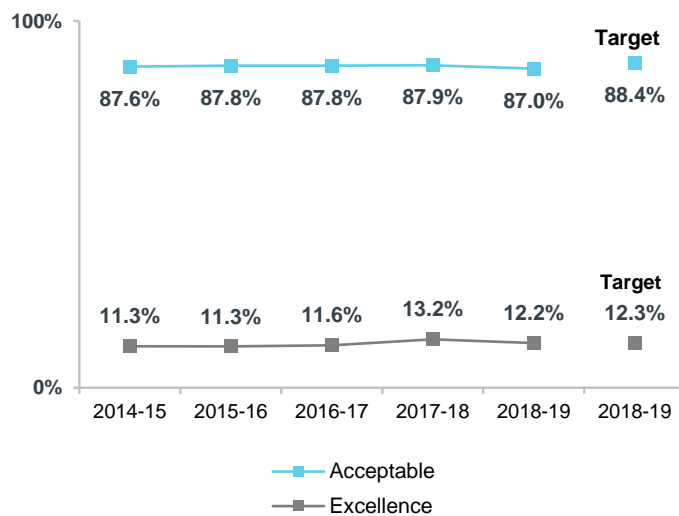
***Targets***

- The target for overall Language Arts diploma examination results at the acceptable standard was not met; the target at the standard of excellence was met as the current result is not significantly different from the target value.

***Discussion***

- The Language Arts measure is an average of the results in the following four subjects, weighted by the total number of individuals who wrote each of the exams:
  - » English Language Arts 30-1
  - » English Language Arts 30-2
  - » French Language Arts 30-1
  - » Français 30-1
- The overall proportion of students achieving the acceptable standard in Language Arts has decreased over time, while the proportion achieving the standard of excellence has increased.

### Overall Percentages of Students Who Achieved Standards on Diploma Examinations in Language Arts



Source: Alberta Education

#### Notes:

- The percentages of students who achieved the acceptable standard include the students who achieved the standard of excellence.
- Overall results for Language Arts are a weighted average of results for the four Language Arts subjects.
- Participation in diploma examinations was impacted by the fire in Fort McMurray in May to June 2016. Caution should be exercised when interpreting the results over time.
- See Endnote A, page 97, for information on assessing results relative to targets, and results over time.
- See Endnote B, Diploma Examinations, pages 103-104.

**Discussion (continued):**

- Compared to the previous three-year average, the proportion of students achieving the acceptable standard has remained stable for English Language Arts 30-1 and decreased for English Language Arts 30-2.
- Compared to the previous three-year average, the proportion of students achieving the standard of excellence has remained stable for English Language Arts 30-1 and English Language Arts 30-2.
- The number of students writing French Language Arts 30-1 and Français 30-1 exams was too small to make comparisons over time.

**Percentages of Students Writing Language Arts Diploma Examinations Who Achieved Standards**

Subject	Standard	2014-15	2015-16	2016-17	2017-18	Previous 3-year average	2018-19	Targets 2018-19
English Language Arts 30-1	excellence	11.4	10.7	11.7	13.2	11.9	12.3	
	acceptable	86.5	86.8	86.5	87.5	86.9	86.8	
English Language Arts 30-2	excellence	11.2	12.3	11.4	13.1	12.3	12.1	
	acceptable	88.6	89.1	89.5	88.0	88.9	87.1	
French Language Arts 30-1	excellence	9.9	8.7	9.4	11.0	9.7	10.1	
	acceptable	95.5	93.8	94.7	93.8	94.1	91.5	
Français 30-1	excellence	17.1	20.3	18.6	23.0	20.6	29.5	
	acceptable	95.3	99.3	98.1	97.4	98.3	98.6	
<b>Overall Language Arts</b>	<b>excellence</b>	<b>11.3</b>	<b>11.3</b>	<b>11.6</b>	<b>13.2</b>	<b>12.0</b>	<b>12.2</b>	<b>12.3</b>
	<b>acceptable</b>	<b>87.6</b>	<b>87.8</b>	<b>87.8</b>	<b>87.9</b>	<b>87.8</b>	<b>87.0</b>	<b>88.4</b>

Source: Alberta Education

**Notes:**

- The percentages of students who achieved the acceptable standard include the students who achieved the standard of excellence.
- Equating of diploma examinations has been phased in over the past number of years making results directly comparable from year-to-year for the equated tests. Results are comparable for all years reported from 2014-15 to 2018-19 for English Language Arts 30-1 and 30-2, but not for French Language Arts 30-1 and Français 30-1.
- Overall results for Language Arts are a weighted average of results for the four Language Arts subjects.
- Participation in diploma examinations was impacted by the fire in Fort McMurray in May to June 2016. Caution should be exercised when interpreting the results over time.
- See Endnote A, page 97, for information on assessing results relative to targets, and results over time.
- See Endnote B, Diploma Examinations, pages 103-104.



**Performance Measure 1.b:  
Overall Diploma Examination Results in Mathematics*****Rationale***

- Student results on diploma examinations are a solid indicator of whether high school students are achieving high standards.
- The Mathematics diploma examination measure is an aggregate of two courses. This measure reflects a focus on the development of mathematical reasoning and problem-solving skills, which are important outcomes for Alberta's K–12 education system.

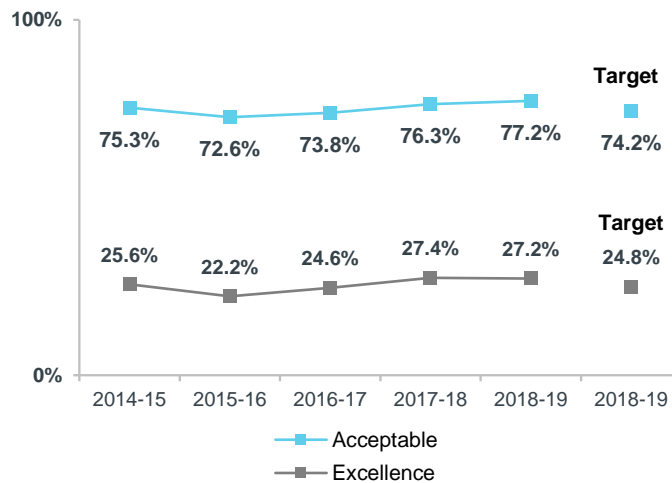
***Targets***

- The targets for overall Mathematics diploma examination results at the acceptable standard and at the standard of excellence were exceeded.

***Discussion***

- The Mathematics measure is an average of the results in the following two subjects, weighted by the total number of individuals that wrote each of the exams:
  - » Mathematics 30-1
  - » Mathematics 30-2
- The overall proportions of students achieving the acceptable standard and the standard of excellence in Mathematics have increased since 2016-17. Note that Mathematics results were not directly comparable prior to 2016-17 as equating for Mathematics 30-1 and Mathematics 30-2 was not in place until after that year.

### Overall Percentages of Students Who Achieved Standards on Diploma Examinations in Mathematics



Source: Alberta Education

#### Notes:

- The percentages of students who achieved the acceptable standard include the students who achieved the standard of excellence.
- Overall results for Mathematics are a weighted average of results for the two Mathematics subjects.
- Any results prior to 2016-2017 were not directly comparable, as equating for Mathematics 30-1 and Mathematics 30-2 was not in place until the 2016-17 school year.
- Starting from the 2018-19 school year, written-response questions have been added as part of the Mathematics 30-1 and Mathematics 30-2 diploma exams.
- Participation in diploma examinations was impacted by the fire in Fort McMurray in May to June 2016. Caution should be exercised when interpreting the results over time.
- See Endnote A, page 97, for information on assessing results relative to targets, and results over time.
- See Endnote B, Diploma Examinations, pages 103-104.

**Discussion (continued):**

- For Mathematics 30-1 and Mathematics 30-2 comparisons over time are not reported as equating was not in place for those subjects until the 2016-17 school year.

**Percentages of Students Writing Mathematics Diploma Examinations Who Achieved Standards**

Subject	Standard	2014-15	2015-16	2016-17	2017-18	2018-19	Targets 2018-19
Mathematics 30-1	excellence	31.6	25.9	30.7	35.3	35.1	
	acceptable	76.1	70.7	73.1	77.8	77.8	
Mathematics 30-2	excellence	15.5	16.8	15.9	16.4	16.8	
	acceptable	73.9	75.4	74.7	74.2	76.5	
<b>Overall Mathematics</b>	<b>excellence</b>	<b>25.6</b>	<b>22.2</b>	<b>24.6</b>	<b>27.4</b>	<b>27.2</b>	<b>24.8</b>
	<b>acceptable</b>	<b>75.3</b>	<b>72.6</b>	<b>73.8</b>	<b>76.3</b>	<b>77.2</b>	<b>74.2</b>

Source: Alberta Education

**Notes:**

- The percentages of students who achieved the acceptable standard include the students who achieved the standard of excellence.
- Overall results for Mathematics are a weighted average of results for the two Mathematics subjects.
- Any results prior to 2016-2017 are not directly comparable, as equating for Mathematics 30-1 and Mathematics 30-2 was not in place until the 2016-17 school year.
- Starting from the 2018-19 school year, written-response questions have been added as part of the Mathematics 30-1 and Mathematics 30-2 diploma exams.
- Participation in diploma examinations was impacted by the fire in Fort McMurray in May to June 2016. Caution should be exercised when interpreting the results over time.
- See Endnote A, page 97, for information on assessing results relative to targets and results over time.
- See Endnote B, Diploma Examinations, pages 103-104.

**Performance Measure 1.b:**  
**Overall Diploma Examination Results in Social Studies**

***Rationale***

- Student results on diploma examinations are a solid indicator of whether high school students are achieving high standards.
- The Social Studies diploma examination measure is an aggregate of two courses. This measure reflects a focus on students affirming their place as citizens in an inclusive, democratic society, an important outcome for Alberta's K–12 education system.

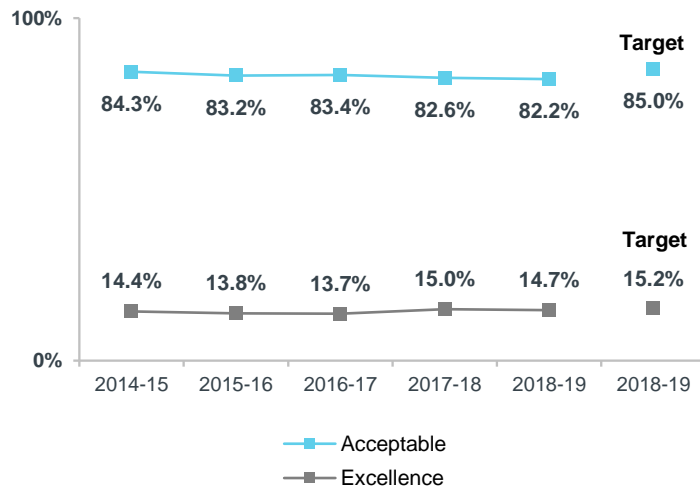
***Targets***

- The targets for overall Social Studies diploma examination results at the acceptable standard and at the standard of excellence were not met.

***Discussion***

- The Social Studies measure is an average of the results in the following two subjects, weighted by the total number of individuals that wrote each of the exams:
  - » Social Studies 30-1
  - » Social Studies 30-2
- The overall proportion of students achieving the acceptable standard in Social Studies has decreased over time, while the proportion of students achieving the standard of excellence has remained stable.

### Overall Percentages of Students Who Achieved Standards on Diploma Examinations in Social Studies



Source: Alberta Education

#### Notes:

- The percentages of students who achieved the acceptable standard include the students who achieved the standard of excellence.
- Overall results for Social Studies are a weighted average of results for the two Social Studies subjects.
- Participation in diploma examinations was impacted by the fire in Fort McMurray in May to June 2016. Caution should be exercised when interpreting the results over time.
- See Endnote A, page 97, for information on assessing results relative to targets, and results over time.
- See Endnote B, Diploma Examinations, pages 103-104.

**Discussion (continued):**

- Compared to the previous three-year average, the proportion of students achieving the acceptable standard has increased for Social Studies 30-1 and decreased for Social Studies 30-2.
- Compared to the previous three-year average, the proportion of students achieving the standard of excellence has increased for Social Studies 30-1 and remained stable for Social Studies 30-2.

**Percentages of Students Writing Social Studies Diploma Examinations Who Achieved Standards**

Subject	Standard	2014-15	2015-16	2016-17	2017-18	Previous 3-year average	2018-19	Targets 2018-19
Social Studies 30-1	excellence	16.2	14.3	14.8	17.7	15.6	17.0	
	acceptable	87.1	84.9	86.0	86.2	85.7	86.6	
Social Studies 30-2	excellence	12.5	13.1	12.6	12.2	12.6	12.2	
	acceptable	81.3	81.1	80.6	78.8	80.2	77.8	
<b>Overall</b>	<b>excellence</b>	<b>14.4</b>	<b>13.8</b>	<b>13.7</b>	<b>15.0</b>	<b>14.2</b>	<b>14.7</b>	<b>15.2</b>
<b>Social Studies</b>	<b>acceptable</b>	<b>84.3</b>	<b>83.2</b>	<b>83.4</b>	<b>82.6</b>	<b>83.1</b>	<b>82.2</b>	<b>85.0</b>

Source: Alberta Education

**Notes:**

- The percentages of students who achieved the acceptable standard include the students who achieved the standard of excellence.
- Overall results for Social Studies are a weighted average of results for the two Social Studies subjects.
- Participation in diploma examinations was impacted by the fire in Fort McMurray in May to June 2016. Caution should be exercised when interpreting the results over time.
- See Endnote A, page 97, for information on assessing results relative to targets, and results over time.
- See Endnote B, Diploma Examinations, pages 103-104.

**Performance Measure 1.b:  
Overall Diploma Examination Results in the Sciences*****Rationale***

- Student results on diploma examinations are a solid indicator of whether high school students are achieving high standards.
- The Sciences diploma examination measure is an aggregate of four courses. This measure reflects a focus on skills and attitudes needed to solve problems and make decisions, which are important outcomes for Alberta's K–12 education system.

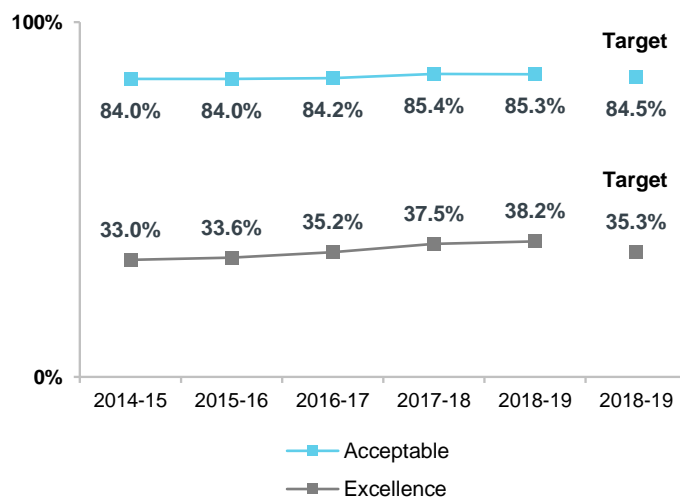
***Targets***

- The targets for overall Sciences diploma examination results at the acceptable standard and the standard of excellence were exceeded.

***Discussion***

- The Sciences measure is an average of the results in the following four subjects, weighted by the total number of individuals that wrote each of the exams:
  - » Biology 30
  - » Chemistry 30
  - » Physics 30
  - » Science 30
- The overall proportions of students achieving the acceptable standard and the standard of excellence in the Sciences have increased over time.

### Overall Percentages of Students Who Achieved Standards on Diploma Examinations in the Sciences



Source: Alberta Education

#### Notes:

- The percentages of students who achieved the acceptable standard include the students who achieved the standard of excellence.
- Overall results for the Sciences are a weighted average of results for the four Science subjects.
- Participation in diploma examinations was impacted by the fire in Fort McMurray in May to June 2016. Caution should be exercised when interpreting the results over time.
- See Endnote A, page 97, for information on assessing results relative to targets, and results over time.
- See Endnote B, Diploma Examinations, pages 103-104.



**Discussion (continued):**

- Compared to the previous three-year average, the proportion of students achieving the acceptable standard has increased for Chemistry 30 and Physics 30, remained stable for Science 30, and decreased for Biology 30.
- Compared to the previous three-year average, the proportion of students achieving the standard of excellence has increased for Biology 30, Chemistry 30, Physics 30, and Science 30.

**Percentages of Students Writing Science Diploma Examinations Who Achieved Standards**

Subject	Standard	2014-15	2015-16	2016-17	2017-18	Previous 3-year average	2018-19	Targets 2018-19
Biology 30	excellence	33.0	32.4	32.3	36.6	33.8	35.5	
	acceptable	85.8	85.1	84.2	86.6	85.3	83.9	
Chemistry 30	excellence	34.2	34.5	38.6	38.3	37.2	42.5	
	acceptable	82.1	81.5	83.1	83.6	82.7	85.7	
Physics 30	excellence	35.8	39.8	41.8	43.6	41.7	43.5	
	acceptable	83.9	85.8	85.7	86.2	85.9	87.5	
Science 30	excellence	26.6	27.6	28.4	31.5	29.2	31.2	
	acceptable	83.9	84.4	84.9	85.4	84.9	85.7	
<b>Overall Science</b>	<b>excellence</b>	<b>33.0</b>	<b>33.6</b>	<b>35.2</b>	<b>37.5</b>	<b>35.4</b>	<b>38.2</b>	<b>35.3</b>
	<b>acceptable</b>	<b>84.0</b>	<b>84.0</b>	<b>84.2</b>	<b>85.4</b>	<b>84.5</b>	<b>85.3</b>	<b>84.5</b>

Source: Alberta Education

**Notes:**

- The percentages of students who achieved the acceptable standard include the students who achieved the standard of excellence.
- Overall results for the Sciences are a weighted average of results for the four Science subjects.
- Participation in diploma examinations was impacted by the fire in Fort McMurray in May to June 2016. Caution should be exercised when interpreting the results over time.
- See Endnote A, page 97, for information on assessing results relative to targets, and results over time.
- See Endnote B, Diploma Examinations, pages 103-104.

## Supplementary Information: English as a Second Language (ESL) Students Diploma Examination Results in English Language Arts

### Discussion

- The goal of ESL programs is to provide students with planned systematic instruction and support that will enable them to speak the English language fluently, further their education and become productive and contributing members of Albertan and Canadian society. ESL programs are funded for both Canadian-born and foreign-born students.
- Targets were not set for ESL students in the 2018-21 business plan.
- The overall proportions of ESL students achieving the acceptable standard and the standard of excellence in English Language Arts have increased over time.
- Compared to the previous three-year average, ESL results at the acceptable standard have remained stable for English Language Arts 30-1 and English Language Arts 30-2.
- Compared to the previous three-year average, ESL results at the standard of excellence have remained stable for English Language Arts 30-1 and English Language Arts 30-2.

### Percentages of ESL Students Writing English Language Arts Diploma Examinations Who Achieved Standards

Subject	Standard	2014-15	2015-16	2016-17	2017-18	Previous 3-year average	2018-19
English Language Arts 30-1	excellence	2.9	3.3	3.7	3.8	3.6	3.3
	acceptable	64.7	68.2	68.1	71.0	69.1	68.1
English Language Arts 30-2	excellence	3.1	4.5	4.0	4.8	4.4	4.8
	acceptable	72.3	74.8	75.8	76.3	75.6	73.1
<b>Overall English Language Arts</b>	<b>excellence</b>	<b>3.0</b>	<b>3.9</b>	<b>3.8</b>	<b>4.3</b>	<b>4.0</b>	<b>4.1</b>
	<b>acceptable</b>	<b>68.5</b>	<b>71.5</b>	<b>72.0</b>	<b>73.6</b>	<b>72.4</b>	<b>70.7</b>

Source: Alberta Education

### Notes:

- The percentages of students who achieved the acceptable standard include the students who achieved the standard of excellence.
- Equating of diploma examinations has been phased in over the past number of years making results directly comparable from year-to-year for the equated tests. Results are comparable for all years reported from 2014-15 to 2018-19 for English Language Arts 30-1 and 30-2.
- Overall results for English Language Arts are a weighted average of results for the English Language Arts subjects.
- Participation in diploma examinations was impacted by the fire in Fort McMurray in May to June 2016. Caution should be exercised when interpreting the results over time.
- See Endnote A, page 97, for information on assessing results over time.  
See Endnote B, Diploma Examinations, pages 103-104.

## Other Subjects (ESL Students)

### *Discussion*

- Compared to the previous three-year average, the proportion of ESL students achieving the acceptable standard has decreased for Social Studies 30-2. The proportions have remained stable for Social Studies 30-1, Biology 30, Chemistry 30, Physics 30, and Science 30.
- Compared to the previous three-year average, the proportion of ESL students achieving the standard of excellence has decreased for Social Studies 30-2. The proportions have remained stable for Social Studies 30-1, Biology 30, Chemistry 30, Physics 30, and Science 30.
- The numbers of ESL students writing French Language Arts 30-1 and Français 30-1 exams were too small to make comparisons over time. For Mathematics 30-1 and Mathematics 30-2 comparisons over time are not included as equating was not in place for those subjects until the 2016-17 school year.

### Percentages of ESL Students Writing Diploma Examinations other than English Language Arts Who Achieved Standards

Subject	Standard	2014-15	2015-16	2016-17	2017-18	Previous 3-year average	2018-19
French Language Arts 30-1	excellence	12.5	16.1	12.8	12.8	13.9	20.9
	acceptable	95.0	83.9	89.4	92.3	88.5	93.0
Français 30-1	excellence	14.8	11.8	24.0	8.3	14.7	33.3
	acceptable	88.9	100.0	96.0	83.3	93.1	100.0
Mathematics 30-1	excellence	30.2	26.0	27.9	29.3	27.7	27.6
	acceptable	72.9	65.1	65.8	71.5	67.5	71.7
Mathematics 30-2	excellence	11.5	11.6	11.5	12.0	11.7	11.6
	acceptable	66.7	69.3	68.6	66.1	68.0	68.8
Social Studies 30-1	excellence	8.3	8.2	9.6	10.0	9.3	9.6
	acceptable	74.8	75.0	76.9	77.9	76.6	79.1
Social Studies 30-2	excellence	9.5	10.8	9.2	8.7	9.6	7.5
	acceptable	69.7	70.9	70.1	68.0	69.7	65.7
Biology 30	excellence	26.4	25.9	26.1	29.1	27.1	24.7
	acceptable	80.9	78.8	77.4	80.5	78.9	76.6
Chemistry 30	excellence	32.2	30.8	36.4	33.2	33.5	34.6
	acceptable	76.9	78.5	78.8	79.3	78.9	78.8
Physics 30	excellence	30.4	34.6	31.1	32.8	32.8	32.3
	acceptable	77.7	78.8	78.1	79.4	78.8	79.3
Science 30	excellence	20.1	20.4	22.7	22.1	21.7	21.8
	acceptable	74.3	75.5	74.9	75.8	75.4	78.3

Source: Alberta Education

#### Notes:

- The percentages of students who achieved the acceptable standard include the percentages of students who achieved the standard of excellence.
- Results are comparable for Mathematics 30-1 and Mathematics 30-2 since 2016-17. Caution should be exercised when interpreting the results over time.
- Participation in diploma examinations was impacted by the fire in Fort McMurray in May to June 2016. Caution should be used when interpreting the results over time.
- See Endnote A, page 97, for information on assessing results over time.
- See Endnote B, Diploma Examinations, pages 103-104.

**Performance Measure 1.c:  
Diploma Examination Participation*****Rationale***

- Participation in four or more diploma examinations reflects the intent of the Alberta programs of study and gives appropriate emphasis to the four core subjects of language arts, mathematics, the sciences and social studies, which are the foundation of basic education.

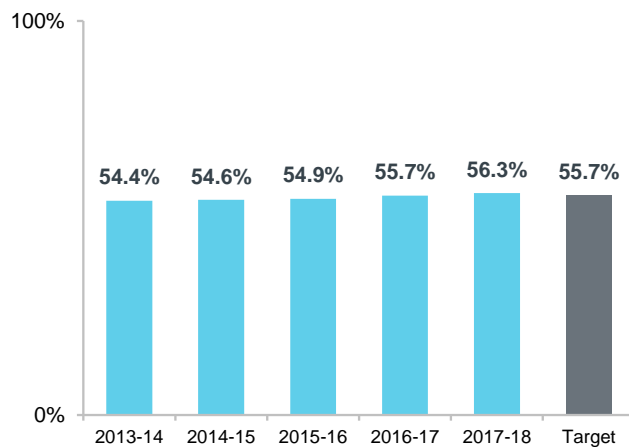
***Target***

- The target was exceeded.

***Discussion***

- In 2017-18, 56.3 per cent of Alberta's high school students wrote four or more diploma examinations within three years of entering Grade 10.
- The proportion of students has increased over time.
- The ministry is acting to improve results in this area by:
  - » providing students writing diploma exams the opportunity to use additional writing time to complete assessments, and
  - » streamlining processes for other accommodations, such as eliminating the application process for accommodations and provisions. Accommodations for the purpose of writing diploma exams are reviewed and managed at the school level.
- The vast majority of students who have written four or more diploma examinations have taken courses in the four core subjects throughout high school. This positions them well to complete high school and enter post-secondary programs or the workplace.

### Percentages of Students Writing Four or More Diploma Examinations within Three Years of Entering Grade 10



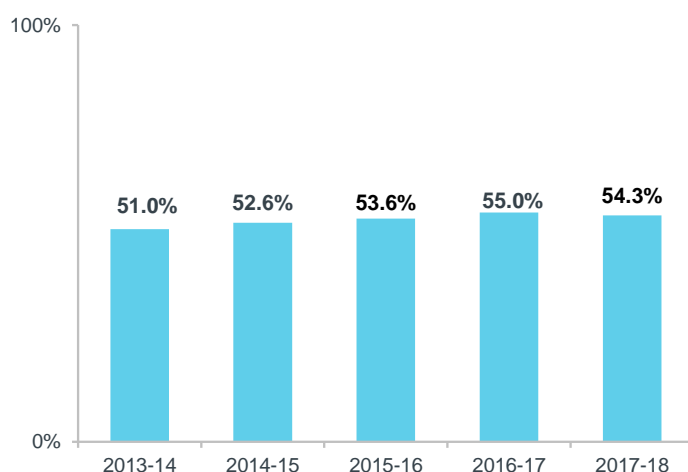
Source: Alberta Education

#### Notes:

- The most current result available for this measure is for the 2017-18 school year as data for this measure lag a year.
- Participation in diploma examinations was impacted by the fire in Fort McMurray in May to June 2016. Caution should be exercised when interpreting the results over time.
- Weighting of school-awarded marks in diploma courses increased from 50 per cent to 70 per cent beginning in the 2015-16 school year. Caution should be exercised when interpreting trends over time.
- The 2015-2016 results for three-year diploma examination participation rates have been adjusted to reflect the correction of the Grade 10 cohort.
- See Endnote A, page 97 for information on assessing results relative to targets, and results over time.
- See Endnote B, Diploma Examination Participation Rate, page 104.

**Supplementary Information:****English as a Second Language (ESL) Students  
Diploma Examination Participation Rate**

- ESL programs help students learn English while also learning about Canadian cultural values, customs and social expectations. The goal of ESL programs is to provide students with planned systematic instruction and support that will enable them to speak the English language fluently, further their education, and become productive and contributing members of Albertan and Canadian society. ESL programming is funded for both Canadian-born and foreign-born students.
- Based on 2013-14 to 2017-18 data, the percentage of ESL students writing four or more diploma examinations within three years of entering Grade 10 has increased over time.

**Percentages of English as a Second Language Students Writing  
Four or More Diploma Examinations within Three years of  
Entering Grade 10**

**Source:** Alberta Education

**Notes:**

- The most current result available for this measure is for the 2017-18 school year as data for this measure lag a year.
- Participation in diploma examinations was impacted by the fire in Fort McMurray in May to June 2016. Caution should be exercised when interpreting the results over time.
- Weighting of school-awarded marks in diploma courses increased from 50 per cent to 70 per cent beginning in the 2015-16 school year. Caution should be exercised when interpreting trends over time.
- The 2015-2016 results for three-year diploma examination participation rates have been adjusted to reflect the correction of the Grade 10 cohort.
- See Endnote A, page 97 for information on assessing results relative to targets, and results over time.
- See Endnote B, Diploma Examination Participation Rate, page 104.

## Performance Measure 1.d: Annual Dropout Rate - All Students

### Rationale

- The student dropout rate is an indicator of how well the needs of students at risk of not completing high school are being addressed by the K–12 education system.

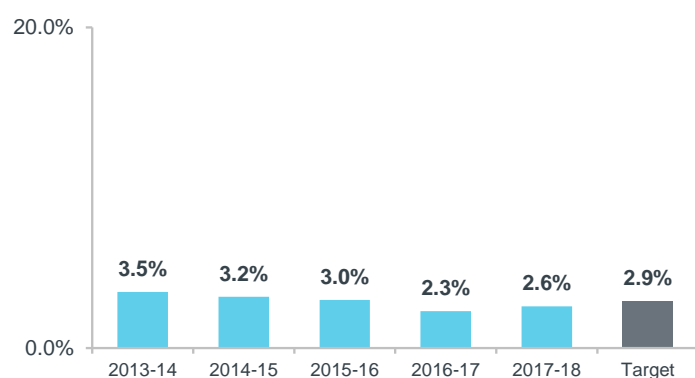
### Target

- The target for the dropout rate was exceeded.

### Discussion

- Enrolment data indicate that 2.6 per cent of students aged 14-to-18 dropped out of school in 2017-18.
- The dropout rate has improved significantly over time.
- Efforts to improve high school completion rates, as well as strategies to improve parent and community engagement, are being implemented to encourage students to complete school and help reduce their dropout rate.
- As part of the effort to improve results in this area, the ministry launched the Office of Student Attendance and Re-engagement (OSAR) to provide leadership and support to school authorities to address chronic absenteeism.
- Dropping out of school may be a temporary interruption of a student's education. Of the students who dropped out in 2016-17, about 23 per cent resumed their education in 2017-18.
- Some students who do not complete high school in the basic education system do so as young adults in the adult learning system. In 2018, 94 per cent of Albertans aged 25-34 reported they had completed high school. This result has remained stable over time.

### Annual Dropout Rates of Students Aged 14-to-18



Source: Alberta Education

### Notes:

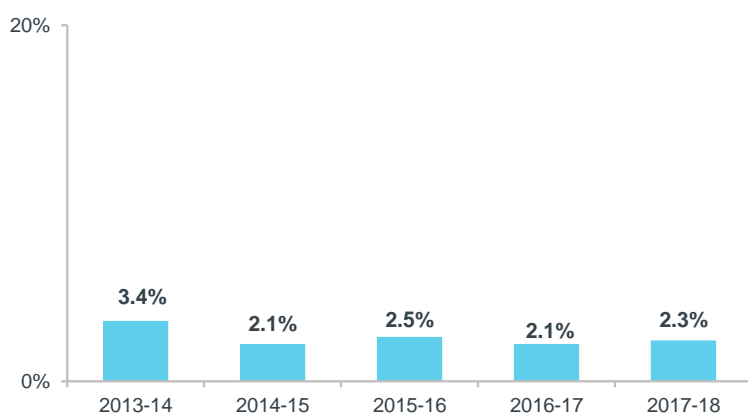
- The most recent results are for 2017-18 as the data for this measure lag a year.
- Students aged 14-to-18 who, in the following year, are not enrolled in school (a K–12 school, an Alberta post-secondary institution or apprenticeship program) and have not completed high school are included in the annual dropout rate. For example, students aged 14-to-18 in 2016-17 were tracked for one year. Those who were not enrolled and had not completed are included in the 2017-18 dropout rate.
- See Endnote B, Annual Dropout Rate of Students Aged 14-to-18, pages 99-100.



### Supplementary Information: English as a Second Language (ESL) Students Annual Dropout Rate

- ESL programs help students learn English while also learning about Canadian cultural values, customs and social expectations. The goal of ESL programs is to provide students with planned systematic instruction and support that will enable them to speak the English language fluently, further their education, and become productive and contributing members of Albertan and Canadian society. ESL programming is funded for both Canadian-born and foreign-born students.
- Enrolment data indicate that 2.3 per cent of ESL students aged 14-to-18 dropped out of school in 2017-18.
- Based on 2013-14 to 2017-18 data, the dropout rate for ESL students has improved significantly over time.

### Annual Dropout Rates of English as a Second Language Students Aged 14-to-18



**Source:** Alberta Education

#### Notes:

- Students aged 14-to-18 who, in the following year, are not enrolled in school (a K–12 school, an Alberta post-secondary institution or apprenticeship program) and have not completed high school are included in the annual dropout rate. For example, students aged 14-to-18 in 2016-17 were tracked for one year. Those who were not enrolled and had not completed are included in the 2017-18 dropout rate.
- See Endnote A, page 97, for information on assessing results over time.
- See Endnote B, Annual Dropout Rate of Students Aged 14-to-18, pages 99-100.

## **Performance Measure 1.e: High School Completion**

### ***Rationale***

- High school completion is important for entry to the labour force and post-secondary programs. While the majority of students complete high school within three years of entering Grade 10, the five-year rate recognizes that it may take more time for some students to finish high school.
- In addition to those who earn a high school diploma or certificate, Alberta's high school completion rate also includes students who enter an Alberta post-secondary institution or an apprenticeship program within five years of entering Grade 10. This acknowledges that students have completed the high school courses they need to continue their education in a post-secondary program. Another group comprises those who have earned credits in a minimum of five Grade 12 courses, including one Language Arts diploma examination course and three other diploma examination courses.

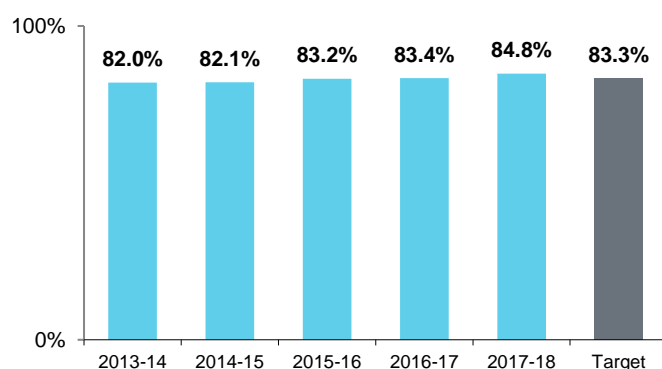
### ***Target***

- The target for high school completion rate was exceeded.

### ***Discussion***

- In 2017-18, 84.8 per cent of students completed high school within five years of entering Grade 10.
- Based on 2013-14 to 2017-18 data, the high school completion rate has improved over time. This indicates that parents, students and schools continue to recognize that high school completion is important for students' future success.
- Survey results indicate that high school students are attracted into the workforce for part time work, although the percentage of students employed appears to be declining. The percentage of Grade 12 Alberta High School students who reported being employed decreased from 55 per cent to 52 per cent, corresponding to the Grade 10 cohorts that completed in 2013-14 and 2017-18, respectively.
- At the same time, the percentage of employed Grade 12 students who report they work more than 20 hours per week has remained stable, with 18 per cent in 2013-14 and 17 per cent in 2017-18.
- In addition, some students who do not complete high school in the ECS-12 education system do so as young adults in the adult learning system. In 2018, 94 per cent of Albertans aged 25-to-34 reported they had completed high school. This result has remained stable over time and is similar to the Canadian average.

### High School Completion Rate of Students within Five Years of Entering Grade 10



Source: Alberta Education

#### Notes:

- The most recent results are for 2017-18 as the data for this measure lag a year.
- Included in the calculation of high school completion rates is an estimated adjustment for attrition (i.e., students moving out of province) using Statistics Canada estimates of out-migration.
- Weighting of school-awarded marks in diploma courses increased from 50 per cent to 70 per cent beginning in the 2015-16 school year. Caution should be exercised when interpreting trends over time.
- See Endnote A, page 97, for information on assessing results relative to targets.
- See Endnote B, High School Completion Rates, page 100.

### Percentages of Students who Completed High School within Three and Five Years of Entering Grade 10

Grade 10 Year	3 Year Rate and Year		5 Year Rate and Year	
2009-10	74.8%	2011-12	82.0%	2013-14
2010-11	75.3%	2012-13	82.1%	2014-15
2011-12	76.5%	2013-14	83.2%	2015-16
2012-13	76.5%	2014-15	83.4%	2016-17
2013-14	78.0%	2015-16	84.8%	2017-18
2014-15	78.0%	2016-17		
2015-16	79.1%	2017-18		

Source: Alberta Education

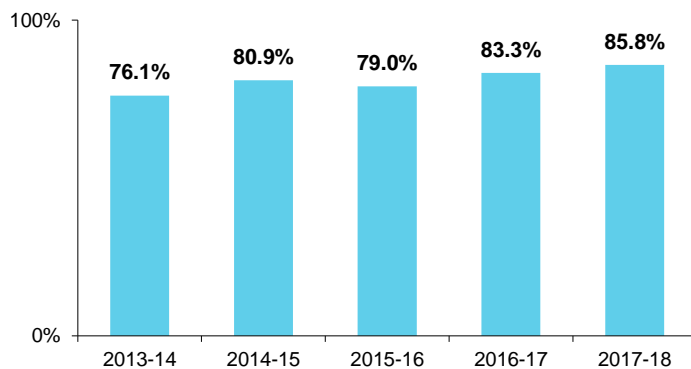
#### Note:

- The 2015-2016 result for the three-year high school completion rate has been adjusted to reflect the correction of the Grade 10 cohort.

**Supplementary Information:  
English as a Second Language (ESL)  
High School Completion**

- ESL programs help students learn English while also learning about Canadian cultural values, customs, and social expectations. The goal of ESL programs is to provide students with planned systematic instruction and support that will enable them to speak the English language fluently, further their education, and become productive and contributing members of Albertan and Canadian society. ESL programming is funded for both Canadian-born and foreign-born students.
- In 2017-18, 85.8 per cent of ESL students completed high school within five years of entering Grade 10.
- Based on 2013-14 to 2017-18 data, the high school completion rate for ESL students has improved over time.

**High School Completion Rate of English as a Second  
Language Students within Five Years of Entering Grade 10**



**Source:** Alberta Education

**Percentages of ESL Students Who Completed High School within  
Three and Five Years of Entering Grade 10**

Grade 10 Year	3 Year Rate and Year	5 Year Rate and Year
2009-10	62.0% 2011-12	76.1% 2013-14
2010-11	65.9% 2012-13	80.9% 2014-15
2011-12	65.4% 2013-14	79.0% 2015-16
2012-13	67.5% 2014-15	83.3% 2016-17
2013-14	73.7% 2015-16	85.8% 2017-18
2014-15	74.8% 2016-17	
2015-16	74.4% 2017-18	

Source: Alberta Education

**Notes:**

- Included in the calculation of high school completion rates is an estimated adjustment for attrition (i.e., students moving out of province) using Statistics Canada estimates of out-migration.
- Weighting of school-awarded marks in diploma courses increased from 50 per cent to 70 per cent in the beginning of the 2015-16 school year. Caution should be exercised when interpreting trends over time.
- The 2015-2016 result for the three-year high school completion rate has been adjusted to reflect the correction of the Grade 10 cohort.
- See Endnote B, High School Completion Rates, page 100.

## Performance Measure 1.f: Transition to Post-Secondary

### *Rationale*

- Post-secondary education equips students with valuable skills and knowledge to increase their opportunities for success and full participation in society. Entering post-secondary and apprenticeship programs indicates that high school students are prepared for further education and training.

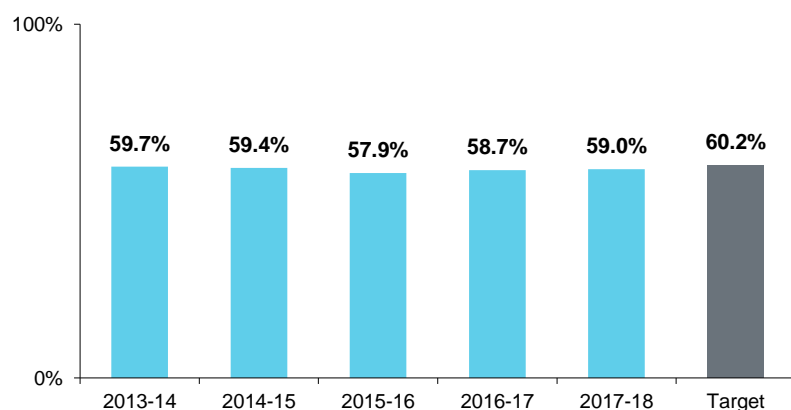
### *Target*

- The target was not met.

### *Discussion*

- In 2017-18, 59 per cent of Alberta's high school students made the transition to post-secondary within six years of entering Grade 10.
- The six-year transition rate has decreased since 2013-14.

### High School to Post-Secondary Transition Rate within Six Years of Entering Grade 10



Source: Alberta Education

### Notes:

- The most recent results are for 2017-18 as the data for this measure lag a year.
- Student enrolment in a post-secondary program includes attending a publicly funded post-secondary institution in Alberta or registering in an Alberta apprenticeship program.
- The post-secondary transition rates include adjustments for attrition using estimates from Statistics Canada and for students who attend post-secondary outside the province using estimates from the Ministry of Advanced Education.
- See Endnote A, page 97, for information on assessing results relative to targets.
- See Endnote B, High School to Post-Secondary Transition Rates, page 101.

**Discussion (continued):**

- The difference between the four-year and six-year transition rates indicates that a substantial proportion of Alberta's young people delay their entry to post-secondary programs after high school.
- Projections indicate that the six-year rate will remain between 58 and 60 per cent over the next few years.

**Percentages of Students Who Enroll in Post-Secondary Programs within  
Four and Six Years of Entering Grade 10**

Grade 10 Year	4 Year Rate	and Year	6 Year Rate	and Year
2008-09	39.4%	2011-12	59.7%	2013-14
2009-10	39.7%	2012-13	59.4%	2014-15
2010-11	38.3%	2013-14	57.9%	2015-16
2011-12	37.0%	2014-15	58.7%	2016-17
2012-13	37.0%	2015-16	59.0%	2017-18
2013-14	39.3%	2016-17		
2014-15	40.1%	2017-18		

Source: Alberta Education

## Supplementary Information: First Nations, Métis and Inuit Post-Secondary Transition Rate

### Discussion:

- In 2017-18, 34.2 per cent of Alberta's self-identified First Nations, Métis and Inuit high school students made the transition to post-secondary within six years of entering Grade 10.
- The six-year transition rate has been stable since 2013-14.
- The difference between the four-year transition rate and the six-year rate indicates that a substantial proportion of self-identified First Nations, Métis and Inuit students delay their entry to post-secondary programs after high school.
- The six-year rate for First Nations, Métis and Inuit students, 34.2 per cent, is slightly more than half the rate for all Alberta students, 59 per cent.
- Projections indicate that the six-year rate will remain between 32 and 35 per cent over the next few years.

### Percentages of First Nations, Métis and Inuit Students Who Enroll in Post-Secondary Programs within Four and Six Years of Entering Grade 10

Grade 10 Year	4 Year Rate and Year		6 Year Rate and Year	
2008-09	18.2%	2011-12	33.0%	2013-14
2009-10	18.9%	2012-13	33.5%	2014-15
2010-11	17.8%	2013-14	31.8%	2015-16
2011-12	17.8%	2014-15	33.0%	2016-17
2012-13	17.3%	2015-16	34.2%	2017-18
2013-14	19.3%	2016-17		
2014-15	20.3%	2017-18		

Source: Alberta Education



## Supplementary Information: English as a Second Language (ESL) Post-Secondary Transition Rate

### Discussion:

- ESL programs help students learn English while also learning about Canadian cultural values, customs and social expectations. The goal of ESL programs is to provide students with planned systematic instruction and support that will enable them to speak the English language fluently, further their education and become productive and contributing members of Albertan and Canadian society. ESL programming is funded for both Canadian-born and foreign-born students.
- In 2017-18, 64.6 per cent of ESL students made the transition to post-secondary within six years of entering Grade 10. This group's transition rate has been higher than the provincial rate for the past three years.
- Projections indicate that the six-year rate will remain between 63 and 65 per cent over the next few years.

### Percentages of ESL Students Who Enroll in Post-Secondary Programs within Four and Six Years of Entering Grade 10

Grade 10 Year	4 Year Rate and Year		6 Year Rate and Year	
2008-09	40.8%	2011-12	62.9%	2013-14
2009-10	38.0%	2012-13	61.3%	2014-15
2010-11	40.9%	2013-14	65.1%	2015-16
2011-12	30.8%	2014-15	62.3%	2016-17
2012-13	34.2%	2015-16	64.6%	2017-18
2013-14	37.1%	2016-17		
2014-15	39.4%	2017-18		

Source: Alberta Education

## Outcome Two

### Alberta's education system supports First Nations, Métis, and Inuit students' success

The ministry supports the success of First Nations, Métis, and Inuit students by helping to improve the resources, supports, and programs provided for all students, teachers, and schools. The department also strengthens stewardship by reviewing accountability for funding and acting on its commitments under the *Truth and Reconciliation Commission of Canada: Calls to Action* and *United Nations Declaration on the Rights of Indigenous Peoples*. The department established relationships with First Nations governments, the Blackfoot Confederacy, the Confederacy of Treaty Six First Nations, Treaty 8 First Nations of Alberta, the Métis Settlements General Council, the Rupertsland Institute, the Alberta Native Friendship Centres Association, and other Indigenous organizations to ensure it understands the diverse and complex needs of First Nations, Métis, and Inuit students.

**Performance Measure 2.a:****Overall First Nations, Métis, and Inuit Student Achievement Test Results in Language Arts*****Rationale***

- Overall First Nations, Métis, and Inuit student achievement of standards on provincial achievement tests is a sound indicator of whether elementary and junior high self-identified First Nations, Métis, and Inuit students are achieving high standards in Language Arts, an important outcome for Alberta's K–12 education system.

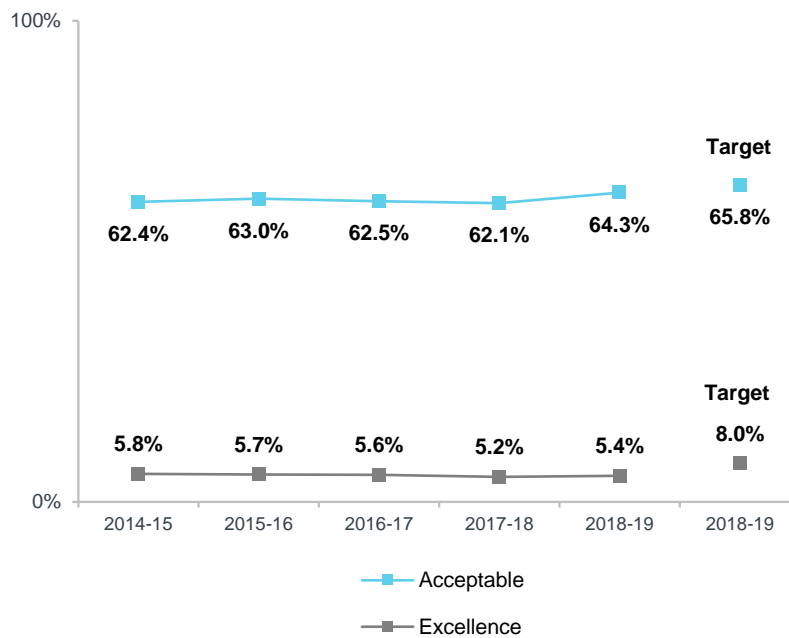
***Target***

- The targets for overall Language Arts results at the acceptable standard and at the standard of excellence were not met.

***Discussion***

- Overall results in Language Arts are calculated as an average of the results in the following seven subjects, weighted by the number of individuals that were enrolled:
  - » English Language Arts 6 and 9
  - » French Language Arts 6 and 9
  - » Français 6 and 9
  - » English Language Arts 9 (Knowledge and Employability)
- The overall proportion of self-identified First Nations, Métis, and Inuit students achieving the acceptable standard in Language Arts has increased over time, while the overall proportion achieving the standard of excellence has remained stable.
- To support student learning in core subjects, the ministry provides programs of study and implementation guides for teachers and develops or authorizes learning resources for students in all grades and subjects.

### Overall Percentage of Self-Identified First Nations, Métis, and Inuit Students Who Achieved Standards on Grade 6 and 9 Provincial Achievement Tests in Language Arts



Source: Alberta Education

#### Notes:

- The results reported are solely based on students who identified themselves as Indian/First Nations, Métis, and Inuit. These students may not be fully representative of the population of Indigenous students. Discretion should be applied when interpreting the results.
- The percentages of students who achieved the acceptable standard include the students who achieved the standard of excellence.
- Overall Language Arts results are a weighted average based on total enrolment in Grades 6 and 9 Language Arts courses.
- Participation in provincial achievement tests was impacted by the fire in Fort McMurray in May to June 2016. Caution should be exercised when interpreting the results over time.
- See Endnote A, page 97, for information on assessing results relative to targets, and results over time.
- See Endnote B, Provincial Achievement Tests, pages 102-103.

**Discussion (continued):**

- The overall participation rate for self-identified First Nations, Métis, and Inuit students taking Language Arts provincial achievement tests has remained stable over time.

**Self-Identified First Nations, Métis, and Inuit Student Participation Rates for Language Arts Provincial Achievement Tests (in percentages)**

Subject	2014-15	2015-16	2016-17	2017-18	2018-19
<b>Grade 6</b>					
English Language Arts	87	88	87	86	87
French Language Arts	94	97	94	93	99
Français	100	*	*	100	93
<b>Grade 9</b>					
English Language Arts	80	80	81	80	79
English Language Arts (Knowledge and Employability)	75	74	73	76	75
French Language Arts	89	96	97	96	98
Français	*	*	*	100	100
<b>Overall Language Arts</b>					
	<b>83.3</b>	<b>83.8</b>	<b>84.2</b>	<b>83.4</b>	<b>83.5</b>

Source: Alberta Education

**Notes:**

- An asterisk (\*) indicates data suppression has been applied because fewer than six self-identified First Nations, Métis and Inuit students wrote the test.
- Knowledge and Employability courses are designed for students who meet enrolment criteria and learn best through experiences that integrate essential and employability skills in occupational contexts.
- Participation in provincial achievement tests was impacted by the fire in Fort McMurray in May to June 2016. Caution should be exercised when interpreting the results over time.

**Performance Measure 2.a:**

**First Nations, Métis, and Inuit Student Achievement Test Results in Language Arts  
by Individual Subject for Students in Grades 6 and 9**

***Rationale***

- Self-identified First Nations, Métis, and Inuit student results on provincial achievement tests in each grade and subject provide detailed information on whether elementary and junior high self-identified First Nations, Métis, and Inuit students are achieving high standards in Language Arts, an important outcome for Alberta's K–12 education system.

***Targets***

- Targets for individual Language Arts subject results were not set in the 2018-21 business plan.

***Discussion***

- Compared to the previous three-year average, the current proportion of self-identified First Nations, Métis and Inuit students achieving the acceptable standard has increased for English Language Arts 6 and has remained stable for English Language Arts 9 and English Language Arts 9 (Knowledge and Employability).
- Compared to the previous three-year average, the current proportion of self-identified First Nations, Métis and Inuit students achieving the standard of excellence has remained stable for English Language Arts 6 and 9 and English Language Arts 9 (Knowledge and Employability).
- The number of self-identified First Nations, Metis and Inuit students in French Language Arts and Français courses was too small to make comparisons over time.
- As adult literacy studies are not conducted regularly, Grade 9 results in Language Arts are regarded as indicators of literacy. Self-identified First Nations, Métis and Inuit students who achieve the acceptable standard have developed the foundational skills needed to become literate adults. As indicated above, the proportion of students at the acceptable standard has remained stable for English Language Arts 9.
- Participation in provincial achievement tests was impacted by the fire in Fort McMurray in May to June 2016. Caution should be exercised when interpreting the results over time.

### Percentages of Self-Identified First Nations, Métis and Inuit Students in Grades 6 and 9 Who Achieved Standards on Provincial Achievement Tests in Language Arts

Subject	Standard	2014-15	2015-16	2016-17	2017-18	Previous 3-year average	2018-19	Targets 2018-19
<b>Grade 6</b>								
English Language Arts	excellence	7.3	7.1	6.5	5.5	6.4	6.3	
	acceptable	69.0	69.3	67.9	69.0	68.8	71.6	
French Language Arts	excellence	10.1	7.8	5.6	5.2	6.2	6.6	
	acceptable	76.4	78.9	72.2	74.1	75.1	81.3	
Français	excellence	0.0	*	*	0.0	-	0.0	
	acceptable	85.7	*	*	100.0	-	80.0	
<b>Grade 9</b>								
English Language Arts	excellence	4.0	4.4	4.8	4.9	4.7	4.2	
	acceptable	54.5	56.2	57.0	54.4	55.8	55.0	
English Language Arts (Knowledge and Employability)	excellence	5.1	3.2	3.6	4.5	3.8	5.0	
	acceptable	57.2	54.5	51.7	53.5	53.2	56.3	
French Language Arts	excellence	3.7	1.3	8.2	4.5	4.7	5.4	
	acceptable	74.1	58.7	75.3	71.9	68.6	67.7	
Français	excellence	*	*	*	30.0	-	11.1	
	acceptable	*	*	*	100.0	-	77.8	
<b>Overall Language Arts</b>								
	excellence	5.8	5.7	5.6	5.2	5.5	5.4	8.0
	acceptable	62.4	63.0	62.5	62.1	62.5	64.3	65.8

Source: Alberta Education

#### Notes:

- The results reported are solely based on students who identified themselves as Indian/First Nations, Métis, and Inuit. These students may not be fully representative of the population of Indigenous students. Discretion should be applied when interpreting the results over time.
- The percentages of students who achieved the acceptable standard include the students who achieved the standard of excellence.
- An asterisk (\*) indicates data suppression has been applied because fewer than six self-identified First Nations, Métis and Inuit students wrote the test.
- Knowledge and Employability courses are designed for students who meet enrolment criteria and learn best through experiences that integrate essential and employability skills in occupational contexts.
- Participation in provincial achievement tests was impacted by the fire in Fort McMurray in May to June 2016. Caution should be exercised when interpreting the results over time.
- See Endnote A, page 97, for information on assessing results relative to targets, and results over time.
- See Endnote B, Provincial Achievement Tests, pages 102-103.

**Performance Measure 2.a:**

**Overall First Nations, Métis, and Inuit Student Achievement Test Results in Mathematics**

***Rationale***

- Overall First Nations, Métis, and Inuit student achievement of standards on provincial achievement tests is a sound indicator of whether elementary and junior high self-identified First Nations, Métis, and Inuit students are achieving high standards in Mathematics, an important outcome for Alberta's K–12 education system.

***Target***

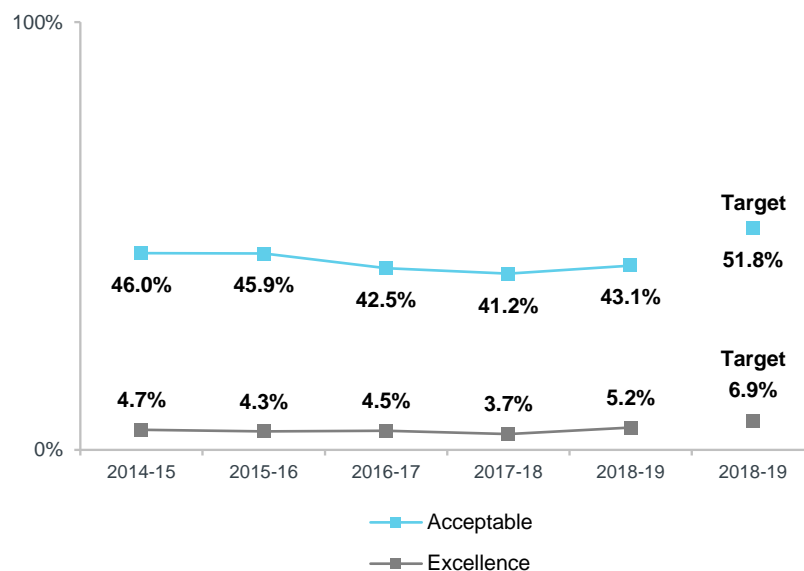
- The targets for overall Mathematics results at the acceptable standard and at the standard of excellence were not met.

***Discussion***

- Overall results in Mathematics are calculated as an average of the results in the following three subjects, weighted by the number of individuals that were enrolled:
  - » Mathematics 6
  - » Mathematics 9
  - » Mathematics 9 (Knowledge and Employability)
- The overall proportion of self-identified First Nations, Métis and Inuit students achieving the acceptable standard in Mathematics has decreased over time while the proportion achieving the standard of excellence has remained stable. The decline in overall Mathematics results in 2016-17 and 2017-18 could have been due to the inclusion of number-operation questions without using calculators. These questions were added to Part A Mathematics 6 in 2016-17 and Mathematics 9 in 2017-18, respectively. Mathematics results have started to improve in 2018-19.
- To support student learning in core subjects, the ministry provides programs of study and implementation guides for teachers and develops or authorizes learning resources for students in all grades and subjects.



### Overall Percentages of Self-Identified First Nations, Métis, and Inuit Students Who Achieved Standards on Grade 6 and 9 Provincial Achievement Tests in Mathematics



Source: Alberta Education

#### Notes:

- The results reported are solely based on students who identified themselves as Indian/First Nations, Métis, and Inuit. These students may not be fully representative of the population of Indigenous students. Discretion should be applied when interpreting the results.
- The percentages of students who achieved the acceptable standard include the students who achieved the standard of excellence.
- Overall Mathematics results are a weighted average based on total enrolment in Grades 6 and 9 Mathematics courses.
- Part A, which requires students to complete number-operation questions without using calculators, was added to Mathematics 6 in 2016-17 and Mathematics 9 in 2017-18.
- Participation in provincial achievement tests was impacted by the fire in Fort McMurray in May to June 2016. Caution should be exercised when interpreting the results over time.
- See Endnote A, page 97, for information on assessing results relative to targets, and results over time.
- See Endnote B, Provincial Achievement Tests, pages 102-103.

**Discussion (continued):**

- The overall participation rate for self-identified First Nations, Métis, and Inuit students taking Mathematics provincial achievement tests has been stable over time.

**Self-Identified First Nations, Métis, and Inuit Student Participation Rates for Mathematics Provincial Achievement Tests (in percentages)**

Subject	2014-15	2015-16	2016-17	2017-18	2018-19
<b>Grade 6</b>					
Mathematics	86	87	86	86	87
<b>Grade 9</b>					
Mathematics	81	81	81	78	78
Mathematics (Knowledge and Employability)	82	81	77	80	83
<b>Overall Mathematics</b>	<b>83.7</b>	<b>83.9</b>	<b>83.7</b>	<b>82.2</b>	<b>83.1</b>

Source: Alberta Education

**Notes:**

- Knowledge and Employability courses are designed for students who meet enrolment criteria and learn best through experiences that integrate essential and employability skills in occupational contexts.
- Participation in provincial achievement tests was impacted by the fire in Fort McMurray in May to June 2016. Caution should be exercised when interpreting the results over time.

**Performance Measure 2.a:****First Nations, Métis, and Inuit Student Achievement Test Results in Mathematics by Individual Subject for Students in Grades 6 and 9*****Rationale***

- Self-identified First Nations, Métis, and Inuit student results on provincial achievement tests in each grade and subject provide detailed information on whether self-identified elementary and junior high self-identified First Nations, Métis, and Inuit students are achieving high standards in Mathematics, an important outcome for Alberta's K–12 education system.

***Target***

- Targets for individual Mathematics subject results were not set in the 2018-21 business plan.

***Discussion***

- Compared to the previous three-year average, the current proportion of self-identified First Nations, Métis and Inuit students achieving the acceptable standard has increased for Mathematics 6, decreased for Mathematics 9, and remained stable for Mathematics 9 (Knowledge and Employability).
- Compared to the previous three-year average, the current proportion of self-identified First Nations, Métis and Inuit students achieving the standard of excellence has remained stable for Mathematics 6, Mathematics 9 and Mathematics 9 (Knowledge and Employability).

### Percentages of Self-Identified First Nations, Métis and Inuit Students in Grades 6 and 9 Who Achieved Standards on Provincial Achievement Tests in Mathematics

Subject	Standard	2014-15	2015-16	2016-17	2017-18	Previous 3-year average	2018-19	Targets 2018-19
<b>Grade 6</b>								
Mathematics	excellence	3.9	3.6	3.4	3.0	3.3	4.2	
	acceptable	51.2	49.0	44.4	49.1	47.5	50.5	
<b>Grade 9</b>								
Mathematics	excellence	4.7	4.7	5.2	3.4	4.5	5.4	
	acceptable	37.9	41.1	39.9	30.7	37.2	31.5	
Mathematics (Knowledge and Employability)	excellence	10.4	6.1	9.0	10.7	8.6	11.4	
	acceptable	58.3	51.6	46.2	51.4	49.7	55.0	
<b>Overall Mathematics</b>								
	excellence	4.7	4.3	4.5	3.7	4.2	5.2	6.9
	acceptable	46.0	45.9	42.5	41.2	43.2	43.1	51.8

Source: Alberta Education

#### Notes:

- The results reported are solely based on students who identified themselves as Indian/First Nations, Métis, and Inuit. These students may not be fully representative of the population of Indigenous students. Discretion should be applied when interpreting the results.
- The percentages of students who achieved the acceptable standard include the students who achieved the standard of excellence.
- Knowledge and Employability courses are designed for students who meet enrolment criteria and learn best through experiences that integrate essential and employability skills in occupational contexts.
- Part A, which requires students to complete number-operation questions without using calculators, was added to Mathematics 6 in 2016-17 and Mathematics 9 in 2017-18.
- Participation in provincial achievement tests was impacted by the fire in Fort McMurray in May to June 2016. Caution should be exercised when interpreting the results over time.
- See Endnote A, page 97, for information on assessing results relative to targets, and results over time.
- See Endnote B, Provincial Achievement Tests, pages 102-103.

**Performance Measure 2.a:****Overall First Nations, Métis, and Inuit Student Achievement Test Results in Social Studies*****Rationale***

- Overall First Nations, Métis, and Inuit student achievement of standards on provincial achievement tests is a sound indicator of whether elementary and junior high self-identified First Nations, Métis, and Inuit students are achieving high standards in Social Studies, an important outcome for Alberta's K–12 education system.

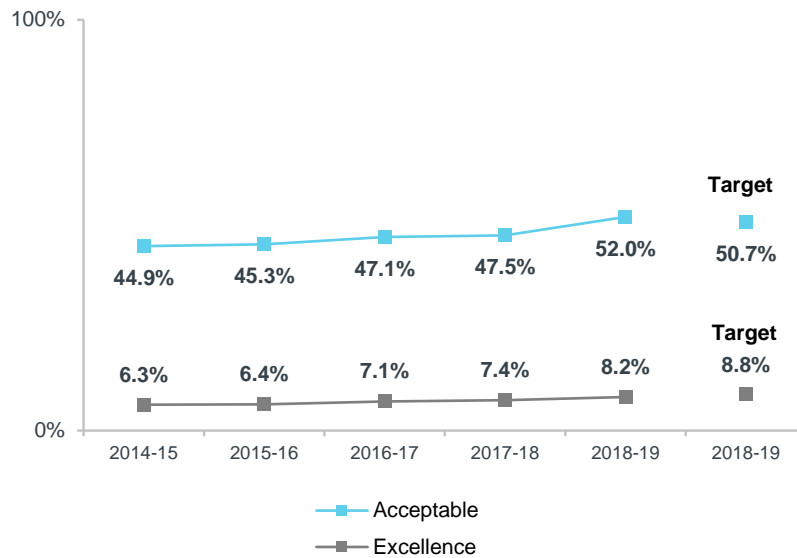
***Target***

- The target for overall Social Studies provincial achievement test results at the acceptable standard was exceeded. The target at the standard of excellence was met as the current result is not significantly different from the target value.

***Discussion:***

- Overall results in Social Studies are calculated as an average of the results in the following three subjects, weighted by the number of individuals that were enrolled:
  - » Social Studies 6
  - » Social Studies 9
  - » Social Studies 9 (Knowledge and Employability)
- The overall proportion of self-identified First Nations, Métis and Inuit students achieving the acceptable standard in Social Studies has increased over time. The proportion achieving the standard of excellence has also increased over time.
- To support student learning in core subjects, the ministry provides programs of study and implementation guides for teachers and develops or authorizes learning resources for students in all grades and subjects.

### Overall Percentages of Self-Identified First Nations, Métis, and Inuit Students Who Achieved Standards on Grades 6 and 9 Provincial Achievement Tests in Social Studies



Source: Alberta Education

#### Notes:

- The results reported are solely based on students who identified themselves as Indian/First Nations, Métis, and Inuit. These students may not be fully representative of the population of Indigenous students. Discretion should be applied when interpreting the results.
- The percentages of students who achieved the acceptable standard include the students who achieved the standard of excellence.
- Overall Social Studies results are a weighted average based on total enrolment in Grades 6 and 9 Social Studies courses.
- Participation in provincial achievement tests was impacted by the fire in Fort McMurray in May to June 2016. Caution should be exercised when interpreting the results over time.
- See Endnote A, page 97, for information on assessing results relative to targets, and results over time.
- See Endnote B, Provincial Achievement Tests, pages 102-103.

**Discussion (continued):**

- The overall participation rate for self-identified First Nations, Métis, and Inuit students taking Social Studies provincial achievement tests has increased over time.

**Self-Identified First Nations, Métis, and Inuit Student Participation Rates for Social Studies Provincial Achievement Tests (in percentages)**

Subject	2014-15	2015-16	2016-17	2017-18	2018-19
<b>Grade 6</b>					
Social Studies	85	87	86	86	87
<b>Grade 9</b>					
Social Studies	80	81	82	81	80
Social Studies (Knowledge and Employability)	80	77	77	82	82
<b>Overall Social Studies</b>					
	<b>82.6</b>	<b>83.4</b>	<b>84.0</b>	<b>83.7</b>	<b>83.9</b>

**Source:** Alberta Education

**Notes:**

- Knowledge and Employability courses are designed for students who meet enrolment criteria and learn best through experiences that integrate essential and employability skills in occupational contexts.
- Participation in provincial achievement tests was impacted by the fire in Fort McMurray in May to June 2016. Caution should be exercised when interpreting the results over time.

**Performance Measure 2.a:**

**First Nations, Métis, and Inuit Student Achievement Test Results in Social Studies by Individual Subject for Students in Grades 6 and 9**

***Rationale***

- Self-identified First Nations, Métis, and Inuit student results on provincial achievement tests in each grade and subject provide detailed information on whether elementary and junior high self-identified First Nations, Métis, and Inuit students are achieving high standards in Social Studies, an important outcome for Alberta's K–12 education system.

***Target***

- Targets for individual Social Studies subject results were not set in the 2018-21 business plan.

***Discussion***

- Compared to the previous three-year average, the current proportion of self-identified First Nations, Métis and Inuit students achieving the acceptable standard increased for Social Studies 6 and 9, and remained stable for Social Studies 9 (Knowledge and Employability).
- Compared to the previous three-year average, the current proportion of self-identified First Nations, Métis and Inuit students achieving the standard of excellence increased for Social Studies 6, and remained stable for Social Studies 9 and Social Studies 9 (Knowledge and Employability).
- Participation in provincial achievement tests was impacted by the fire in Fort McMurray in May to June 2016. Caution needs to be exercised when interpreting the results over time.



**Percentages of Self-Identified First Nations, Métis and Inuit Students in Grades 6 and 9 Who Achieved Standards on Provincial Achievement Tests in Social Studies**

Subject	Standard	2014-15	2015-16	2016-17	2017-18	Previous 3-year average	2018-19	Targets 2018-19
<b>Grade 6</b>								
Social Studies	excellence	5.9	6.7	7.4	7.5	7.2	8.9	
	acceptable	47.6	49.0	50.6	52.8	50.8	57.7	
<b>Grade 9</b>								
Social Studies	excellence	6.7	5.8	6.8	6.8	6.5	6.8	
	acceptable	40.6	40.5	43.2	41.2	41.6	44.7	
Social Studies (Knowledge and Employability)	excellence	8.4	7.2	8.0	12.3	9.2	12.9	
	acceptable	55.2	49.4	47.1	48.8	48.4	53.9	
<b>Overall Social Studies</b>								
	excellence	6.3	6.4	7.1	7.4	7.0	8.2	8.8
	acceptable	44.9	45.3	47.1	47.5	46.6	52.0	50.7

Source: Alberta Education

**Notes:**

- The results reported are solely based on students who identified themselves as Indian/First Nations, Métis, and Inuit. These students may not be fully representative of the population of Indigenous students. Discretion should be applied when interpreting the results.
- The percentages of students who achieved the acceptable standard include the students who achieved the standard of excellence.
- Knowledge and Employability courses are designed for students who meet enrolment criteria and learn best through experiences that integrate essential and employability skills in occupational contexts.
- Participation in provincial achievement tests was impacted by the fire in Fort McMurray in May to June 2016. Caution should be exercised when interpreting the results over time.
- See Endnote A, page 97, for information on assessing results relative to targets, and results over time.
- See Endnote B, Provincial Achievement Tests, pages 102-103.

**Performance Measure 2.a:**

**Overall First Nations, Métis, and Inuit Student Achievement Test Results in Science**

***Rationale***

- Overall First Nations, Métis, and Inuit student achievement of standards on provincial achievement tests is a sound indicator of whether elementary and junior high self-identified First Nations, Métis, and Inuit students are achieving high standards in Science, an important outcome for Alberta's K–12 education system.

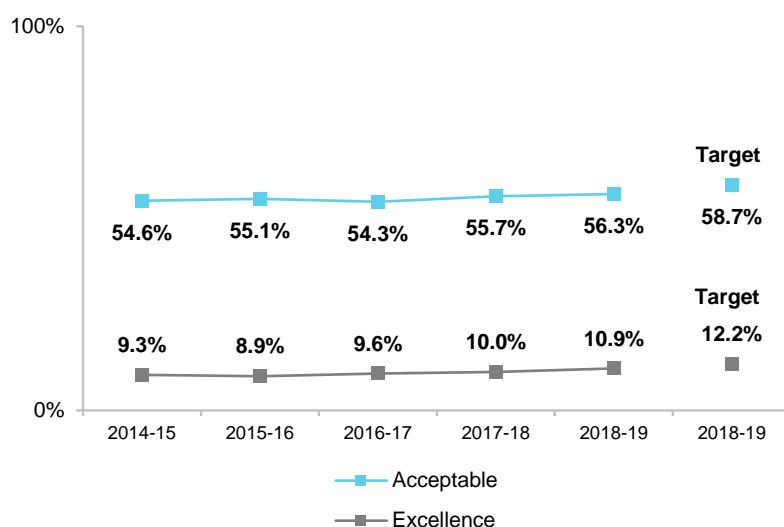
***Target***

- The targets for the overall Science results at the acceptable standard and at the standard of excellence were not met.

***Discussion***

- Overall results in Science are calculated as an average of the results in the following three subjects, weighted by the number of individuals that were enrolled:
  - » Science 6
  - » Science 9
  - » Science 9 (Knowledge and Employability)
- The overall proportions of self-identified First Nations, Métis and Inuit students achieving the acceptable standard and the standard of excellence in Science have increased over time.
- To support student learning in core subjects, the ministry provides programs of study and implementation guides for teachers and develops or authorizes learning resources for students in all grades and subjects.

### Overall Percentages of Self-Identified First Nations, Métis, and Inuit Students Who Achieved Standards on Grades 6 and 9 Provincial Achievement Tests in Science



Source: Alberta Education

#### Notes:

- The results reported are solely based on students who identified themselves as Indian/First Nations, Métis, and Inuit. These students may not be fully representative of the population of Indigenous students. Discretion should be applied when interpreting the results.
- The percentages of students who achieved the acceptable standard include the students who achieved the standard of excellence.
- Overall Science results are a weighted average based on total enrolment in Grades 6 and 9 Science courses.
- Participation in provincial achievement tests was impacted by the fire in Fort McMurray in May to June 2016. Caution should be exercised when interpreting the results over time.
- See Endnote A, page 97, for information on assessing results relative to targets, and results over time.
- See Endnote B, Provincial Achievement Tests, pages 102-103.

**Discussion (continued):**

- The overall participation rate for self-identified First Nations, Métis, and Inuit students taking Science provincial achievement tests has been stable over time.

**Self-Identified First Nations, Métis, and Inuit Student Participation Rates for Science  
Provincial Achievement Tests (in percentages)**

Subject	2014-15	2015-16	2016-17	2017-18	2018-19
<b>Grade 6</b>					
Science	87	88	86	87	87
<b>Grade 9</b>					
Science	82	83	82	81	80
Science (Knowledge and Employability)	81	80	77	82	81
<b>Overall Science</b>					
	<b>84.4</b>	<b>85.0</b>	<b>83.7</b>	<b>83.8</b>	<b>83.7</b>

Source: Alberta Education

**Notes:**

- Knowledge and Employability courses are designed for students who meet enrolment criteria and learn best through experiences that integrate essential and employability skills in occupational contexts.
- Participation in provincial achievement tests was impacted by the fire in Fort McMurray in May to June 2016. Caution should be exercised when interpreting the results over time.

**Performance Measure 2.a:****First Nations, Métis, and Inuit Student Achievement Test Results in Science by Individual Subject for Students in Grades 6 and 9*****Rationale***

- Self-identified First Nations, Métis, and Inuit student results on provincial achievement tests in each grade and subject provide detailed information on whether elementary and junior high self-identified First Nations, Métis, and Inuit students are achieving high standards in Science, an important outcome for Alberta's K–12 education system.

***Targets***

- Targets for individual Science subject results were not set in the 2018-21 business plan.

***Discussion***

- Compared to the previous three-year average, the current proportion of self-identified First Nations, Métis and Inuit students achieving the acceptable standard has remained stable for Science 6, Science 9 and Science 9 (Knowledge and Employability).
- Compared to the previous three-year average, the current proportion of self-identified First Nations, Métis and Inuit students achieving the standard of excellence has increased for Science 9 and remained stable for Science 6 and Science 9 (Knowledge and Employability).
- Participation in provincial achievement tests was impacted by the fire in Fort McMurray in May to June 2016. Caution should be exercised when interpreting the results over time.

### Percentages of Self-identified First Nations, Métis and Inuit Students in Grades 6 and 9 Who Achieved Standards on Provincial Achievement Tests in Science

Subject	Standard	2014-15	2015-16	2016-17	2017-18	Previous 3-year average	2018-19	Targets 2018-19
<b>Grade 6</b>								
Science	excellence	10.6	10.3	11.7	11.5	11.2	11.9	
	acceptable	57.8	58.6	57.8	58.9	58.4	59.2	
<b>Grade 9</b>								
Science	excellence	7.5	7.3	7.3	8.0	7.6	10.2	
	acceptable	50.0	50.6	50.3	51.7	50.9	52.8	
Science (Knowledge and Employability)	excellence	12.3	8.0	8.6	12.2	9.6	6.1	
	acceptable	62.0	58.8	55.2	58.9	57.6	56.2	
<b>Overall Science</b>								
	<b>excellence</b>	<b>9.3</b>	<b>8.9</b>	<b>9.6</b>	<b>10.0</b>	<b>9.5</b>	<b>10.9</b>	<b>12.2</b>
	<b>acceptable</b>	<b>54.6</b>	<b>55.1</b>	<b>54.3</b>	<b>55.7</b>	<b>55.0</b>	<b>56.3</b>	<b>58.7</b>

Source: Alberta Education

#### Notes:

- The results reported are solely based on students who identified themselves as Indian/First Nations, Métis, and Inuit. These students may not be fully representative of the population of Indigenous students. Discretion should be applied when interpreting the results.
- The percentages of students who achieved the acceptable standard include the students who achieved the standard of excellence.
- Knowledge and Employability courses are designed for students who meet enrolment criteria and learn best through experiences that integrate essential and employability skills in occupational contexts.
- Participation in provincial achievement tests was impacted by the fire in Fort McMurray in May to June 2016. Caution should be exercised when interpreting the results over time.
- See Endnote A, page 97, for information on assessing results relative to targets, and results over time.
- See Endnote B, Provincial Achievement Tests, pages 102-103.

**Performance Measure 2.b:****Overall First Nations, Métis, and Inuit Student Diploma Examination Results in Language Arts*****Rationale***

- Self-identified First Nations, Métis, and Inuit student results on diploma examinations are a solid indicator of whether high school students are achieving high standards.
- The Language Arts diploma examination measure is an aggregate of four Language Arts courses. This reflects a focus on fundamental literacy skills, an important outcome for Alberta's K–12 education system.

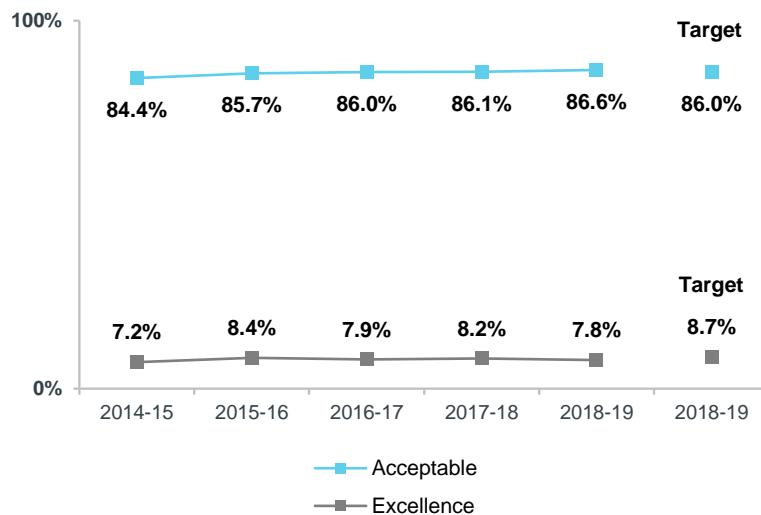
***Targets***

- The target for overall Language Arts diploma examination results at the acceptable standard was met. The target at the standard of excellence was met as the current result is not significantly different from the target value.

***Discussion***

- The Language Arts measure is an average of the results in the following four subjects, weighted by the total number of individuals that wrote each of the exams:
  - » English Language Arts 30-1
  - » English Language Arts 30-2
  - » French Language Arts 30-1
  - » Français 30-1
- The overall proportion of self-identified First Nations, Métis, and Inuit students achieving the acceptable standard in Language Arts has increased while the proportion achieving the standard of excellence has remained stable.

### Overall Percentages of Self-Identified First Nations, Métis, and Inuit Students Who Achieved Standards on Diploma Examinations in Language Arts



Source: Alberta Education

#### Notes:

- The results reported are solely based on students who identified themselves as Indian/First Nations, Métis, or Inuit. These students may not be fully representative of the population of Indigenous students. Discretion should be applied when interpreting the results.
- The percentages of students who achieved the acceptable standard include the students who achieved the standard of excellence.
- Overall results for Language Arts are a weighted average of results for the four Language Arts subjects.
- Participation in diploma examinations was impacted by the fire in Fort McMurray in May to June 2016. Caution should be exercised when interpreting the results over time.
- See Endnote A, page 97, for information on assessing results relative to targets, and results over time.
- See Endnote B, Diploma Examinations, pages 103-104.



**Discussion (continued):**

- Compared to the previous 3-year average, the proportion of self-identified First Nations, Métis, and Inuit students achieving the acceptable standard has increased for English Language Arts 30-1 and remained stable for English Language Arts 30-2.
- Compared to the previous 3-year average, the proportion of self-identified First Nations, Métis, and Inuit students achieving the standard of excellence has remained stable over time for English Language Arts 30-1 and English Language Arts 30-2.
- The number of self-identified First Nations, Métis, and Inuit students writing French Language Arts 30-1 and Français 30-1 exams was too small to make comparisons over time.

**Percentages of Self-Identified First Nations, Métis, and Inuit Students Writing Language Arts Diploma Examinations Who Achieved Standards**

Subject	Standard	2014-15	2015-16	2016-17	2017-18	Previous 3-year average	2018-19	Targets 2018-19
English Language Arts 30-1	excellence	5.4	4.7	6.7	5.9	5.8	5.4	
	acceptable	79.4	80.7	80.1	83.1	81.3	84.4	
English Language Arts 30-2	excellence	8.4	11.2	8.8	10.0	10.0	9.7	
	acceptable	87.4	89.2	90.0	88.5	89.2	88.4	
French Language Arts 30-1	excellence	3.1	4.3	8.7	5.4	6.1	0.0	
	acceptable	93.8	91.3	91.3	83.8	88.8	81.3	
Français 30-1	excellence	*	*	n/a	*	-	n/a	
	acceptable	*	*	n/a	*	-	n/a	
<b>Overall Language Arts</b>	<b>excellence</b>	<b>7.2</b>	<b>8.4</b>	<b>7.9</b>	<b>8.2</b>	<b>8.2</b>	<b>7.8</b>	<b>8.7</b>
	<b>acceptable</b>	<b>84.4</b>	<b>85.7</b>	<b>86.0</b>	<b>86.1</b>	<b>85.9</b>	<b>86.6</b>	<b>86.0</b>

Source: Alberta Education

**Notes:**

- The results reported are solely based on students who identified themselves as Indian/First Nations, Métis, or Inuit. These students may not be fully representative of the population of Indigenous students. Discretion should be applied when interpreting the results.
- The percentages of students who achieved the acceptable standard include the students who achieved the standard of excellence.
- Asterisk (\*) indicates data suppression has been applied because fewer than six self-identified First Nations, Métis and Inuit students wrote the test, while n/a indicates no self-identified First Nations, Métis and Inuit students wrote the test.
- Equating of diploma examinations has been phased in over the past number of years making results directly comparable from year-to-year for the equated tests. Results are comparable for all years reported from 2014-15 to 2018-19 for English Language Arts 30-1 and 30-2, but not for French Language Arts 30-1 and Français 30-1.
- Overall results for Language Arts are a weighted average of results for the four Language Arts subjects.
- Participation in diploma examinations was impacted by the fire in Fort McMurray in May to June 2016. Caution should be exercised when interpreting the results over time.
- See Endnote A, page 97, for information on assessing results relative to targets and results over time.
- See Endnote B, Diploma Examinations, pages 103-104.

**Performance Measure 2.b:**

**Overall First Nations, Métis, and Inuit Student Diploma Examination Results in Mathematics**

***Rationale***

- Self-identified First Nations, Métis, and Inuit student results on diploma examinations are a solid indicator of whether high school students are achieving high standards.
- The Mathematics diploma examination measure is an aggregate of two courses. This measure reflects a focus on development of mathematical reasoning and problem-solving skills, which are important outcomes for Alberta's K–12 education system.

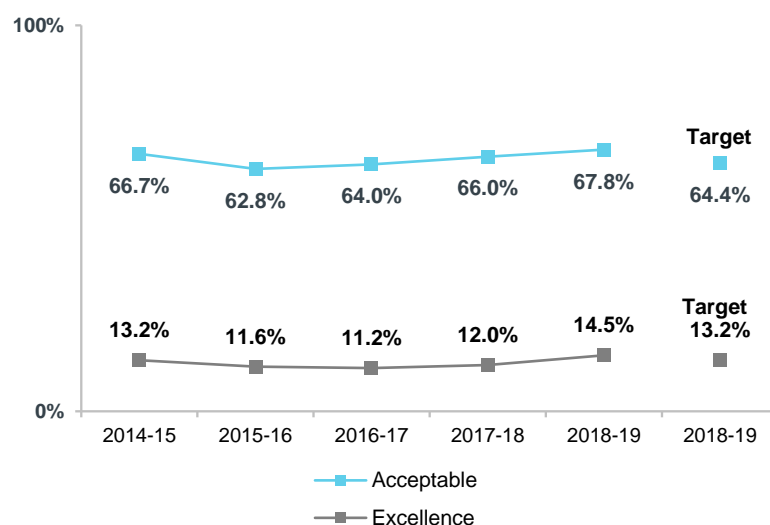
***Targets***

- The target for overall Mathematics diploma examination results at the acceptable standard was exceeded and the target at the standard of excellence was met.

***Discussion***

- The Mathematics measure is an average of the results in the following two subjects, weighted by the total number of individuals that wrote each of the exams:
  - » Mathematics 30-1
  - » Mathematics 30-2
- The overall proportions of self-identified First Nations, Métis, and Inuit students achieving the acceptable standard and the standard of excellence in Mathematics have remained stable since 2016-17. Note that Mathematics results were not directly comparable prior to 2016-17 as equating for Mathematics 30-1 and Mathematics 30-2 was not in place until that year.

### Overall Percentages of Self-identified First Nations, Métis, and Inuit Students Who Achieved Standards on Diploma Examinations in Mathematics



Source: Alberta Education

#### Notes:

- The results reported are solely based on students who identified themselves as Indian/First Nations, Métis, or Inuit. These students may not be fully representative of the population of Indigenous students. Discretion should be applied when interpreting the results.
- The percentages of students who achieved the acceptable standard include the students who achieved the standard of excellence.
- Overall results for Mathematics are a weighted average of results for the two Mathematics subjects.
- Any results prior to 2016-2017 were not directly comparable, as equating for Mathematics 30-1 and Mathematics 30-2 was not in place until the 2016-17 school year.
- Starting from the 2018-19 school year, written-response questions have been added as part of the Mathematics 30-1 and Mathematics 30-2 diploma exams.
- Participation in diploma examinations was impacted by the fire in Fort McMurray in May to June 2016. Caution should be exercised when interpreting the results over time.
- See Endnote A, page 97, for information on assessing results relative to targets, and results over time.
- See Endnote B, Diploma Examinations, pages 103-104.

**Discussion (continued):**

- For Mathematics 30-1 and Mathematics 30-2, comparisons over time are not included as equating was not in place for those subjects until the 2016-17 school year.

**Percentages of Self-identified First Nations, Métis, and Inuit Students Writing Mathematics Diploma Examinations Who Achieved Standards**

Subject	Standard	2014-15	2015-16	2016-17	2017-18	2018-19	Targets 2018-19
Mathematics 30-1	excellence	16.6	11.6	14.6	15.3	18.2	
	acceptable	64.2	54.1	59.2	61.3	61.7	
Mathematics 30-2	excellence	10.3	11.6	8.8	9.7	12.0	
	acceptable	69.0	69.4	67.4	69.1	72.0	
<b>Overall Mathematics</b>	<b>excellence</b>	<b>13.2</b>	<b>11.6</b>	<b>11.2</b>	<b>12.0</b>	<b>14.5</b>	<b>13.2</b>
	<b>acceptable</b>	<b>66.7</b>	<b>62.8</b>	<b>64.0</b>	<b>66.0</b>	<b>67.8</b>	<b>64.4</b>

Source: Alberta Education

**Notes:**

- The results reported are solely based on students who identified themselves as Indian/First Nations, Métis, or Inuit. These students may not be fully representative of the population of Indigenous students. Discretion should be applied when interpreting the results.
- Overall results for Mathematics are a weighted average of results for the two Mathematics subjects.
- Any results prior to 2016-2017 were not directly comparable, as equating for Mathematics 30-1 and Mathematics 30-2 was not in place until the 2016-17 school year.
- Starting from the 2018-19 school year, written-response questions have been added as part of the Mathematics 30-1 and Mathematics 30-2 diploma examinations.
- Participation in diploma examinations was impacted by the fire in Fort McMurray in May to June 2016. Caution should be exercised when interpreting the results over time.
- See Endnote A, page 97, for information on assessing results relative to targets and results over time.
- See Endnote B, Diploma Examinations, pages 103-104.

**Performance Measure 2.b:****Overall First Nations, Métis, and Inuit Student Diploma Examination Results in Social Studies*****Rationale***

- Self-identified First Nations, Métis, and Inuit student results on diploma examinations are a solid indicator of whether high school students are achieving high standards.
- The Social Studies diploma examination measure is an aggregate of two courses. This measure reflects a focus on students affirming their place as citizens in an inclusive, democratic society, an important outcome for Alberta's K–12 education system.

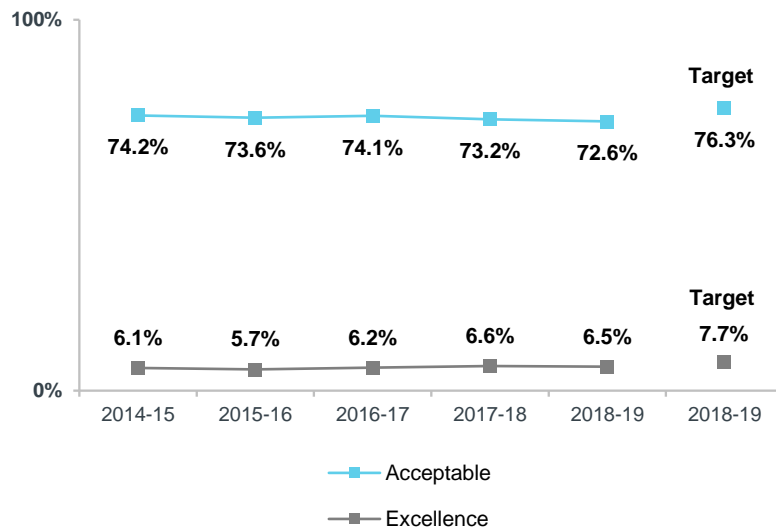
***Targets***

- The targets for overall Social Studies diploma examination results at the acceptable standard and at the standard of excellence were not met.

***Discussion***

- The Social Studies measure is an average of the results in the following two subjects, weighted by the total number of individuals that wrote each of the exams:
  - » Social Studies 30-1
  - » Social Studies 30-2
- The overall proportions of self-identified First Nations, Métis, and Inuit students achieving the acceptable standard and the standard of excellence in Social Studies have remained stable over time.

### Overall Percentages of Self-identified First Nations, Métis, and Inuit Students Who Achieved Standards on Diploma Examinations in Social Studies



Source: Alberta Education

#### Notes:

- The results reported are solely based on students who identified themselves as Indian/First Nations, Métis, or Inuit. These students may not be fully representative of the population of Indigenous students. Discretion should be applied when interpreting the results.
- The percentages of students who achieved the acceptable standard include the students who achieved the standard of excellence.
- Overall results for Social Studies are a weighted average of results for the two Social Studies subjects.
- Participation in diploma examinations was impacted by the fire in Fort McMurray in May to June 2016. Caution should be exercised when interpreting the results over time.
- See Endnote A, page 97, for information on assessing results relative to targets, and results over time.
- See Endnote B, Diploma Examinations, pages 103-104.

**Discussion (continued):**

- Compared to the previous three-year average, the proportion of students achieving the acceptable standard has remained stable for Social Studies 30-1 and Social Studies 30-2.
- Compared to the previous three-year average, the proportion of students achieving the standard of excellence has remained stable over time for Social Studies 30-1 and Social Studies 30-2.

**Percentages of Self-identified First Nations, Métis, and Inuit Students Writing Social Studies Diploma Examinations Who Achieved Standards**

Subject	Standard	2014-15	2015-16	2016-17	2017-18	Previous 3-year average	2018-19	Targets 2018-19
Social Studies 30-1	excellence	6.4	6.6	6.3	8.1	7.0	7.6	
	acceptable	77.6	72.5	77.1	75.3	74.9	77.3	
Social Studies 30-2	excellence	5.9	5.3	6.1	5.8	5.8	5.8	
	acceptable	72.7	74.1	72.7	72.2	73.0	70.1	
<b>Overall</b>	<b>excellence</b>	<b>6.1</b>	<b>5.7</b>	<b>6.2</b>	<b>6.6</b>	<b>6.2</b>	<b>6.5</b>	<b>7.7</b>
<b>Social Studies</b>	<b>acceptable</b>	<b>74.2</b>	<b>73.6</b>	<b>74.1</b>	<b>73.2</b>	<b>73.6</b>	<b>72.6</b>	<b>76.3</b>

**Source:** Alberta Education

**Notes:**

- The results reported are solely based on students who identified themselves as Indian/First Nations, Métis, or Inuit. These students may not be fully representative of the population of Indigenous students. Discretion should be applied when interpreting the results.
- The percentages of students who achieved the acceptable standard include the students who achieved the standard of excellence.
- Overall results for Social Studies are a weighted average of results for the two Social Studies subjects.
- Participation in diploma examinations was impacted by the fire in Fort McMurray in May to June 2016. Caution should be exercised when interpreting the results over time.
- See Endnote A, page 97, for information on assessing results relative to targets, and results over time.
- See Endnote B, Diploma Examinations, pages 103-104.

**Performance Measure 2.b:**

**First Nations, Métis, and Inuit Student Diploma Examination Results in the Sciences**

***Rationale***

- Self-identified First Nations, Métis, and Inuit student results on diploma examinations are a solid indicator of whether high school students are achieving high standards.
- The Sciences diploma examination measure is an aggregate of four courses. This measure reflects a focus on skills and attitudes needed to solve problems and make decisions, which are important outcomes for Alberta's K–12 education system.

***Targets***

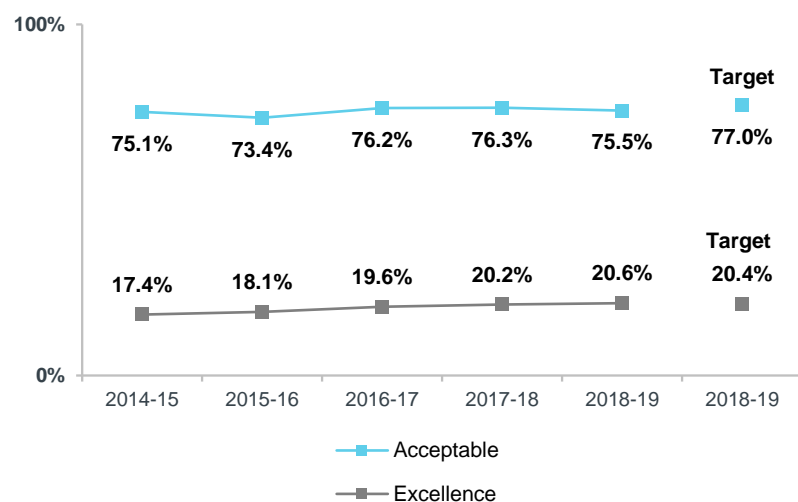
- The targets for overall Science diploma examination results at the acceptable standard and the standard of excellence were met.

***Discussion***

- The Sciences measure is an average of the results in the following four subjects, weighted by the total number of individuals that wrote each of the exams:
  - » Biology 30
  - » Chemistry 30
  - » Physics 30
  - » Science 30
- The overall proportion of self-identified First Nations, Métis, and Inuit students achieving the acceptable standard in the Sciences has remained stable over time, while the proportion achieving the standard of excellence has increased.



### Overall Percentages of Self-identified First Nations, Métis, and Inuit Students Who Achieved Standards on Diploma Examinations in the Sciences



Source: Alberta Education

#### Notes:

- The results reported are solely based on students who identified themselves as Indian/First Nations, Métis, or Inuit. These students may not be fully representative of the population of Indigenous students. Discretion should be applied when interpreting the results.
- The percentages of students who achieved the acceptable standard include the students who achieved the standard of excellence.
- Overall results for the Sciences are a weighted average of results for the four Science subjects.
- Participation in diploma examinations was impacted by the fire in Fort McMurray in May to June 2016. Caution should be exercised when interpreting the results over time.
- See Endnote A, page 97, for information on assessing results relative to targets, and results over time.
- See Endnote B, Diploma Examinations, pages 103-104.

**Discussion (continued):**

- Compared to the previous three-year average, the proportion of self-identified First Nations, Métis, and Inuit students achieving the acceptable standard has been stable over time for Biology 30, Chemistry 30, Physics 30, and Science 30.
- Compared to the previous three-year average, the proportion of self-identified First Nations, Métis, and Inuit students achieving the standard of excellence has been stable over time for Biology 30, Chemistry 30, Physics 30 and Science 30.

**Percentages of Self-identified First Nations, Métis, and Inuit Students Writing Science Diploma Examinations Who Achieved Standards**

Subject	Standard	2014-15	2015-16	2016-17	2017-18	Previous 3-year average	2018-19	Targets 2018-19
Biology 30	excellence	17.4	16.1	16.5	17.3	16.6	17.8	
	acceptable	75.9	72.2	73.9	75.7	73.9	72.6	
Chemistry 30	excellence	16.5	17.6	23.2	19.9	20.2	23.7	
	acceptable	71.6	72.2	74.8	69.7	72.2	72.9	
Physics 30	excellence	20.6	24.5	26.8	24.0	25.1	25.9	
	acceptable	78.4	75.5	82.6	76.9	78.3	74.1	
Science 30	excellence	16.6	19.2	17.9	24.4	20.5	19.5	
	acceptable	76.1	76.1	79.0	84.1	79.7	84.1	
<b>Overall Science</b>	<b>excellence</b>	<b>17.4</b>	<b>18.1</b>	<b>19.6</b>	<b>20.2</b>	<b>19.3</b>	<b>20.6</b>	<b>20.4</b>
	<b>acceptable</b>	<b>75.1</b>	<b>73.4</b>	<b>76.2</b>	<b>76.3</b>	<b>75.3</b>	<b>75.5</b>	<b>77.0</b>

Source: Alberta Education

**Notes:**

- The results reported are solely based on students who identified themselves as Indian/First Nations, Métis, or Inuit. These students may not be fully representative of the population of Indigenous students. Discretion should be applied when interpreting the results.
- The percentages of students who achieved the acceptable standard include the students who achieved the standard of excellence.
- Overall results for Sciences are a weighted average of results for the four Science subjects.
- Participation in diploma examinations was impacted by the fire in Fort McMurray in May to June 2016. Caution should be exercised when interpreting the results over time.
- See Endnote A, page 97, for information on assessing results over time.
- See Endnote B, Diploma Examinations, pages 103-104.

**Performance Measure 2.c:****Diploma Examination Participation of Self-Identified First Nations, Métis and Inuit Students*****Rationale***

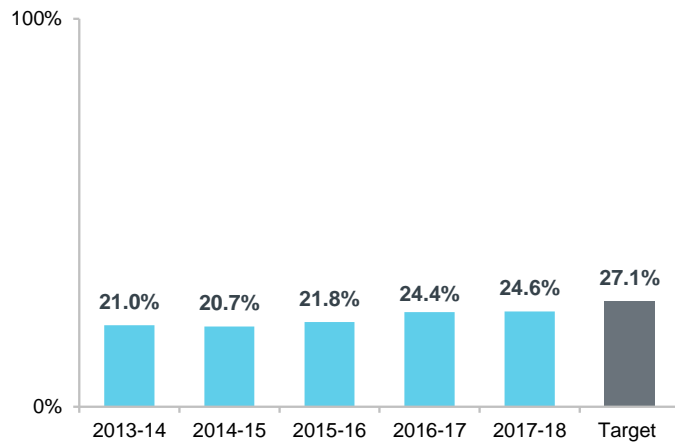
- Participation in four or more diploma examinations reflects the intent of the Alberta programs of study and gives appropriate emphasis to the four core subjects of language arts, mathematics, the sciences and social studies, which are the foundation of basic education.

***Target***

- The target was not met.

***Discussion***

- In 2017-18, 24.6 per cent of self-identified First Nations, Métis and Inuit high school students wrote four or more diploma examinations.
- The proportion has increased over time since 2013-14.
- The ministry is acting to improve results in this area by:
  - » providing students writing diploma exams the opportunity to use additional writing time to complete assessments, and
  - » streamlining processes for other accommodations, such as eliminating the application process for accommodations and provisions. Accommodations for the purpose of writing diploma exams are reviewed and managed at the school level.
- The vast majority of self-identified First Nations, Métis and Inuit students who have written four or more Diploma Examinations have taken courses in the four core subjects throughout high school. This positions them well to complete high school and enter post-secondary programs or the workplace.

**Percentages of Self-Identified First Nations, Métis and Inuit Students Writing Four or More Diploma Examinations within Three Years of Entering Grade 10**

**Source:** Alberta Education

**Notes:**

- The most current result available for this measure is for the 2017-18 school year as data for this measure lag a year.
- Participation in diploma examinations was impacted by the fire in Fort McMurray in May to June 2016. Caution should be exercised when interpreting the results over time.
- Weighting of school-awarded marks in diploma courses increased from 50 per cent to 70 per cent beginning in the 2015-16 school year. Caution should be used when interpreting trends over time.
- The 2015-16 results for three-year diploma examination participation rates have been adjusted to reflect the correction of the Grade 10 cohort.
- See Endnote B, Diploma Examination Participation Rate, page 104.

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**Performance Measure 2.d:  
Annual Dropout Rate of Self-Identified First Nations, Métis and Inuit Students*****Rationale***

- The self-identified First Nations, Métis and Inuit student dropout rate is an indicator of how well the needs of self-identified First Nations, Métis and Inuit students at risk of not completing high school are being addressed by the K–12 education system.

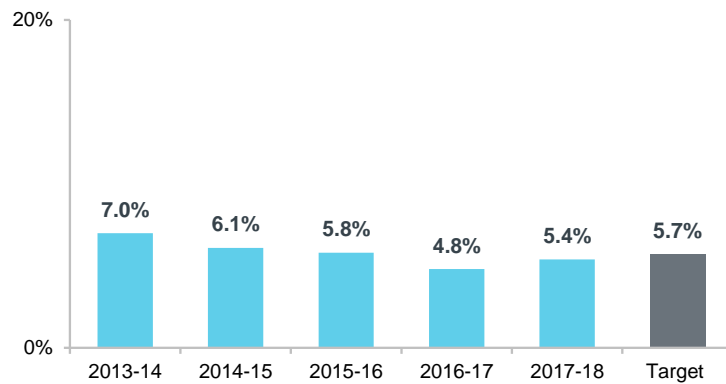
***Target***

- The target for the dropout rate of self-identified First Nations, Métis and Inuit students was met as the current result is not significantly different from the target value.

***Discussion***

- Enrolment data indicate that 5.4 per cent of self-identified First Nations, Métis and Inuit students aged 14-to-18 dropped out of school in 2017-18.
- The current dropout rate for self-identified First Nations, Métis and Inuit students, 5.4 per cent, is approximately twice the rate for students overall, 2.6 per cent over the same period. However, the dropout rate for self-identified First Nations, Métis and Inuit students has improved significantly over time, with some fluctuation.
- Efforts to improve high school completion rates, as well as strategies to improve First Nations, Métis and Inuit parent and community engagement, are being implemented to encourage First Nations, Métis and Inuit students to complete school and help reduce the dropout rate.
- As part of the effort to improve results in this area, the ministry launched the Office of Student Attendance and Re-engagement (OSAR) to provide leadership and support to school authorities to address chronic absenteeism.
- Dropping out of school may be a temporary interruption of a student's education. Of the self-identified First Nations, Métis and Inuit students who dropped out in 2016-17, about 23 per cent resumed their education in 2017-18.
- Some self-identified First Nations, Métis and Inuit students who do not complete high school in the basic education system do so as young adults in the adult learning system. In 2018, 84.9 per cent of Indigenous Albertans aged 25-to-34 reported that they had completed high school.

## Annual Dropout Rates of Self-Identified First Nations, Métis and Inuit Students Aged 14-to-18



**Source:** Alberta Education

### Notes:

- The most recent results are for 2017-18 as the data for this measure lag a year.
- Self-identified First Nations, Métis and Inuit students aged 14-to-18 who, in the following year, are not enrolled in school (a K-12 school, an Alberta post-secondary institution or apprenticeship program) and have not completed high school are included in the annual dropout rate. For example, students aged 14-to-18 in 2016-17 were tracked for one year. Those who were not enrolled and had not completed are included in the 2017-18 dropout rate.
- See Endnote B, Annual Dropout Rate of Students Aged 14-to-18, pages 99-100.

**Performance 2.e:****High School Completion of Self-Identified First Nations, Métis and Inuit Students*****Rationale***

- High school completion of self-identified First Nations, Métis and Inuit students is important for entry to the labour force and post-secondary programs. While the majority of self-identified First Nations, Métis and Inuit students complete high school within three years of entering Grade 10, the five-year rate recognizes that it may take more time for some self-identified First Nations, Métis and Inuit students to finish high school.
- In addition to those who earn a high school diploma or certificate, Alberta's high school completion rate of self-identified First Nations, Métis and Inuit students also includes students who enter an Alberta post-secondary institution or an apprenticeship program within five years of entering Grade 10. This acknowledges that students have completed the high school courses they need to continue their education in a post-secondary program.

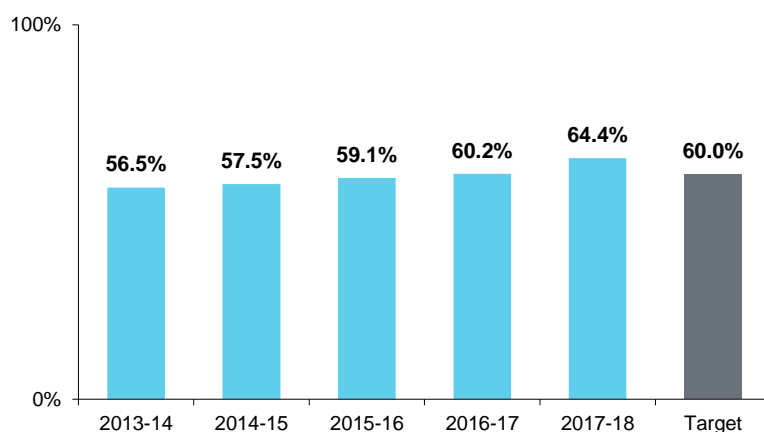
***Target***

- The target was exceeded.

***Discussion***

- In 2017-18, 64.4 per cent of self-identified First Nations, Métis and Inuit students completed high school within five years of entering Grade 10.
- The high school completion rate of self-identified First Nations, Métis and Inuit students has improved by 7.9 per cent from 56.5 per cent in 2013-14 to 64.4 per cent in 2017-18.
- The three-year rate, 56.6 per cent, has also shown a significant improvement compared with the period from 2013-14 to 2014-2015 where it was under 51 per cent.
- Of the students who complete high school in five years, most (about 90 per cent in 2017-18) complete in three years. This makes the three-year rate a reliable predictor of the five-year rate in subsequent years. Projections indicate the five-year rate is likely to increase over the next few years.

### High School Completion Rate of Self-identified First Nations, Métis and Inuit Students within Five Years of Entering Grade 10



Source: Alberta Education

#### Notes:

- The most recent results are for 2017-18 as the data for this measure lag a year.
- Included in the calculation of high school completion rates is an estimated adjustment for attrition (i.e., students moving out of province) using Statistics Canada estimates of out-migration.
- Weighting of school-awarded marks in diploma courses increased from 50 per cent to 70 per cent beginning in the 2015-16 school year. Caution should be exercised when interpreting trends over time.
- The 2015-16 result for the three-year high school completion rate has been adjusted to reflect the correction of the Grade 10 cohort.
- See Endnote A, page 97, for information on assessing results relative to targets.
- See Endnote B, High School Completion Rates, page 100.

### Percentages of First Nations, Métis and Inuit Students who Completed High School within Three and Five Years of Entering Grade 10

Grade 10 Year	3 Year Rate and Year		5 Year Rate and Year	
2009-10	45.8%	2011-12	56.5%	2013-14
2010-11	45.6%	2012-13	57.5%	2014-15
2011-12	47.7%	2013-14	59.1%	2015-16
2012-13	50.2%	2014-15	60.2%	2016-17
2013-14	53.7%	2015-16	64.4%	2017-18
2014-15	53.3%	2016-17		
2015-16	56.6%	2017-18		

Source: Alberta Education



# Performance Measure Methodology

## Endnote A: Technical Notes

### Assessing Results Relative to Targets

Performance targets set expectations for results within specific time frames and are the basis for planning improvements and assessing results that are within the sphere of influence of the Ministry and school authorities. They are an important way to gauge whether the education system is improving or falling behind in obtaining desired results in key areas. Targets clearly establish desired levels of performance better than recent performance, to be attained within a specific timeframe. Targets are quantifiable and expressed in numerical terms, such as percentages or ratios. They are used as a key tool to drive, measure, improve and manage performance.

For measures based on achievement tests and on diploma exams, a one sample Chi-square statistical test is used to determine whether the result is significantly different from the target and whether the target is met, not met or exceeded. The magnitude of the difference required between the result and the target to establish significance depends on the sample size, for example, the number of students writing an exam, and the proportion of students meeting standards.

### Assessing Results Over Time

Changes over time are assessed with a two sample Chi-square statistical test for measures based on provincial achievement test and diploma examination results. The test determines whether the difference between the base year and current year results is significant. The calculation of the Chi-square is based on the difference between what was observed and what would be expected assuming that the proportions were the same. Under a simple test of proportions, a Chi-square value of “1” represents a difference of one standard deviation, while a Chi-square value of 3.84 is significant at the five per cent level.

Discussion of results over time is supported by this test of significant difference.

### Trend Lines

Although not appearing in the annual report update, trend lines are an aid to interpreting the results for measures reported in the annual report update. Trend lines augment data interpretation techniques already in use to determine the significance of changes in measure results over time.

Trend lines are used to develop an expected value for a current result given historical results. The expected value can then be compared with the actual result. In this way, trend lines provide a useful method of understanding year-to-year fluctuations and shift the focus from smaller year-to-year changes by providing information about the direction of results over the longer-term. In particular it is of interest whether results are tracking towards the performance target for the measures that have not met targets.

Discussion of results over time for measures with at least three data points are supported by trend lines. The type of trend line used is selected based on an informed interpretation of the data series underlying the trend.

Logarithmic trend lines are appropriate for proportional data, i.e., data expressed as percentages of a whole and therefore ranging between zero per cent and 100 per cent, such as the performance measures in this report. A logarithmic trend line is a best-fit straight line that is most useful when the rate of change in the data increases or decreases quickly, then levels out. The leveling out can be seen in the results for some measures in the report, along with examples of year-to-year increases or decreases on other measures.

A logarithmic trend line is calculated using the following formula:

$Y = c \ln(x) + b$ , where  $c$  and  $b$  are constants and  $\ln( )$  is the natural logarithm function and  $x$  is the year of the series.

## Endnote B: Methodology for Performance Measures

Described below are the methodologies used to calculate the measures that are derived from provincial assessments of student learning and from other information about Alberta students in the Ministry of Education's data systems.

### Definition of Alberta Student

Starting from 2013-14, the definition of an Alberta student is an individual who is registered as of September 30 of the school year in a school located in Alberta, where "school" means a structured learning environment through which an education program is offered to a student by: a board (includes public, separate, francophone, Lloydminster); an operator of a private school; an early childhood services (ECS) program private operator; the operator of a charter school; a parent giving a home education program; the Minister. It also includes other Alberta-located educational institutions providing ECS to Grade 12 curriculum instruction, specifically federal (First Nations' schools and those operated by Corrections Canada); and provincial authorities (such as Bow Valley College and NorQuest College).

### Results for First Nations, Métis and Inuit Students

Calculating results for First Nations, Métis and Inuit students is possible because school jurisdictions are required to include a voluntary First Nations, Métis and Inuit self-identification question on school registration forms and to report the identifier to the ministry's student data system. Self-identification of students has increased each year. Students' First Nations, Métis and Inuit self-identification information associated with their most recent school registration is used to calculate results. This provides the most complete results and reflects the student's intent to be identified.

### Results for English as a Second Language (ESL) Students

The calculation of results for ESL students is based on the number of ESL students for whom funding was provided to school authorities for ESL programming. ESL programming is designed for children/students who require additional English language supports and instruction to achieve grade level expectations in English and other subject areas. This group includes both Canadian-born and foreign-born students. Students funded for an ESL program in the year reflected in the measure are included in the ESL results. For example, students in the appropriate Grade 10 cohort that were funded for ESL in their most recent registration are included in the ESL High School Completion rate for 2017-18.

### Annual Dropout Rate of Students Aged 14-to-18

The annual dropout rate reports the percentages of Alberta students aged 14-to-18 in public, separate, francophone, charter, and accredited private schools who, in the following school year:

- are not enrolled in the K–12 system,
- are not enrolled in a post-secondary institution in Alberta,
- are not registered in an apprenticeship program in Alberta, and
- have not completed high school.

The annual dropout rate is derived from student data in Alberta Education and Alberta Advanced Education systems. Adjustments for attrition are based on estimates from Alberta Demographic Estimates 48\_CD\_DR\_AS\_20062018 and the February 2018 DMTI concordance file.

Alberta students who are identified as having a moderate or severe cognitive disability or a severe multiple disability are not included in the annual dropout rate.

Annual dropout rate is calculated by dividing the number of students who have dropped out of school (adjusted for attrition) by the number of 14-to-18 year old students who were registered in the K–12 system in the previous school year (the age specific cohort), less attrition as shown in the formula below:

$$\frac{\text{Count of Students who Drop Out (adjusted for attrition)}}{\left( \text{Count of 14-18 Year Old Students in One Year (Age Specific Cohort)} - \text{Attrition} \right)} = \text{Annual Dropout Rate}$$

### High School Completion Rates

The high school completion rate reports the percentages of Alberta students in public, separate, francophone, charter, and accredited private schools who, within three, four and five years of entering Grade 10:

- received an Alberta High School Diploma, an Alberta High School Equivalency Diploma (GED), or the Certificate of High School Achievement (completion of Knowledge and Employability courses and the certificate requirements),
- entered an Alberta post-secondary program or an apprenticeship program, or
- passed a minimum of five Grade 12 courses, including a Language Arts diploma examination course and three other diploma examination courses.

Data for this measure are from Alberta Education and Alberta Advanced Education systems. The provincial rate is calculated by dividing the number of high school completers, as defined above, by the number of students in the Grade 10 cohort, adjusted for attrition, as shown in the formula below.

$$\frac{\left( \text{High School Completers} \right)}{\left( \text{Grade 10 Cohort} - \text{Attrition Factor} \right)} = \text{High School Completion Rate}$$

The tracking of Grade 10 students excludes some students, such as those identified as having a severe or moderate cognitive disability or a severe multiple disability.

In 2010, high school completion rate methodology was revised to reflect new data received from the post-secondary system. Under the revised methodology, the calculations incorporate the post-secondary Classification of Instructional Programs (CIP) coding to better identify those students enrolled in programs that are not deemed to be post-secondary level programming (e.g., academic upgrading). Students in these kinds of programs are not considered completers for the purpose of this measure.

The educational attainment of Albertans aged 25-to-34 is derived from Statistics Canada *Labour Force Survey*, special tabulation for Alberta Education.

## High School to Post-Secondary Transition Rates

The high school to post-secondary transition rate reports the percentages of Alberta students in public, separate, francophone, charter, and accredited private schools who, within four and six years of starting Grade 10:

- enrolled in a credit program, part-time or full-time, in a publically funded Alberta post-secondary institution
- registered in an apprenticeship program other than the Registered Apprenticeship Program for high school students.

Alberta students are tracked using data from the Alberta Education and the Alberta Advanced Education systems. The high school to post-secondary transition rates include adjustments for attrition and for attendance at post-secondary institutions out of province.

The high school to post-secondary transition rate is calculated by dividing the number of students who enter post-secondary programs by the number of students in the Grade 10 cohort, adjusted for attrition as shown in the formula below.

$$\left( \begin{array}{c} \text{In-Province} \\ \text{Post-} \\ \text{Secondary} \\ \text{Attendees} \end{array} + \begin{array}{c} \text{Estimate of Out-} \\ \text{of-Province} \\ \text{Post-Secondary} \\ \text{Attendees} \end{array} \right) / \left( \begin{array}{c} \text{Grade 10} \\ \text{Cohort} \end{array} - \begin{array}{c} \text{Attrition} \\ \text{Factor} \end{array} \right) = \begin{array}{c} \text{Transition} \\ \text{Rate} \end{array}$$

The tracking of Grade 10 students excludes some students, such as those identified as having a severe or moderate cognitive disability or a severe multiple disability.

Information on post-secondary enrolments incorporates post-secondary Classification of Instructional Programs (CIP) coding to better identify students enrolled in programs not deemed to be post-secondary level (e.g. academic upgrading). Students in these kinds of programs are not considered transitioners for the purpose of this measure.

## Attrition Adjustment

Attrition estimates are applied to all the four student outcomes measures – the high school completion rate, the post-secondary transition rate, the dropout rate and the diploma examination participation rate.

Attrition is the estimate of the number of students from the Grade 10 cohort who leave the province or die in the years subsequent to the start of Grade 10. The attrition estimate is based on the following factors:

- mortality;
- emigration;
- interprovincial out migration;
- an estimate of the percentage of 16-to-18 year olds who are enrolled in school (school participation rate); and
- a downward adjustment to account for youth who are not in school.

The provincial attrition estimate aggregates census division level data from Alberta Demographic Estimates 48\_CD\_DR\_AS\_20062018 and the February 2018 DMTI concordance file.

### **Out-of-Province Post-Secondary Student Adjustment**

Alberta Education does not specifically track Alberta students who participate in post-secondary programs outside of Alberta. An estimate of the number of students who have left the province to pursue post-secondary education is therefore factored into the high school to post-secondary transition rate.

The out-of-province estimate uses aggregate counts of Alberta students receiving financial assistance for studies both in-province and out-of-province based on data from Alberta Advanced Education's Students Finance System (SFS) and the Data Collection and Reporting (DCAR) system. The premise is that in any given year, the percentage of students from the Grade 10 cohort attending post-secondary programs out-of-province is similar to the percentage of students receiving financial assistance for study out-of-province.

### **Provincial Achievement Tests**

Students in Grades 6 and 9 write provincial achievement tests annually in Language Arts, Mathematics, Science and Social Studies. The achievement test results for Grades 6 and 9 provide information on how well Alberta students in public, separate, francophone, charter and accredited private schools are meeting provincial standards in the core academic subjects. Tests are developed and administered by teachers and educators and are based on the provincial curriculum. Results are reported in relation to the acceptable standard and the standard of excellence.

A student achieving the acceptable standard in a specific grade shows an adequate understanding of the core knowledge and adequate basic skills essential to that course. A student achieving the standard of excellence consistently shows a deeper understanding of the concepts of the course by demonstrating an ability to integrate information and evaluate it from various points of view.

For each achievement test, the cut scores for the acceptable standard and the standard of excellence are set initially by a standard-setting committee of about 20 teachers selected from across the province using the Modified Angoff and Bookmark Standard Setting Procedures. These procedures use teachers' judgment to determine a minimum number of items a student must answer correctly – the cut score – to achieve each standard. In subsequent years, the cut scores for each test are adjusted through test equating. This ensures the standards remain constant even if test difficulty varies slightly from year-to-year. Whenever curriculum is revised, the standard-setting process is done again.

Results on provincial achievement tests are calculated and presented on the basis of the total number of students in each grade who demonstrated the standards. Results for mathematics, science and social studies include student results on both English and French versions of the tests. Given the large number of students in each grade (more than 40,000), typically differences in results from year-to-year of more than 0.4 percentage points on each test are considered significant. French Language Arts and Français courses have higher significant difference values (1.1 to 3.9 percentage points, depending on the number of students in each course), because fewer students are in these courses.

Not all students write the Provincial Achievement Tests. Achievement test results are not available for students who:

- were absent
- were excused from writing by the superintendent because participation would be harmful to the student or the student could not respond to the test instrument
- wrote but whose results were withheld or invalidated
- wrote only one part of the two-part Language Arts test or only Part A of the Grade 6 Mathematics Test.

It is possible that some of these students, under different circumstances, could have demonstrated achievement of standards on the test.

Participation rates in achievement tests are calculated by dividing the number of students in the grade who wrote the test by the sum of total enrolment in the grade plus the ungraded students who are in the corresponding year of schooling.

Provincial overall results in Language Arts, Mathematics, Social Studies and Science present weighted averages based on the number of students enrolled in each course. Test results and participation are recorded and aggregated in ministry systems. Provincial, school authority and school results are available at <https://www.alberta.ca/provincial-achievement-tests.aspx>.

## Diploma Examinations

Examinations are administered in all diploma examination courses in January, June and August each year. Examinations are administered in selected courses in November and April. Provincial assessments are meant to complement day-to-day classroom assessment. Results on diploma examinations show how well Alberta students in public, separate, francophone, charter and accredited private schools are meeting provincial expectations as outlined in the programs of study. Examination items are developed and standards are established by committees of teachers. The examination design is vetted through committees of stakeholders and by a standard-setting committee of teachers.

Test equating has been used for the diploma examination program so that over time examinations are consistent and the results are comparable. The machine-scored portion of the examinations contains a set of items common to administrations in subsequent years. By comparing the achievement of students writing in a baseline session with those writing in any subsequent administration on the common items and on the unique items, Alberta Education is able to determine whether or not the examinations are of equal difficulty. Student scores on the subsequent examinations can then be equated back to the baseline examinations to remove any influence that differences in examination difficulty may have on student scores.

Through equating, test results for a particular course are based on an identical standard and, consequently, can be directly compared over time. As a result of implementing the equating process, diploma examination results are comparable over time as follows:

- Biology 30, English Language Arts 30-1, and English Language Arts 30-2 since 2005-06
- Science 30 and Chemistry 30 since 2010-11
- Social Studies 30-2 since 2011-12,
- Social Studies 30-1 since 2012-13,
- Physics 30 since 2013-14, and
- Mathematics 30-1 and 30-2 since 2016-17

Diploma examination results are reported in relation to the acceptable standard and the standard of excellence. Results for mathematics, sciences and social studies include results for both English and French versions of the tests. Provincial overall results present weighted averages based on the numbers of students achieving standards in all diploma examinations. Students achieving the acceptable standard demonstrate that they have met the basic requirements of the course. A mark of 50 per cent on the examination represents the acceptable standard in a diploma examination course. A mark of 80 per cent on the examination represents the standard of excellence and indicates the student has demonstrated performance significantly beyond the minimum requirements of the course. Starting in 2015-16, diploma exams are worth 30 per cent of the overall mark for the diploma course. The school-awarded mark is worth 70 per cent.

Diploma examination results are recorded and aggregated in ministry systems. Provincial, school authority and school results reports are available at <https://www.alberta.ca/administering-diploma-exams.aspx>.

### Diploma Examination Participation Rate

The diploma examination participation rate reports the percentages of students who have written four or more diploma examinations within three years of entering Grade 10. The tracking of Alberta Grade 10 students in public, separate, francophone, charter and accredited private schools excludes some groups of students, such as those identified as having a severe cognitive disability or severe multiple disabilities.

The diploma examination participation rate is calculated by dividing the number of diploma examination participants by the number of students in the Grade 10 cohort, adjusted for attrition as shown in the formula below:

$$\left( \begin{array}{c} \text{Diploma} \\ \text{Examination} \\ \text{Participants} \end{array} \right) \div \left( \begin{array}{c} \text{Grade 10} \\ \text{Cohort} \end{array} - \begin{array}{c} \text{Attrition} \\ \text{Factor} \end{array} \right) = \begin{array}{c} \text{Diploma} \\ \text{Examination} \\ \text{Participation} \\ \text{Rate} \end{array}$$