

Psychometric and statistical analysis of the 2019 delivery of English Levels 1 - 3, and History Level 1 externally assessed achievement standards using digital medium

Contents

Executive summary	3
Introduction	3
1. Level 1 English	5
1.1 Students in schools participating in Digital Examination	5
1.2 Matched data comparison	6
1.3 Conclusion	8
2. Level 2 English	9
2.1 Students in schools participating in Digital Examination	9
2.2 Matched data comparison	11
2.3 Conclusion	13
3. Level 3 English	14
3.1 Students in schools participating in Digital Examination	14
3.2 Matched data comparison	15
3.3 Conclusion	17
4. Level 1 History	18
4.1 Students in schools participating in Digital Examination	18
4.2 Matched data comparison	19
4.3 Conclusion	21
5. Level 1 English – Māori Students	22
5.1 Māori students in schools participating in Digital Examination	22
5.2 Matched data comparison	23
5.3 Conclusion	25
Appendix	26
A. Analysis of predictive relationship between internal and external assessment	26
B. Matched data analysis methodology detail and results	30
C. Level 1 English: Number of results in each grade category for each participating school, disaggregated by assessment format	36
D. Level 2 English: Number of results in each grade category for each participating school, disaggregated by assessment format	45
E. Level 3 English: Number of results in each grade category for each participating school, disaggregated by assessment format	54

F. Level 1 History: Number of results in each grade category for each participating school, disaggregated by assessment format	63
G. Level 1 English - Māori: Number of results in each grade category for each participating school, disaggregated by assessment format	72

Executive summary

Statistical analyses comparing the psychometric properties of externally-assessed standards completed in digital and paper formats were performed to investigate the extent to which the two formats afforded students equivalent assessment opportunities. Such equivalence is important to establish as NZQA expands the range of NCEA examinations available digitally.

The analyses covered Levels 1, 2 and 3 in English and Level 1 in History. An additional analysis was conducted involving Māori students who participated in Level 1 English. All the analyses had sufficiently large numbers of students to provide reliable comparisons of the two formats. Digital- and paper-format results from the same set of schools participating in Digital Examinations were compared. Subsequent analysis compared the results after adjusting for student ability, by matching on students' internally-assessed standards. Both overall grade distributions and Rasch difficulty parameters of the two sets of results were examined.

Overall there was no conclusive evidence of a difference between the two formats of the assessment.

Introduction

NZQA has a goal of having NCEA examinations available online and, since 2016, has been working with schools to offer Digital examinations in preparation for this. 2019 Digital examinations contained the same content as the paper examinations (substitution), but some digital tools featured in the examinations such as spell check. Involvement in a Digital examination was voluntary, and those students who opted in sat a digital examination rather than the paper examination (the printed examination paper was available as a back up). The Digital examinations were held on the same dates and times as the paper-based examinations ¹.

The purpose of the analyses in this report is to investigate the extent to which the two formats afforded students equivalent assessment opportunities. Such equivalence is important to establish as NZQA expands the digital assessment opportunities it offers to students.

Digital examinations were offered in 2019 in the following:

- Agricultural and Horticultural Science – Levels 1, 2 and 3
- Art History – Levels 2 and 3
- Business Studies – Levels 1, 2, and 3
- Classical Studies – Levels 1, 2, and 3
- Education for Sustainability – Level 2
- English – Levels 1, 2, and 3
- Health – Levels 1, 2, and 3
- History – Levels, 1, 2, and 3
- Home Economics – Levels 1, 2, and 3
- Latin – Levels 1 and 2
- Media Studies – Levels 1, 2 and 3
- Social Studies – Levels 1, 2 and 3
- Te Reo Māori – Level 1
- Te Reo Rangatira – Level 1.

¹ For more information, refer to <https://www.nzqa.govt.nz/about-us/future-state/digital-assessment-ncea-online/about-ncea-online/>

This report analyses the results of Levels 1, 2 and 3 English, Level 1 History, and Māori students in Level 1 English as these examinations had a sufficiently large number of students to provide reliable estimates of the psychometric properties of their respective external standards.

Students may be awarded a derived grade² if they believe their preparation for, or performance in, their examination was impaired. In order to reliably compare the two modes of external assessment, no student with a derived final grade was included in this analysis.

This report uses methodology from last year's analysis of 2018 results³, and the same set of analyses was performed to evaluate Levels 1, 2 and 3 English examination results, Level 1 History examination results, and Māori students Level 1 English examination results. The preliminary analysis compared students who sat the examination digitally with students who sat the same examination on paper, from the same schools. For each standard, the overall grade distributions (Not Achieved, Achieved, Merit, and Excellence) of these two sets of students were compared. Rasch analyses were also conducted to estimate the difficulty parameters associated with grades of Achieved or better, Merit or better, and Excellence for the two sets of students. This analysis treated individual externally assessed standards as items, yielding an interval-scale measurement variable as an aggregate measure of performance across externally assessed standards.

As there were two groups of students, to control for the probable difference in ability between the two groups, another pair of datasets consisting of matched digital-format and paper-format students were constructed by matching on internally assessed achievement standards at the same level.

For each digital-format student, a matching paper-format student was randomly selected from the set of all paper-format students with the same profile of internal assessment results – that is, from those paper-format students who undertook the same set of internally-assessed standards and attained the same result for each – as the target digital-format student. A large number of resamples from the matching paper-format students was taken. As before, the overall grade distributions and difficulty parameters for Rasch analysis for the matched digital-format students and aggregate of matched paper-format students were compared. Any residual differences could then be attributed to the characteristic of the two examination formats.

² For more information, refer to <https://www.nzqa.govt.nz/providers-partners/assessment-and-moderation-of-standards/managing-national-assessment-in-schools/derived-grades/>

³ For more information, refer to <https://www.nzqa.govt.nz/assets/About-us/Future-State/NCEA-Online/Psychometric-Analysis-Report-2018.pdf>

1. Level 1 English

1.1 Students in schools participating in Digital Examination

[Table 1](#) shows the externally-assessed standards in Level 1 English as well as the number of results in each of the digital and paper formats of the examination in the 103 participating schools. A total of 22,332 results, 45% of which were from the digital examination format, were analysed from 11,218 students.

Table 1. Number of results for Level 1 externally assessed achievement standards in English at the participating schools in the Digital Examination.

Level 1 English External Achievement Standard		Total results – digital format	Total results – paper format	Percent results – digital format	Number of participating schools
90849	Show understanding of specified aspect(s) of studied written text(s), using supporting evidence	3,678	4,137	47%	85
90850	Show understanding of specified aspect(s) of studied visual or oral text(s), using supporting evidence	3,320	4,029	45%	86
90851	Show understanding of significant aspects of unfamiliar written text(s) through close reading, using supporting evidence	3,011	4,157	42%	75
Total		10,009	12,323	45%	103

[Figure 1](#) compares the distributions of grades for digital and paper formats for each of the three standards included in the Level 1 English Digital Examination, and [Figure 2](#) shows the Rasch difficulty parameter estimates for digital and paper formats for the three standards.

[Figure 1](#) shows the pairs of differences that were statistically significant ($p < 0.5$):

- 90849
 - The paper-format students had a significantly higher Not Achieved grade percentage compared with digital-format students (four percentage points higher)
 - The paper-format students had a significantly higher Achieved grade percentage compared with digital-format students (six percentage points higher)
 - The digital-format students had a significantly higher Merit grade percentage compared with paper-format students (four percentage points higher)
 - The digital-format students had a significantly higher Excellence grade percentage compared with paper-format students (five percentage points higher)
- 90850
 - The paper-format students had a significantly higher Not Achieved grade percentage compared with digital-format students (four percentage points higher)
 - The digital-format students had a significantly higher Merit grade percentage compared with paper-format students (six percentage points higher).

[Figure 2](#) shows that for the Rasch difficulty parameter estimates:

- The difficulty parameter estimates were higher for the paper format than the digital format for attaining a grade of Achieved or better across all three standards

- There were two pairs of differences between the digital format and the paper format that were statistically significant ($p < 0.5$).

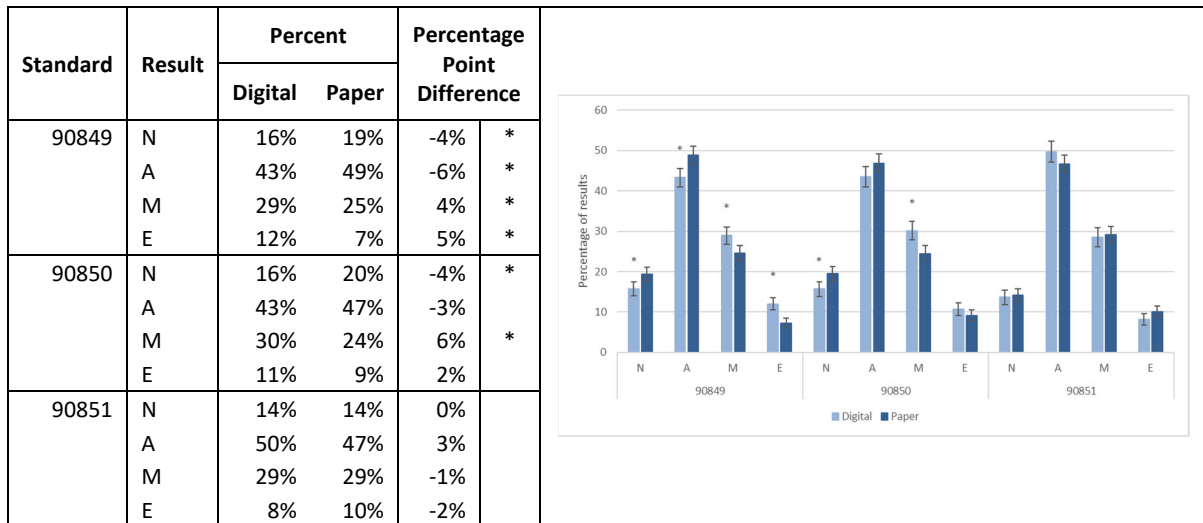


Figure 1. Comparison of digital and paper result distributions for Level 1 externally assessed achievement standards in English at schools participating in the Digital Examination. Due to rounding, percentages may not add up to 100% and re-calculating the percentage point differences may not be identical to the values displayed in the table. Vertical bars denote 95% confidence intervals, adjusted for multiple comparisons. (* = the difference between digital and paper formats is statistically significant.)

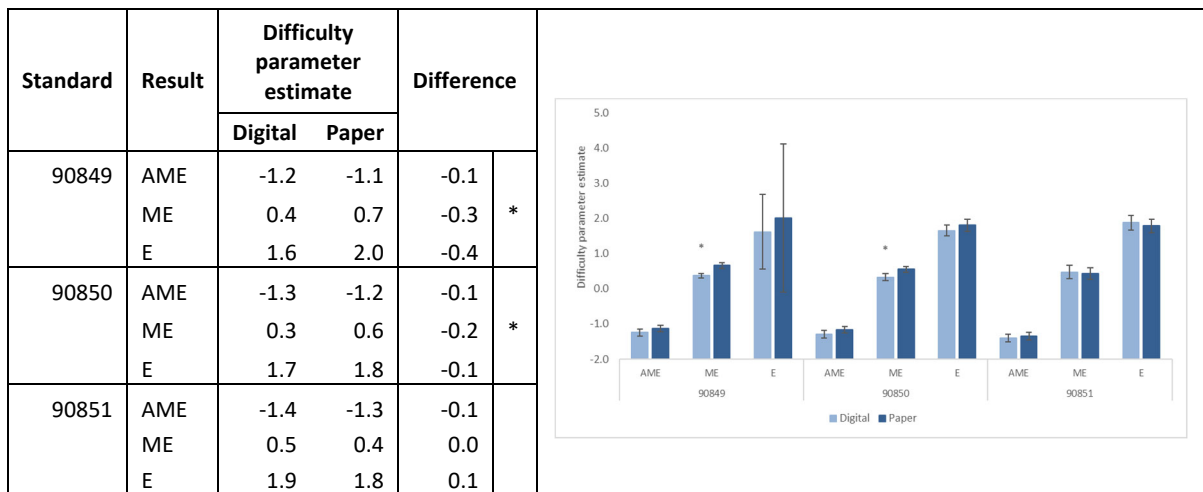


Figure 2. Comparison of Rasch difficulty parameter estimates for attaining grades of Achieved or better (AME), Merit or better (ME), and Excellence (E) for digital and paper formats for each externally assessed Level 1 achievement standard in English. Due to rounding, re-calculating the difficulty parameter estimate differences may not be identical to the values displayed in the table. Vertical bars denote 95% confidence intervals, adjusted for multiple comparisons. (* = the difference between digital and paper formats is statistically significant.)

1.2 Matched data comparison

Analysis described in Appendix A indicated that the findings in the previous section (1.1) were due to the characteristics of the groups of students, rather than the characteristics of the mode of external assessment. In order to account for the underlying difference in ability between the digital-format and paper-format students, achievement in internally assessed achievement standards was used to construct matching datasets of digital-format and paper-format students. Any residual differences, after comparing this set of data, could then be attributed to the characteristics of the two examination formats.

Of the 4,793 students in the previous set of analyses who undertook the Level 1 English examination in the digital format, 3,903 students had at least one paper-format student with identical results in Level 1 English internal achievement standards. For this set of matched digital-format students, there was a total of 16,412 paper-format students that were eligible for matching.

A total of 100 resamples were taken from this set of 16,412 paper-format students, with each resample consisting of 3,903 students that had matching internal results to the matched digital-format students. (See Appendix B for the detailed methodology and results.) [Figure 3](#) compares the distribution of grades for the matched digital-format students with the aggregated distribution of results of the matched paper-format student resamples. [Figure 4](#) shows the comparison of the estimated Rasch difficulty parameters for the matched digital-format students with those generated from the matched paper-format student resamples.

[Figure 3](#) shows the pairs of differences that were statistically significant ($p < 0.5$):

- 90851
 - The paper-format students had a significantly higher Excellence grade percentage compared with digital-format students (three percentage points higher).

[Figure 4](#) shows that for the Rasch difficulty parameter estimates:

- The difficulty parameter estimates were higher for the paper format than the digital format for attaining a grade of Achieved or better across all three standards
- There were three pairs of differences between the digital format and the paper format that were statistically significant ($p < 0.5$).

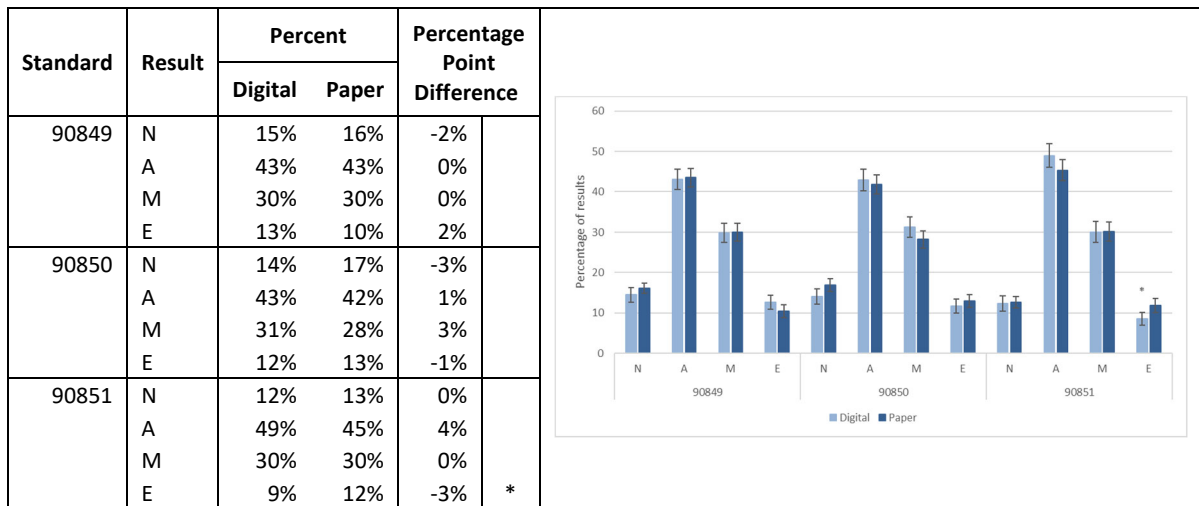


Figure 3. Comparison of result distributions of matched digital-format students and aggregated matched paper-format student resamples (n=100) for Level 1 externally assessed achievement standards in English. Due to rounding, percentages may not add up to 100% and re-calculating the percentage point differences may not be identical to the values displayed in the table. Vertical bars denote 95% confidence intervals, adjusted for multiple comparisons. (* = the difference between digital and paper formats is statistically significant.)

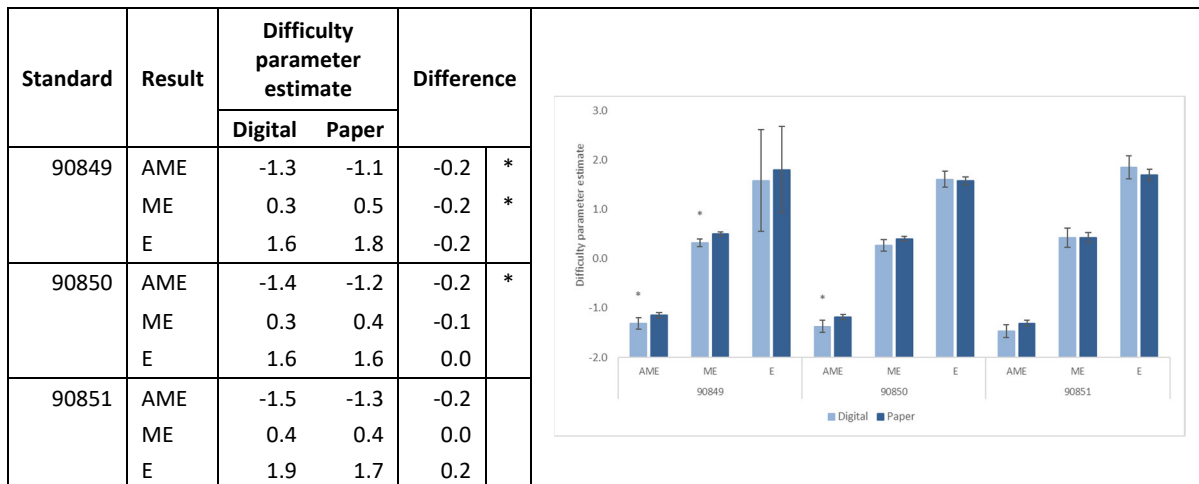


Figure 4. Comparison of Rasch difficulty parameter estimates for attaining grades of Achieved or better (AME), Merit or better (ME), and Excellence (E) for matched digital-format students and aggregated matched paper-format student resamples (n=100) for each externally assessed Level 1 achievement standard in English. Due to rounding, re-calculating the difficulty parameter estimate differences may not be identical to the values displayed in the table. Vertical bars denote 95% confidence intervals, adjusted for multiple comparisons. (* = the difference between digital and paper formats is statistically significant.)

1.3 Conclusion

Results indicated that overall students found the digital format of the same difficulty as the paper format in Level 1 English external standards.

2. Level 2 English

2.1 Students in schools participating in Digital Examination

[Table 2](#) shows the externally-assessed standards in Level 2 English as well as the number of results in each of the digital and paper formats of the examination in the 92 participating schools. A total of 13,526 results, 50% of which were from the digital examination format, were analysed from 7,535 students.

Table 2. Number of results for Level 2 externally assessed achievement standards in English at the participating schools in the Digital Examination.

Level 2 English External Achievement Standard		Total results – digital format	Total results – paper format	Percent results – digital format	Number of participating schools
91098	Analyse specified aspect(s) of studied written text(s), supported by evidence	2,662	2,652	50%	78
91099	Analyse specified aspect(s) of studied visual or oral text(s), supported by evidence	2,151	2,095	51%	75
91100	Analyse significant aspects of unfamiliar written text(s) through close reading, supported by evidence	1,997	1,969	50%	66
Total		6,810	6,716	50%	92

[Figure 5](#) compares the distributions of grades for digital and paper formats for each of the three standards included in the Level 2 English Digital Examination, and [Figure 6](#) shows the Rasch difficulty parameter estimates for the digital and paper formats for the three standards.

For all three standards, the percentages of Not Achieved grades were higher for the paper format, and the percentages of Excellence grades were higher for the digital format.

[Figure 5](#) also shows the pairs of differences that were statistically significant ($p < 0.5$):

- 91098
 - The paper-format students had a significantly higher Not Achieved grade percentage compared with digital-format students (seven percentage points higher)
 - The digital-format students had a significantly higher Excellence grade percentage compared with paper-format students (four percentage points higher)
- 91099
 - The paper-format students had a significantly higher Not Achieved grade percentage compared with digital-format students (nine percentage points higher)
 - The digital-format students had a significantly higher Merit grade percentage compared with paper-format students (six percentage points higher)
 - The digital-format students had a significant higher Excellence grade percentage compared with paper-format students (five percentage points higher)
- 91100
 - The paper-format students had a significantly higher Not Achieved grade percentage compared with digital-format students (six percentage points higher)
 - The digital-format students had a significantly higher Merit grade percentage compared with paper-format students (seven percentage points higher)

- The digital-format students had a significantly higher Excellence grade percentage compared with paper-format students (three percentage points higher).

[Figure 6](#) shows that for the Rasch difficulty parameter estimates:

- The difficulty parameter estimates were higher for the paper format than the digital format for attaining a grade of Merit or better across all three standards
- The difficulty parameter estimates were higher for the paper format than the digital format for attaining a grade of Excellence across all three standards
- There were five pairs of differences between the digital format and the paper format that were statistically significant ($p < 0.5$).

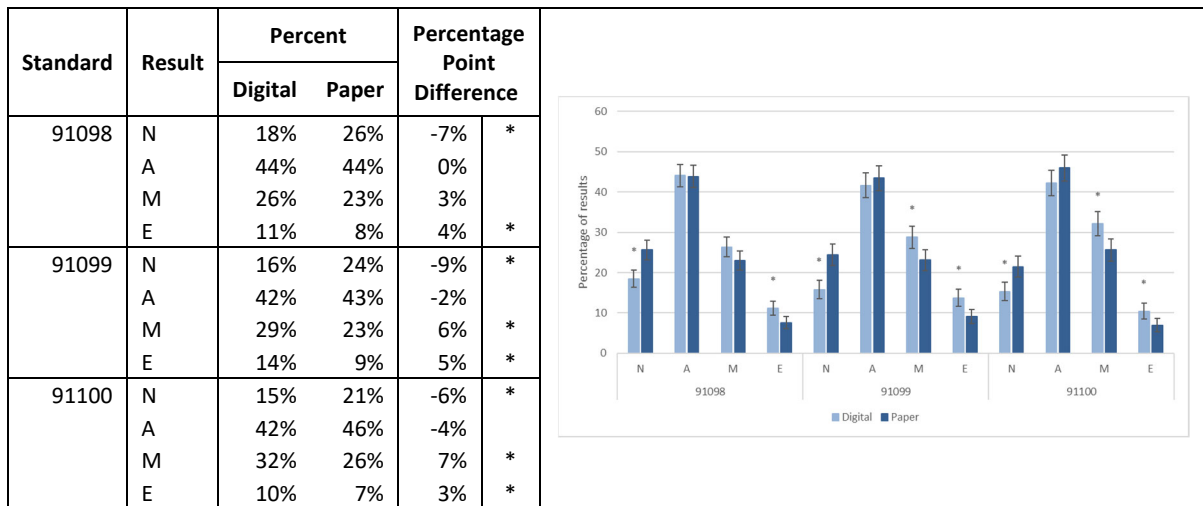


Figure 5. Comparison of digital and paper result distributions for Level 2 externally assessed achievement standards in English at schools participating in the Digital Examination. Due to rounding, percentages may not add up to 100% and re-calculating the percentage point differences may not be identical to the values displayed in the table. Vertical bars denote 95% confidence intervals, adjusted for multiple comparisons. (* = the difference between digital and paper formats is statistically significant.)

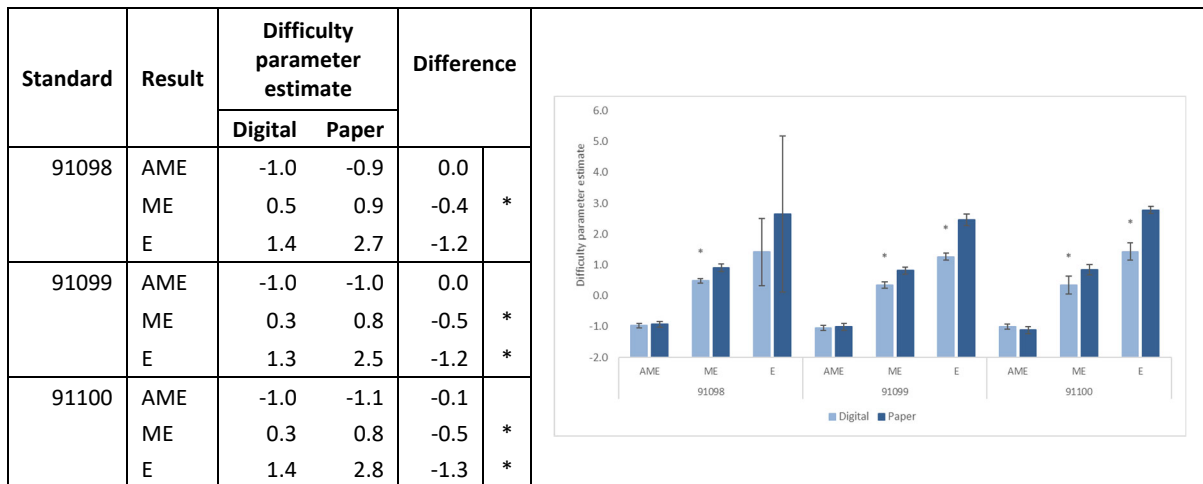


Figure 6. Comparison of Rasch difficulty parameter estimates for attaining grades of Achieved or better (AME), Merit or better (ME), and Excellence (E) for digital and paper formats for each externally assessed Level 2 achievement standard in English. Due to rounding, re-calculating the difficulty parameter estimate differences may not be identical to the values displayed in the table. Vertical bars denote 95% confidence intervals, adjusted for multiple comparisons. (* = the difference between digital and paper formats is statistically significant.)

2.2 Matched data comparison

Analysis described in Appendix A indicated that the findings in the previous section (2.1) were due to the characteristics of the groups of students, rather than the characteristics of the mode of external assessment. In order to account for the underlying difference in ability between the digital-format and paper-format students, achievement in internally assessed achievement standards was used to construct matching datasets of digital-format and paper-format students. Any residual differences, after comparing this set of data, could then be attributed to the characteristics of the two examination formats.

Of the 3,601 students in the previous set of analyses who undertook the Level 2 English examination in the digital format, 3,340 students had at least one paper-format student with identical results in Level 2 English internal achievement standards. For this set of matched digital-format students, there was a total of 21,604 paper-format students that were eligible for matching.

A total of 100 resamples were taken from this set of 21,604 paper-format students, with each resample consisting of 3,340 students that had matching internal results to the matched digital-format students. (See Appendix B for the detailed methodology and results.) [Figure 7](#) compares the distribution of grades for the matched digital-format students with the aggregated distribution of results of the matched paper-format student resamples. [Figure 8](#) shows the comparison of the estimated Rasch difficulty parameters for the matched digital-format students with those generated from the matched paper-format student resamples.

[Figure 7](#) shows that for all three standards, the percentages of Not Achieved grades were higher for the paper format. It also shows that there were no statistically significant differences in grade percentages between the digital format and paper format ($p < 0.5$).

[Figure 8](#) shows that for the Rasch difficulty parameter estimates:

- The difficulty parameter estimates were higher for the paper format than the digital format for attaining a grade of Achieved or better across all three standards
- The difficulty parameter estimates were higher for the paper format than the digital format for attaining a grade of Merit or better across all three standards
- The difficulty parameter estimates were higher for the paper format than the digital format for attaining a grade of Excellence across all three standards
- There were six pairs of differences between the digital format and the paper format that were statistically significant ($p < 0.5$).

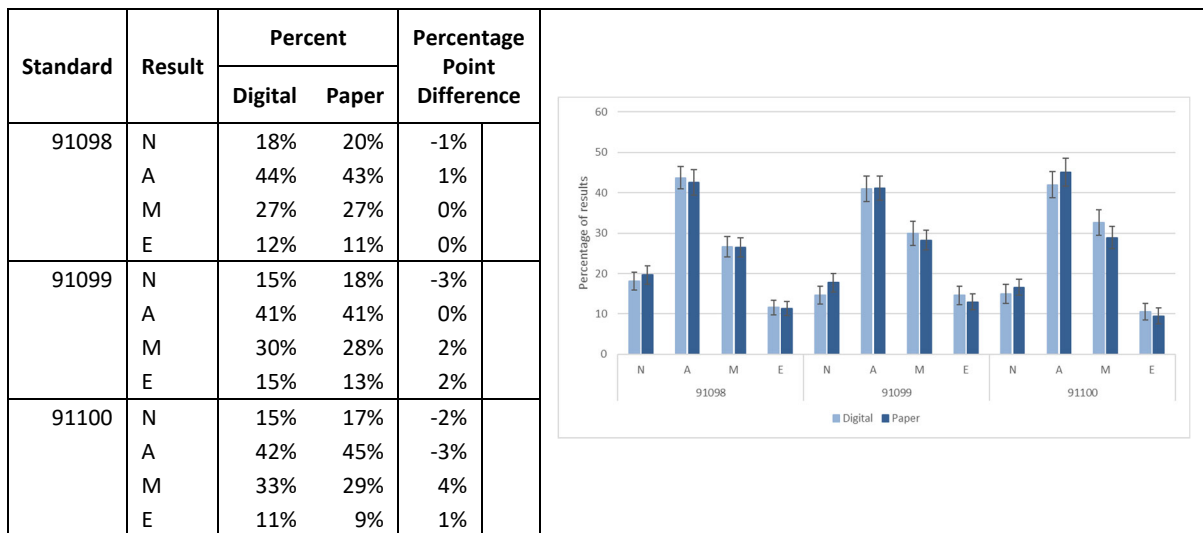


Figure 7. Comparison of result distributions of matched digital-format students and aggregated matched paper-format student resamples (n=100) for Level 2 externally assessed achievement standards in English. Due to rounding, percentages may not add up to 100% and re-calculating the percentage point differences may not be identical to the values displayed in the table. Vertical bars denote 95% confidence intervals, adjusted for multiple comparisons. (* = the difference between digital and paper formats is statistically significant.)

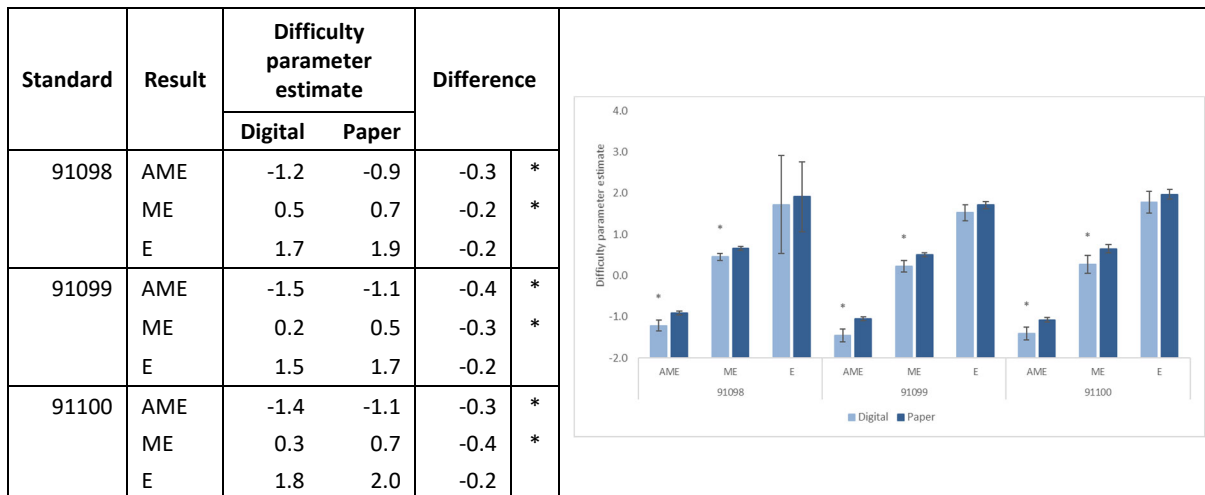


Figure 8. Comparison of Rasch difficulty parameter estimates for attaining grades of Achieved or better (AME), Merit or better (ME), and Excellence (E) for matched digital-format students and aggregated matched paper-format student resamples (n=100) for each externally assessed Level 2 achievement standard in English. Due to rounding, re-calculating the difficulty parameter estimate differences may not be identical to the values displayed in the table. Vertical bars denote 95% confidence intervals, adjusted for multiple comparisons. (* = the difference between digital and paper formats is statistically significant.)

2.3 Conclusion

The analysis indicated that students found the digital format less difficult than the paper format for all three Level 2 English external standards.

3. Level 3 English

3.1 Students in schools participating in Digital Examination

[Table 3](#) shows the externally-assessed standards in Level 3 English as well as the number of results in each of the digital and paper formats of the examination in the 87 participating schools. A total of 5,339 results, 55% of which were from the digital examination format, were analysed from 3,433 students.

Table 3. Number of results for Level 3 externally assessed achievement standards in English at the participating schools in the Digital Examination.

Level 3 English External Achievement Standard		Total results – digital format	Total results – paper format	Percent results – digital format	Number of participating schools
91472	Respond critically to specified aspect(s) of studied written text(s), supported by evidence	1,048	838	56%	74
91473	Respond critically to specified aspect(s) of studied visual or oral text(s), supported by evidence	1,263	989	56%	72
91474	Respond critically to significant aspects of unfamiliar written text(s) through close reading, supported by evidence	631	570	53%	58
Total		2,942	2,397	55%	87

[Figure 9](#) compares the distributions of grades for digital and paper formats for each of the three standards included in the Level 3 English Digital Examination, and [Figure 10](#) shows the Rasch difficulty parameter estimates for the digital and paper formats for the three standards.

[Figure 9](#) shows that for all three standards, the percentages of Not Achieved grades were higher for the paper format. Figure 5 also shows the pairs of differences that were statistically significant ($p < 0.5$):

- 91473
 - The paper-format students had a significantly higher Achieved grade percentage compared with digital-format students (seven percentage points higher)
 - The digital-format students had a significantly higher Merit grade percentage compared with paper-format students (six percentage points higher)
 - The digital-format students had a significantly higher Excellence grade percentage compared with paper-format students (four percentage points higher).

[Figure 10](#) shows that for the Rasch difficulty parameter estimates:

- The difficulty parameter estimates were higher for the paper format than the digital format for attaining a grade of Achieved or better across all three standards
- The difficulty parameter estimates were higher for the digital format than the paper format for attaining a grade of Merit or better across all three standards
- The difficulty parameter estimates were higher for the digital format than the paper format for attaining a grade of Excellence across all three standards
- There were no pairs of differences between the digital format and the paper format that were statistically significant ($p < 0.5$).

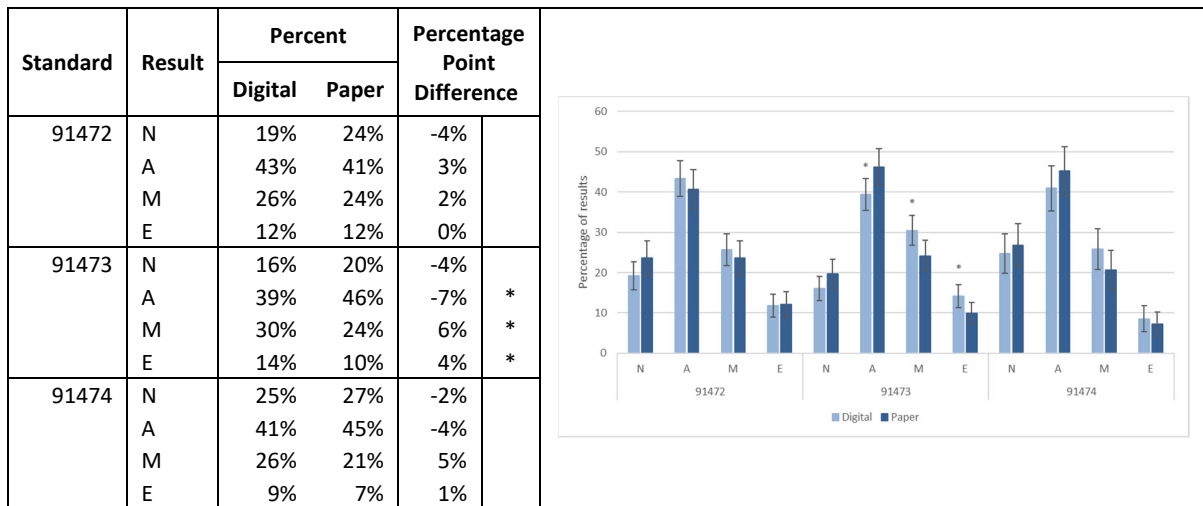


Figure 9. Comparison of digital and paper result distributions for Level 3 externally assessed achievement standards in English at schools participating in the Digital Examination. Due to rounding, percentages may not add up to 100% and re-calculating the percentage point differences may not be identical to the values displayed in the table. Vertical bars denote 95% confidence intervals, adjusted for multiple comparisons. (* = the difference between digital and paper formats is statistically significant.)

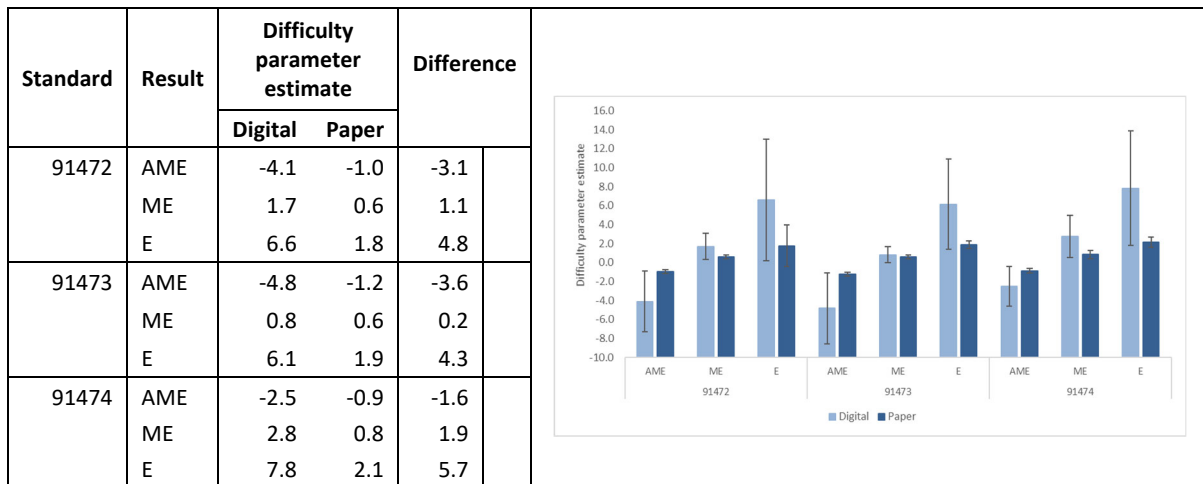


Figure 10. Comparison of Rasch difficulty parameter estimates for attaining grades of Achieved or better (AME), Merit or better (ME), and Excellence (E) for digital and paper formats for each externally assessed Level 3 achievement standard in English. Due to rounding, re-calculating the difficulty parameter estimate differences may not be identical to the values displayed in the table. Vertical bars denote 95% confidence intervals, adjusted for multiple comparisons. (* = the difference between digital and paper formats is statistically significant.)

3.2 Matched data comparison

Analysis described in Appendix A indicated that the findings in the previous section (2.1) could not discount that student results were explained by the characteristics of the format of the external assessment.

Results in external assessment might also be explained by the underlying characteristics of the two groups of students. In order to account for the underlying difference in ability between the digital-format and paper-format students, achievement in internally assessed achievement standards was used to construct matching datasets of digital-format and paper-format students. Any residual differences, after comparing this set of data, could then be attributed to the characteristics of the two examination formats.

Of the 1,842 students in the previous set of analyses who undertook the Level 2 English examination in the digital format, 1,644 students had at least one paper-format student with identical results in Level 2 English internal achievement standards. For this set of matched digital-format students, there was a total of 9,411 paper-format students that were eligible for matching.

A total of 100 resamples were taken from this set of 9,411 paper-format students, with each resample consisting of 1,644 students that had matching internal results to the matched digital-format students. (See Appendix B for the detailed methodology and results.) [Figure 11](#) compares the distribution of grades for the matched digital-format students with the aggregated distribution of results of the matched paper-format student resamples. [Figure 12](#) shows the comparison of the estimated Rasch difficulty parameters for the matched digital-format students with those generated from the matched paper-format student resamples.

[Figure 11](#) shows one statistically significant difference in grade percentages between the digital format and paper format:

- 91472
 - The digital-format students had a significantly higher Achieved grade percentage compared with digital-format students (seven percentage points higher).

[Figure 12](#) shows that for the Rasch difficulty parameter estimates:

- There were no pairs of differences between the digital format and the paper format that were statistically significant ($p < 0.5$).

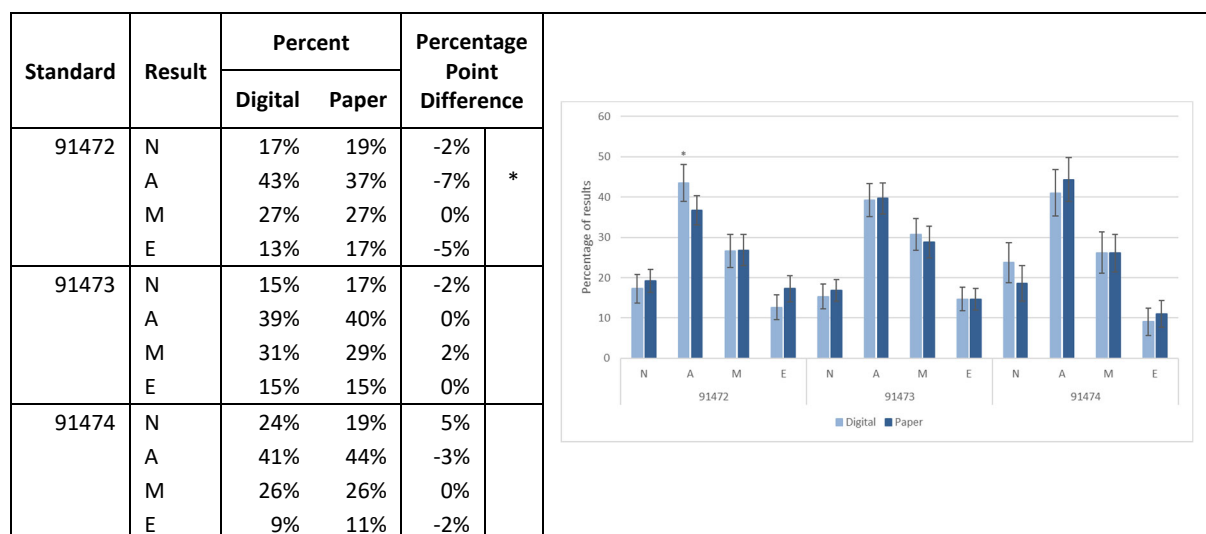


Figure 11. Comparison of result distributions of matched digital-format students and aggregated matched paper-format student resamples (n=100) for Level 3 externally assessed achievement standards in English. Due to rounding, percentages may not add up to 100% and re-calculating the percentage point differences may not be identical to the values displayed in the table. Vertical bars denote 95% confidence intervals, adjusted for multiple comparisons. (* = the difference between digital and paper formats is statistically significant.)

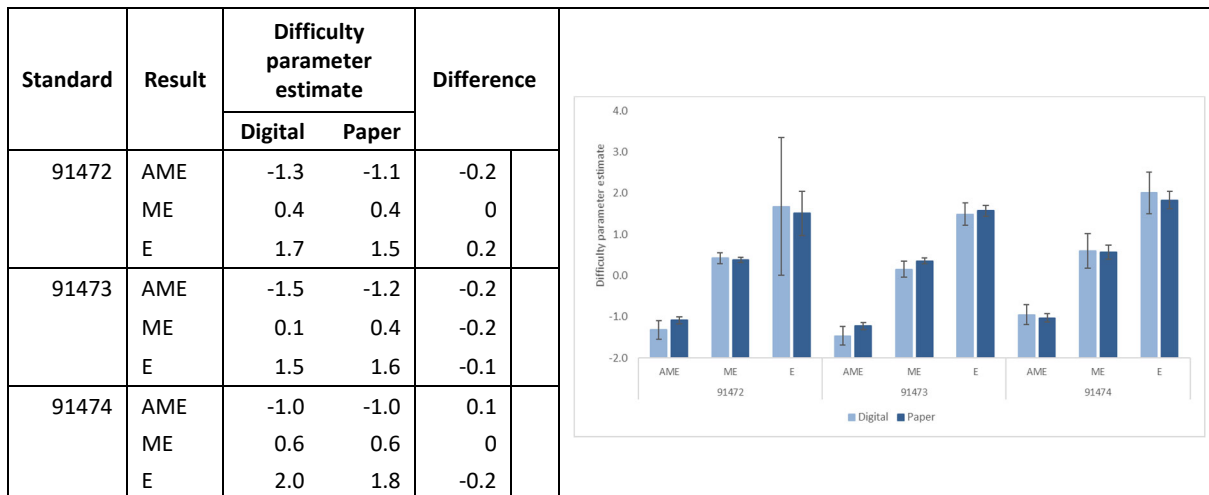


Figure 12. Comparison of Rasch difficulty parameter estimates for attaining grades of Achieved or better (AME), Merit or better (ME), and Excellence (E) for matched digital-format students and aggregated matched paper-format student resamples (n=100) for each externally assessed Level 3 achievement standard in English. Due to rounding, re-calculating the difficulty parameter estimate differences may not be identical to the values displayed in the table. Vertical bars denote 95% confidence intervals, adjusted for multiple comparisons. (* = the difference between digital and paper formats is statistically significant.)

3.3 Conclusion

The analysis indicated that students found the digital format of the same difficulty as the paper format for all three Level 3 English external standards.

4. Level 1 History

4.1 Students in schools participating in Digital Examination

[Table 4](#) shows the externally-assessed standards in Level 1 History as well as the number of results in each of the digital and paper formats of the examination in the 64 participating schools. A total of 5,842 results, 42% of which were from the digital examination format, were analysed from 6,539 students.

Table 4. Number of results for Level 1 externally assessed achievement standards in History at the participating schools in the Digital Examination.

Level 1 History External Achievement Standard		Total results – digital format	Total results – paper format	Percent results – digital format	Number of participating schools
91003	Interpret sources of an historical event of significance to New Zealanders	1,004	1,413	42%	53
91005	Describe the causes and consequences of an historical event	1,109	1,435	44%	54
91006	Describe how a significant historical event affected New Zealand society	330	551	37%	26
Total		2,443	3,399	42%	64

[Figure 13](#) compares the distributions of grades for digital and paper formats for each of the three standards included in the Level 1 History Digital Examination, and [Figure 14](#) shows the Rasch difficulty parameter estimates for the digital and paper formats for the three standards.

[Figure 13](#) shows that for all three standards, the percentages of Not Achieved grades were higher for the paper format. It also shows the pairs of differences that were statistically significant ($p < 0.5$):

- 91003
 - The paper-format students had a significantly higher Not Achieved grade percentage compared with digital-format students (five percentage points higher)
 - The digital-format students had a significantly higher Merit grade percentage compared with paper-format students (seven percentage points higher)
- 91005
 - The paper-format students had a significantly higher Not Achieved grade percentage compared with digital-format students (six percentage points higher)
 - The paper-format students had a significantly higher Achieved grade percentage compared with digital-format students (ten percentage points higher)
 - The digital-format students had a significantly higher Excellence grade percentage compared with paper-format students (ten percentage points higher)
- 91006
 - The digital-format students had a significantly higher Excellence grade percentage compared with paper-format students (nine percentage points higher).

[Figure 14](#) shows that for the Rasch difficulty parameter estimates:

- The difficulty parameter estimates were higher for the paper format than the digital format for attaining a grade of Achieved or better across all three standards

- The difficulty parameter estimates were higher for the paper format than the digital format for attaining a grade of Merit or better across all three standards
- The difficulty parameter estimates were higher for the digital format than the paper format for attaining a grade of Excellence across all three standards
- There were no pairs of differences between the digital format and the paper format that were statistically significant ($p < 0.5$).

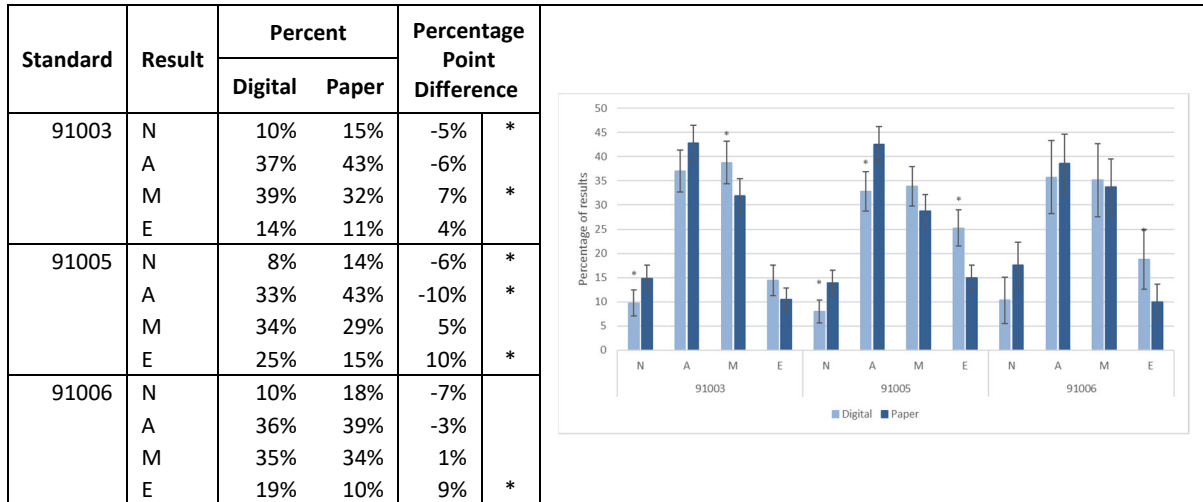


Figure 13. Comparison of digital and paper result distributions for Level 1 externally assessed achievement standards in History at schools participating in the Digital Examination. Due to rounding, percentages may not add up to 100% and re-calculating the percentage point differences may not be identical to the values displayed in the table. Vertical bars denote 95% confidence intervals, adjusted for multiple comparisons. (* = the difference between digital and paper formats is statistically significant.)

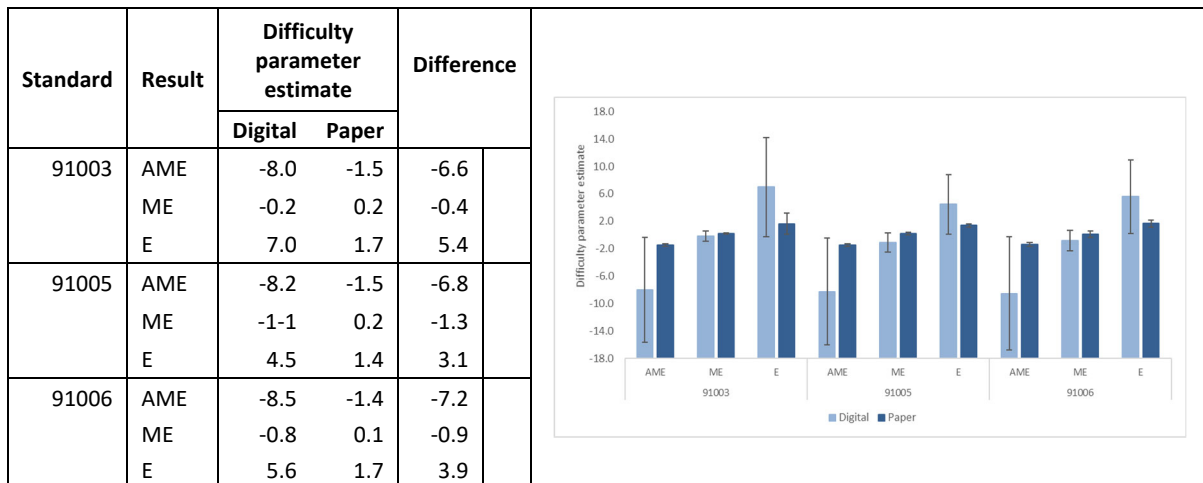


Figure 14. Comparison of Rasch difficulty parameter estimates for attaining grades of Achieved or better (AME), Merit or better (ME), and Excellence (E) for digital and paper formats for each externally assessed Level 1 achievement standard in History. Due to rounding, re-calculating the difficulty parameter estimate differences may not be identical to the values displayed in the table. Vertical bars denote 95% confidence intervals, adjusted for multiple comparisons. (* = the difference between digital and paper formats is statistically significant.)

4.2 Matched data comparison

Analysis described in Appendix A indicated that the findings in the previous section (2.1) could not discount that student results were explained by the characteristics of the format of the external assessment.

Results in external assessment might also be explained by the underlying characteristics of the two groups of students. In order to account for the underlying difference in ability between the digital-format and paper-format students, achievement in internally assessed achievement standards was used to construct matching datasets of digital-format and paper-format students. Any residual differences, after comparing this set of data, could then be attributed to the characteristics of the two examination formats.

Of the 2,704 students in the previous set of analyses who undertook the Level 1 History examination in the digital format, 1,286 students had at least one paper-format student with identical results in Level 1 History internal achievement standards. For this set of matched digital-format students, there was a total of 9,069 paper-format students that were eligible for matching.

A total of 100 resamples were taken from this set of 9,069 paper-format students, with each resample consisting of 1,286 students that had matching internal results to the matched digital-format students. (See Appendix B for the detailed methodology and results.) [Figure 15](#) compares the distribution of grades for the matched digital-format students with the aggregated distribution of results of the matched paper-format student resamples. [Figure 16](#) shows the comparison of the estimated Rasch difficulty parameters for the matched digital-format students with those generated from the matched paper-format student resamples.

[Figure 15](#) shows there were no pairs of differences between the digital format and the paper format that were statistically significant ($p < 0.5$).

[Figure 16](#) shows that for the Rasch difficulty parameter estimates:

- The difficulty parameter estimates were higher for the digital format than the paper format for attaining a grade of Achieved or better across all three standards
- The difficulty parameter estimates were higher for the paper format than the digital format for attaining a grade of Merit or better across all three standards
- The difficulty parameter estimates were higher for the paper format than the digital format for attaining a grade of Excellence across all three standards
- There was only one pair of differences between the digital format and the paper format that were statistically significant ($p < 0.5$).

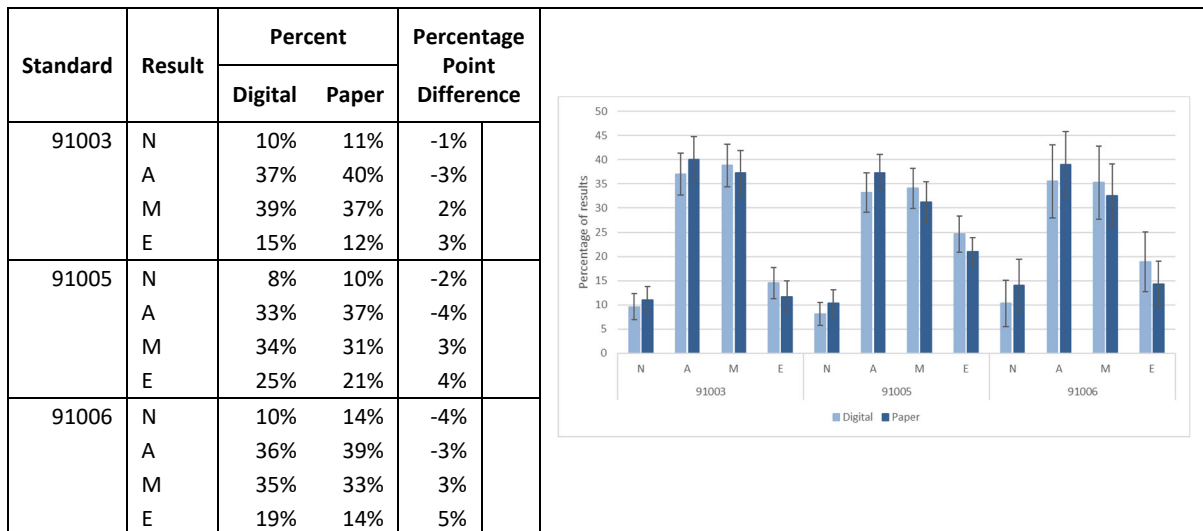


Figure 15. Comparison of result distributions of matched digital-format students and aggregated matched paper-format student resamples (n=100) for Level 1 externally assessed achievement standards in History. Due to rounding, percentages may not add up to 100% and re-calculating the percentage point differences may not be identical to the values displayed in the table. Vertical bars denote 95% confidence intervals, adjusted for multiple comparisons. (* = the difference between digital and paper formats is statistically significant.)

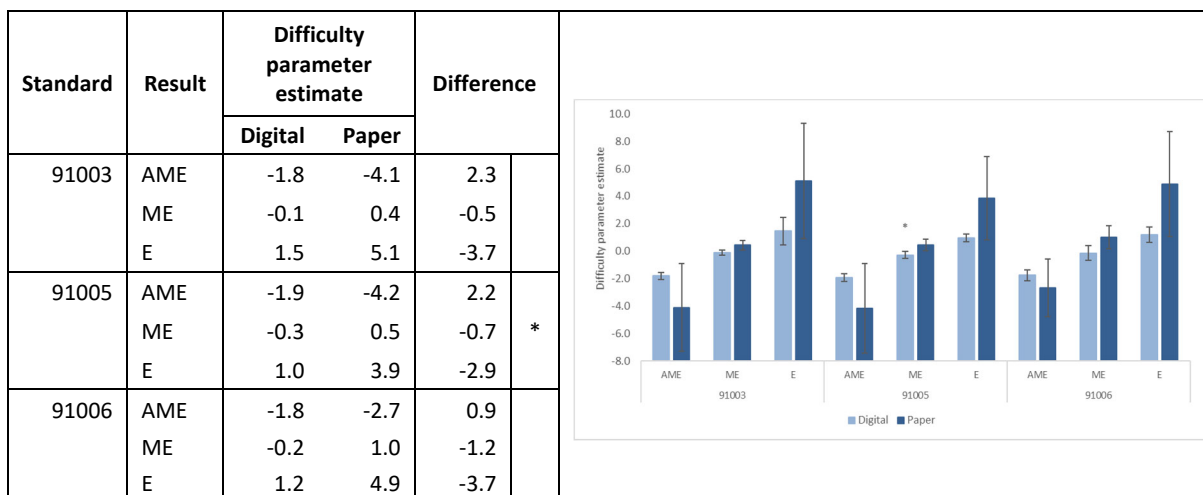


Figure 16. Comparison of Rasch difficulty parameter estimates for attaining grades of Achieved or better (AME), Merit or better (ME), and Excellence (E) for matched digital-format students and aggregated matched paper-format student resamples (n=100) for each externally assessed Level 1 achievement standard in History. Due to rounding, re-calculating the difficulty parameter estimate differences may not be identical to the values displayed in the table. Vertical bars denote 95% confidence intervals, adjusted for multiple comparisons. (* = the difference between digital and paper formats is statistically significant.)

4.3 Conclusion

The analysis indicated that overall, students found the digital format of the same difficulty as the paper format for all three Level 1 History external standards.

5. Level 1 English – Māori Students

5.1 Māori students in schools participating in Digital Examination

[Table 5](#) shows the externally-assessed standards in Level 1 English as well as the number of results in each of the digital and paper formats of the examination in the 80 participating schools. A total of 2,741 results, 44% of which were from the digital examination format, were analysed from 1,494 students.

Table 5. Number of results for Level 1 externally assessed achievement standards in English at the participating schools in the Digital Examination.

Level 1 English External Achievement Standard		Total results – digital format	Total results – paper format	Percent results – digital format	Number of participating schools
90849	Show understanding of specified aspect(s) of studied written text(s), using supporting evidence	423	523	45%	62
90850	Show understanding of specified aspect(s) of studied visual or oral text(s), using supporting evidence	440	522	46%	64
90851	Show understanding of significant aspects of unfamiliar written text(s) through close reading, using supporting evidence	341	492	41%	53
Total		1,204	1,537	44%	80

[Figure 17](#) compares the distributions of grades for digital and paper formats for each of the three standards included in the Level 1 English Digital Examination, and [Figure 18](#) shows the Rasch difficulty parameter estimates for the digital and paper formats for the three standards.

[Figure 17](#) shows that for all three standards, the percentages of Merit grades were higher for the paper format. It also shows there were no pairs of differences that were statistically significant ($p < 0.5$).

[Figure 18](#) shows that for the Rasch difficulty parameter estimates:

- There were no pairs of differences between the digital format and the paper format that were statistically significant ($p < 0.5$).

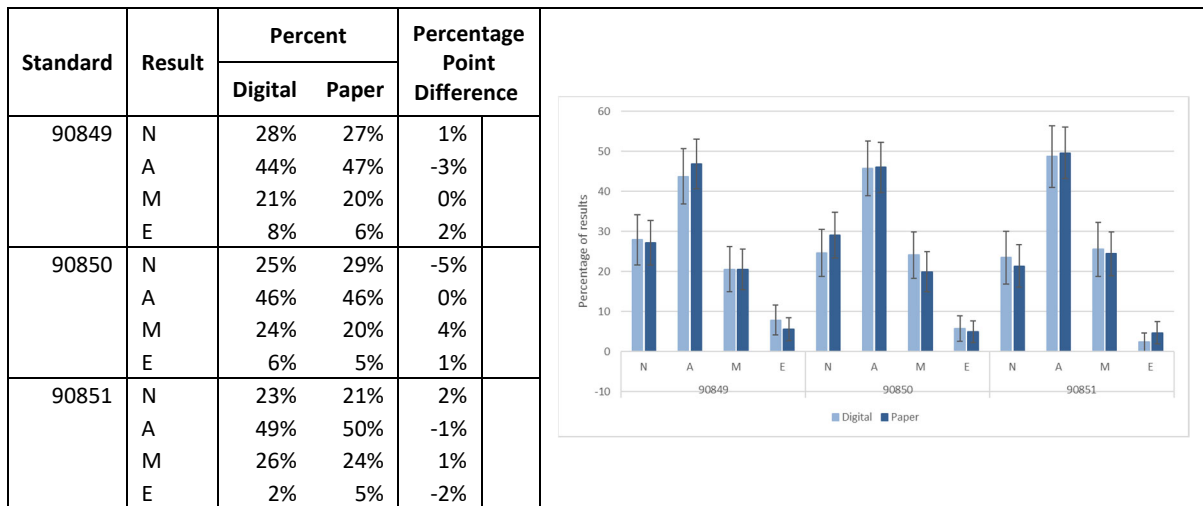


Figure 17. Comparison of digital and paper result distributions of Māori students for Level 1 externally assessed achievement standards in English at schools participating in the Digital Examination. Due to rounding, percentages may not add up to 100% and re-calculating the percentage point differences may not be identical to the values displayed in the table. Vertical bars denote 95% confidence intervals, adjusted for multiple comparisons. (* = the difference between digital and paper formats is statistically significant.)

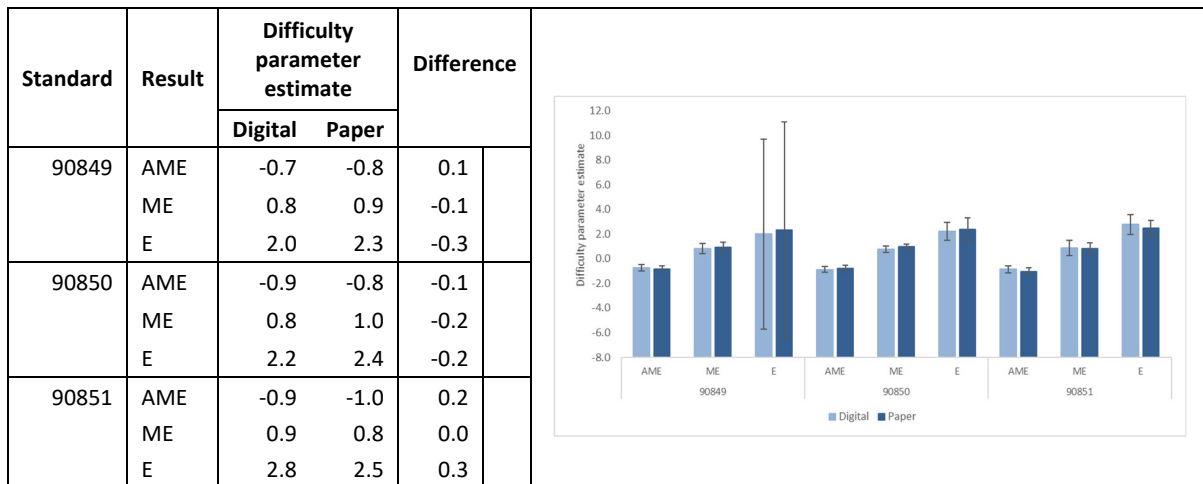


Figure 18. Comparison of Rasch difficulty parameter estimates of Māori students for attaining grades of Achieved or better (AME), Merit or better (ME), and Excellence (E) for digital and paper formats for each externally assessed Level 1 achievement standard in English. Due to rounding, re-calculating the difficulty parameter estimate differences may not be identical to the values displayed in the table. Vertical bars denote 95% confidence intervals, adjusted for multiple comparisons. (* = the difference between digital and paper formats is statistically significant.)

5.2 Matched data comparison

Analysis described in Appendix A indicated that the findings in the previous section (2.1) were due to the characteristics of the groups of students, rather than the characteristics of the mode of external assessment. In order to account for the underlying difference in ability between the digital-format and paper-format students, achievement in internally assessed achievement standards was used to construct matching datasets of digital-format and paper-format students. Any residual differences, after comparing this set of data, could then be attributed to the characteristics of the two examination formats.

Of the 645 Māori students in the previous set of analyses who undertook the Level 1 English examination in the digital format, 356 Māori students had at least one paper-format Māori student with identical results in Level 1 English internal achievement standards. For this set of matched digital-

format Māori students, there was a total of 1,011 paper-format Māori students that were eligible for matching.

A total of 100 resamples were taken from this set of 1,011 paper-format Māori students, with each resample consisting of 356 Māori students that had matching internal results to the matched digital-format Māori students. (See Appendix B for the detailed methodology and results.) [Figure 19](#) compares the distribution of grades for the matched digital-format Māori students with the aggregated distribution of results of the matched paper-format Māori student resamples. [Figure 20](#) shows the comparison of the estimated Rasch difficulty parameters for the matched digital-format Māori students with those generated from the matched paper-format Māori student resamples.

[Figure 19](#) shows there were no pairs of differences between the digital format and the paper format that were statistically significant ($p < 0.5$).

[Figure 20](#) shows that for the Rasch difficulty parameter estimates:

- The difficulty parameter estimates were higher for the paper format than the digital format for attaining a grade of Achieved or better across all three standards
- There were no pairs of differences between the digital format and the paper format that were statistically significant ($p < 0.5$).

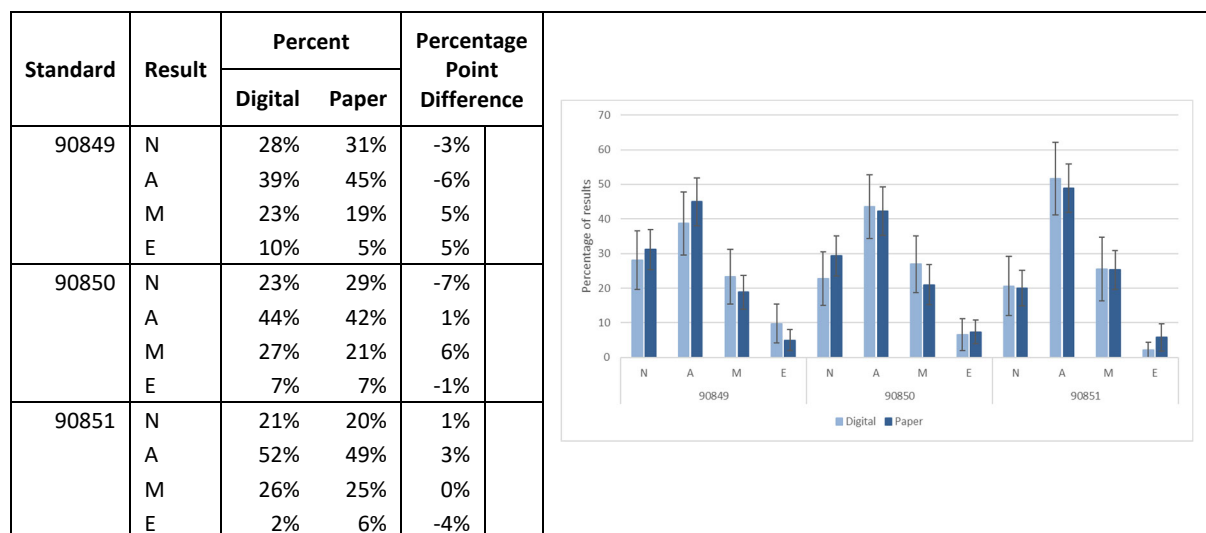


Figure 19. Comparison of result distributions of matched digital-format Māori students and aggregated matched paper-format Māori student resamples (n=100) for Level 1 externally assessed achievement standards in English. Due to rounding, percentages may not add up to 100% and re-calculating the percentage point differences may not be identical to the values displayed in the table. Vertical bars denote 95% confidence intervals, adjusted for multiple comparisons. (* = the difference between digital and paper formats is statistically significant.)

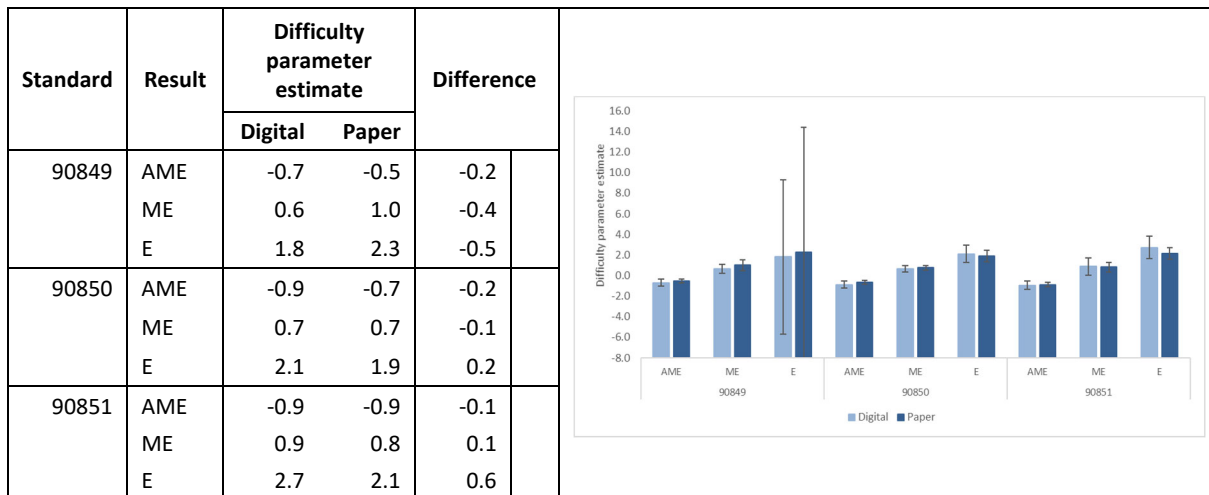


Figure 20. Comparison of Rasch difficulty parameter estimates of Māori students for attaining grades of Achieved or better (AME), Merit or better (ME), and Excellence (E) for matched digital-format students and aggregated matched paper-format student resamples (n=100) for each externally assessed Level 1 achievement standard in English. Due to rounding, re-calculating the difficulty parameter estimate differences may not be identical to the values displayed in the table. Vertical bars denote 95% confidence intervals, adjusted for multiple comparisons. (* = the difference between digital and paper formats is statistically significant.)

5.3 Conclusion

The analysis indicated that overall, Māori students found the digital format of the same difficulty as the paper format for all three Level 1 English external standards.

Appendix

A. Analysis of predictive relationship between internal and external assessment

Results in external assessment might be explained by the format of external assessment (digital vs paper) or by the underlying characteristics of the two groups of students.

To investigate whether results in external assessment were explained by the format of external assessment (digital vs paper), use is made of the predictive relationship between internal and external assessments. If the predictive relationship between the internal and external assessments of the digital format students and the predictive relationship between the internal and external assessments of the paper format students are equivalent, then the format (digital vs paper) has no explanatory power. That is, differences in external assessment results were explained by differences between the underlying characteristics of the two groups of students and not by the format of the external assessment (digital vs paper).

A set of linear regression analyses were conducted to assess the equivalence of external assessment formats (digital vs paper) in terms of its predictive relationship with internal assessments. Results from the Rasch analyses of the external assessment formats (digital vs paper) were used as the independent variable for the linear regression analyses. Rasch analysis was carried out on all internally assessed results of participating students – both those who completed the external assessments digitally and those who completed them on paper. The results from the Rasch analysis of the internal assessments were used as the dependent variable for the linear regression analyses.

Figure 21 through to Figure 25 show pairs of scatterplots (digital students on the left, and paper students on the right) with regression lines for the subjects and levels covered in this report.

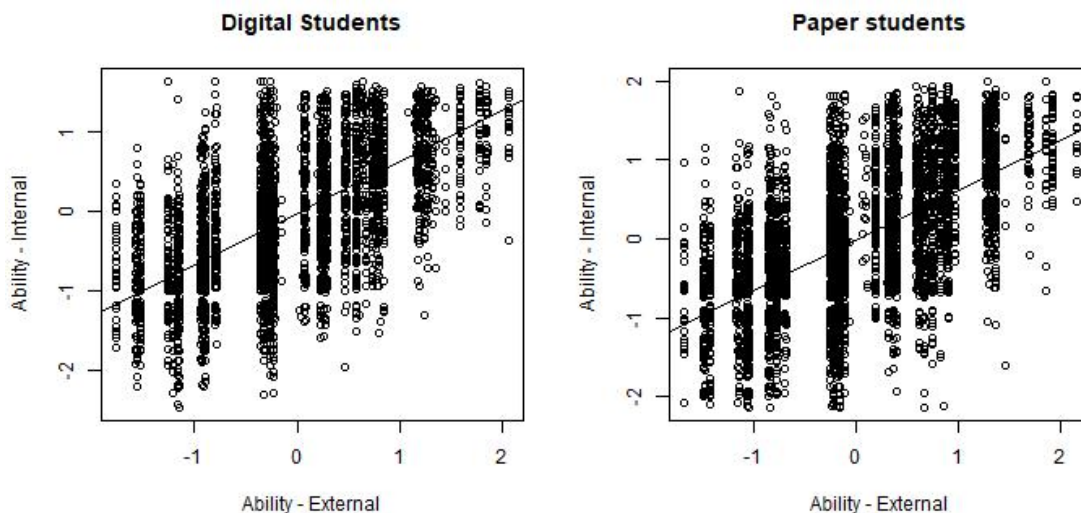


Figure 21. Scatterplots with regression lines showing the relationships between Rasch ability parameters estimated for Level 1 English external and internal assessments.

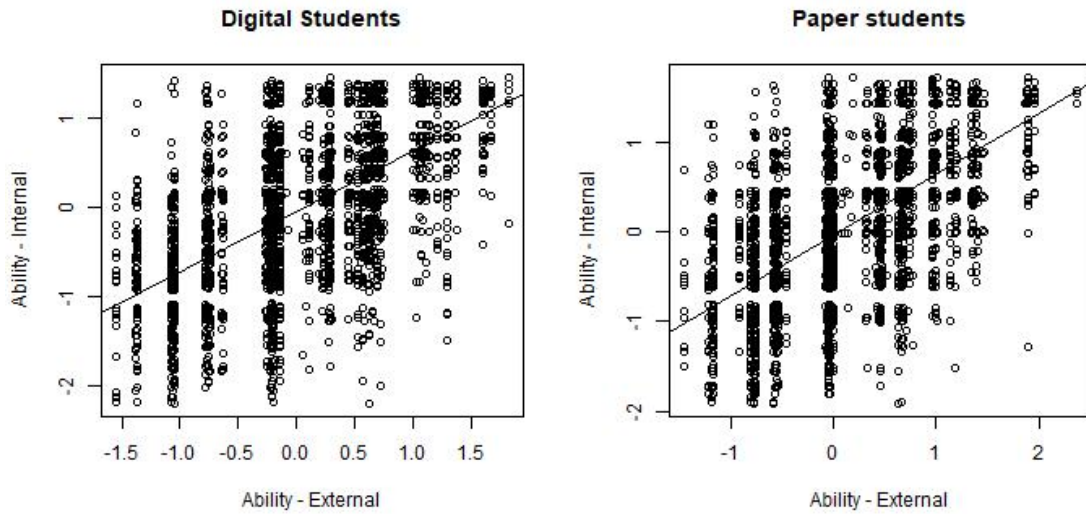


Figure 22. Scatterplots with regression lines showing the relationships between Rasch ability parameters estimated for Level 2 English external and internal assessments.

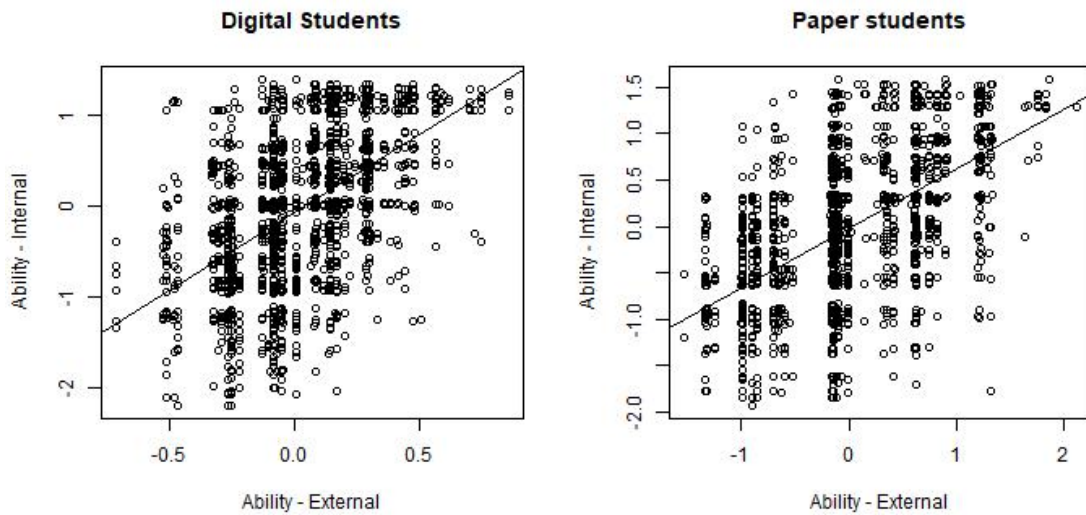


Figure 23. Scatterplots with regression lines showing the relationships between Rasch ability parameters estimated for Level 3 English external and internal assessments.

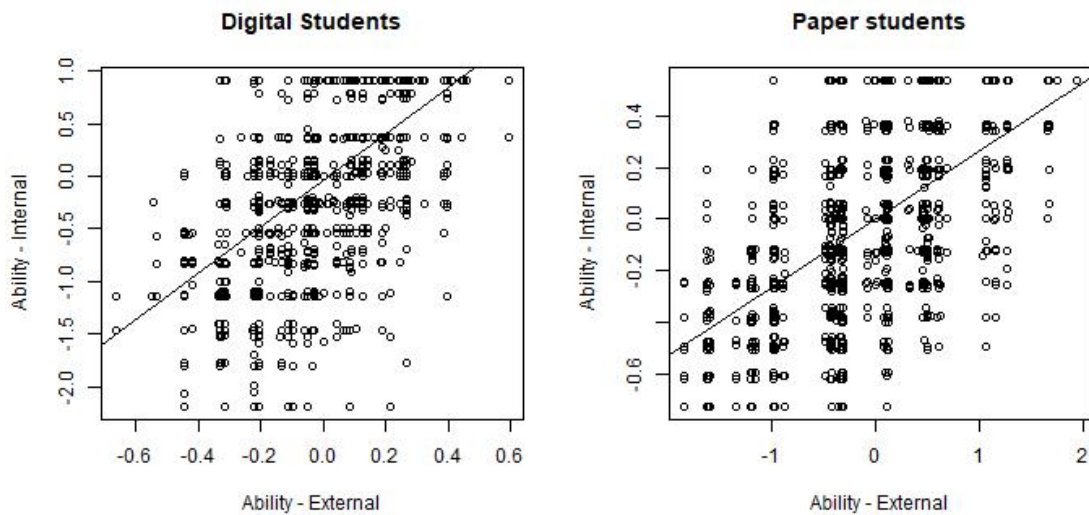


Figure 24. Scatterplots with regression lines showing the relationships between Rasch ability parameters estimated for Level 1 History external and internal assessments.

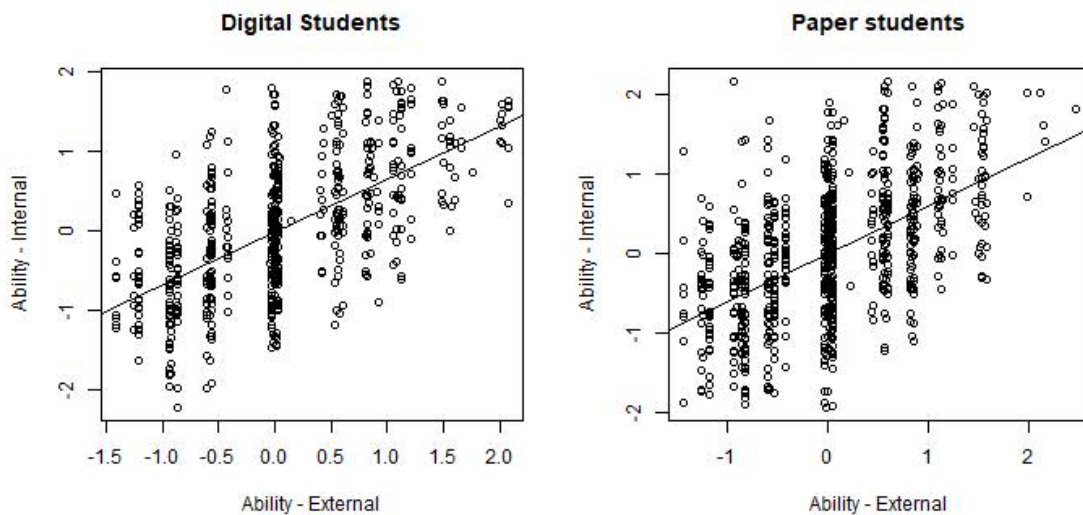


Figure 25. Scatterplots with regression lines showing the relationships between Rasch ability parameters estimated for Level 1 English - Māori external and internal assessments.

[Table 6](#) shows the constant and slope parameters estimated by the regression models. Comparison of these parameters allows a statistical comparison of the equivalence of the predictive relationships between externals and internals achievement.

[Table 6](#) shows that for Level 1 English, Level 2 English, and Level 1 English – Māori, the set of regression models do not differ significantly in their parameter estimates. These results suggest that a student with a given level of attainment in internal assessment is predicted to achieve the same level of attainment in external assessment, irrespective of whether the external assessment is conducted in a digital- or paper-based format. That is, the analyses suggest that student results are explained by the underlying characteristic of the two groups of students, rather than characteristics of the format of the external assessment.

[Table 6](#) also shows that for Level 3 English and Level 1 History, the set of regression models do differ significantly in their parameter estimates. These results suggest that a student with a given level of attainment in internal assessment is predicted to achieve a different level of attainment in external assessment that is dependent on the format of the external assessment. That is, the analyses cannot discount that student results are explained by the characteristics of the format of the external assessment.

Table 6. Parameter estimates of the pairs of regression models from Figure through to Figure . Due to rounding, re-calculating the estimate raw differences may not be identical to the values displayed in the table. The differences between the constant and slope parameters are inside the 95% confidence intervals.

Examination	Parameter	Estimates and 95% Confidence Intervals		Estimate Raw Difference
		Digital	Paper	
Level 1 English	Intercept	-0.02 (-0.04, -0.01)	-0.01 (-0.03, 0.01)	-0.01
	Slope	0.65 (0.62, 0.67)	0.63 (0.61, 0.65)	0.02
Level 2 English	Intercept	-0.05 (-0.07, -0.03)	-0.04 (-0.07, -0.02)	-0.01
	Slope	0.67 (0.64, 0.70)	0.68 (0.65, 0.71)	0.00
Level 3 English	Intercept	-0.06 (-0.09, -0.03)	-0.02 (-0.06, 0.01)	-0.04
	Slope	1.72 (1.59, 1.84)	0.64 (0.59, 0.69)	1.08
Level 1 History	Intercept	-0.04 (-0.06, -0.03)	0.00 (-0.01, 0.01)	-0.05
	Slope	2.20 (2.08, 2.31)	0.26 (0.25, 0.28)	1.93
Level 1 English – Māori	Intercept	-0.01 (-0.07, 0.04)	-0.01 (-0.05, 0.04)	-0.01
	Slope	0.66 (0.60, 0.73)	0.60 (0.54, 0.67)	0.06

The analyses then inform the rationale behind the matched data comparison described in various sections, where matched digital-format and paper-format students were compared by matching on internally assessed achievement standards. Any residual differences could then be attributed to the characteristics of the two examination formats.

B. Matched data analysis methodology detail and results

The matched data analyses performed earlier are described in detail below.

- A. Identify matching sets of students
 1. Identify all digital-format students with at least one paper-format student with identical results in internal achievement standards at the same level.
 2. Identify all paper-format students that are eligible for matching to students identified in Step 1 i.e. paper-format students with at least one digital-format student with identical results in internal achievement standards at the same level.
- B. Generate 100 resamples and perform analysis
 3. For each digital-format student identified in Step 1:
 - a. Identify all paper-format students with identical results in internal achievement standards at the same level.
 - b. From the list of paper-format students identified in Step 3a, randomly sample one student.
 4. Calculate the grade distribution for externally assessed standards of matched paper-format students from Step 3.
 5. Conduct Rasch analysis to estimate the difficulty parameters for externally assessed standards of matched paper-format students from Step 3.
 6. Perform Steps 3 to 5 100 times.
- C. Compile summary of results
 7. Calculate the average of the 100 percentages, for each external standard-grade combination, generated from Step 6.
 8. Calculate the mode (most commonly occurring value) of the 100 difficulty parameter estimates, for each external standard-difficulty combination, generated from Step 6.
 9. Compare the results of Steps 7 and 8 with the corresponding values from matched digital-format students.

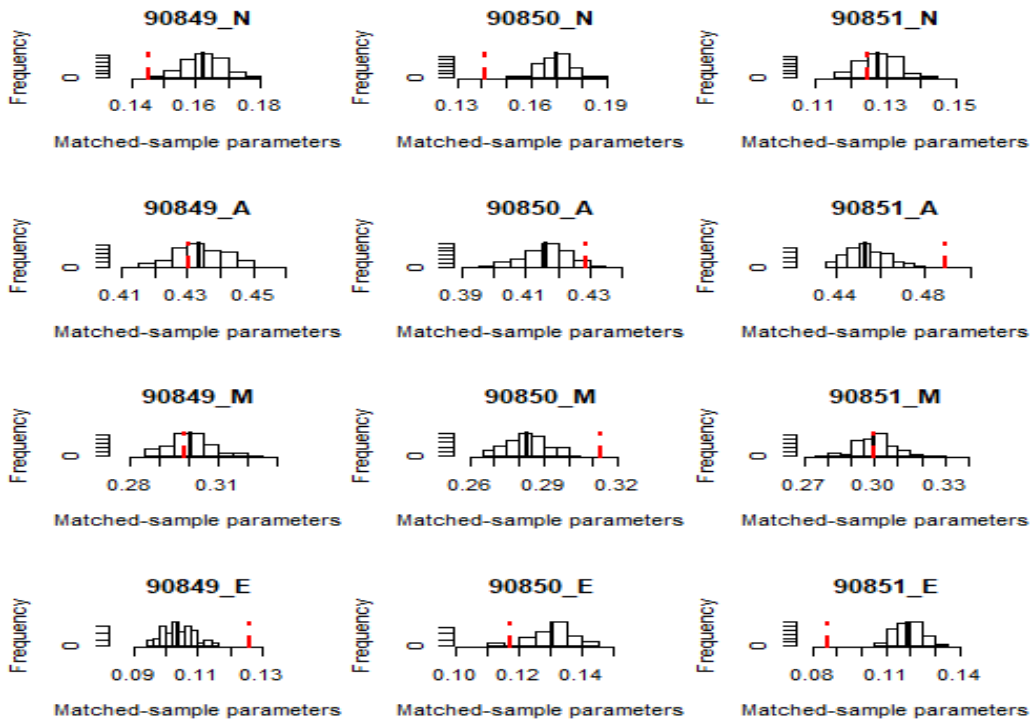


Figure 26. Grade distributions from Level 1 English externally-assessed achievement standards of matched paper-format student resamples (n=100). Vertical solid black lines denote the average percentage. Vertical dotted red lines denote the digital-format student percentage for the corresponding external standard and grade level.

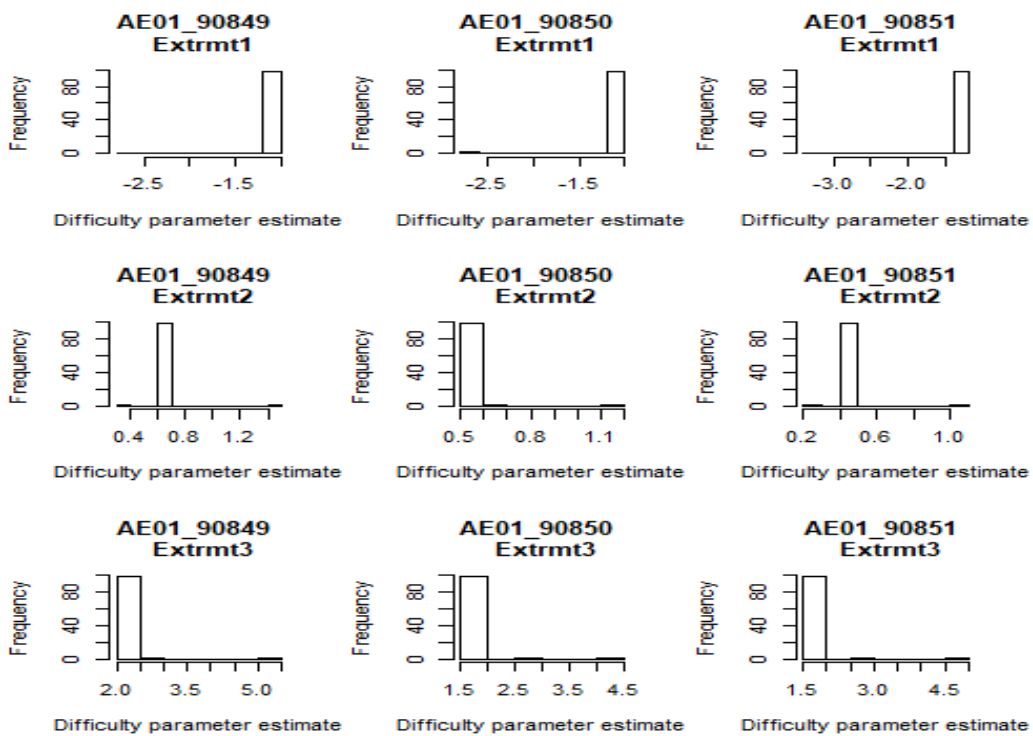


Figure 27. Difficulty parameter estimates of Level 1 English externally-assessed achievement standards from Rasch analysis of matched paper-format student resamples (n=100).

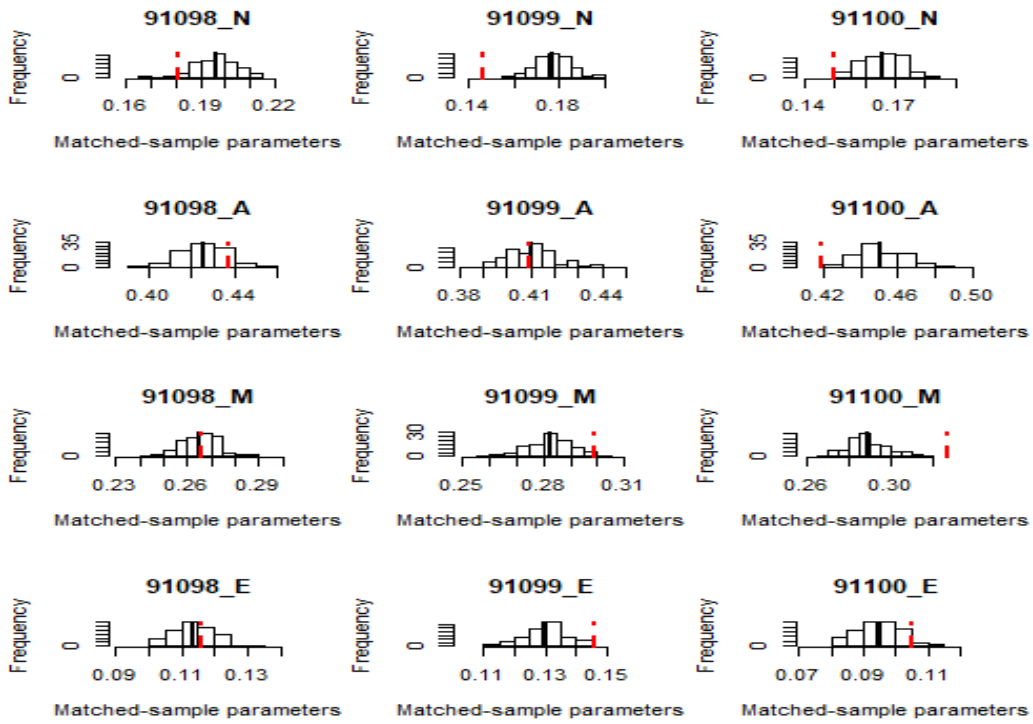


Figure 28. Grade distributions from Level 2 English externally-assessed achievement standards of matched paper-format student resamples (n=100). Vertical solid black lines denote the average percentage. Vertical dotted red lines denote the digital-format student percentage for the corresponding external standard and grade level.

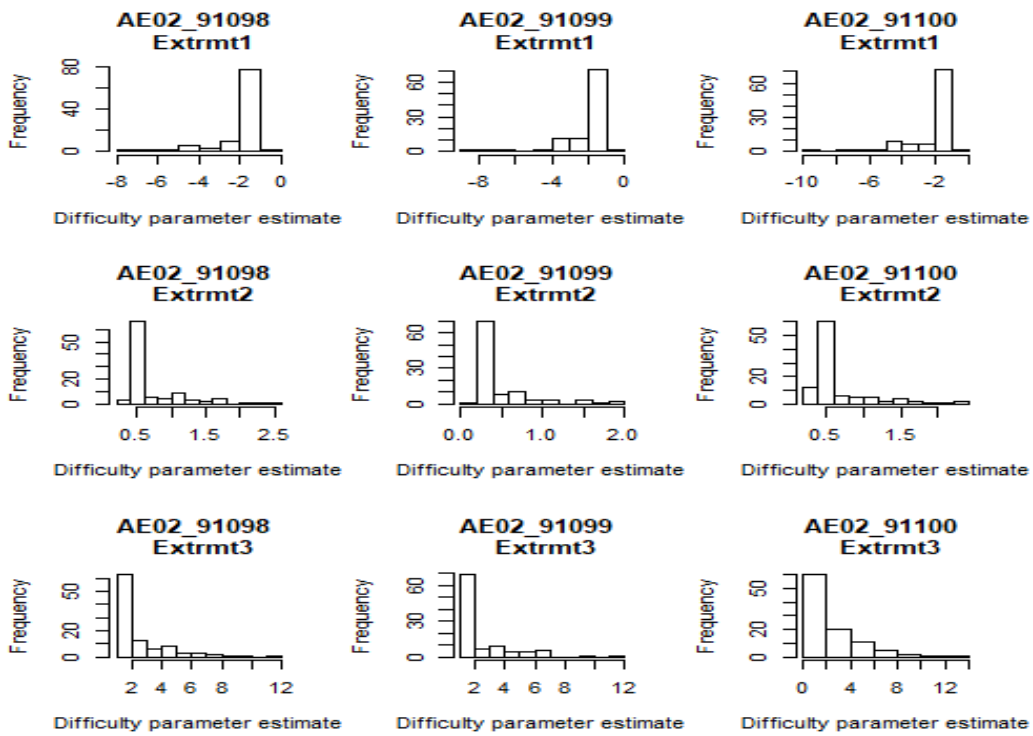


Figure 29. Difficulty parameter estimates of Level 2 English externally-assessed achievement standards from Rasch analysis of matched paper-format student resamples (n=100).

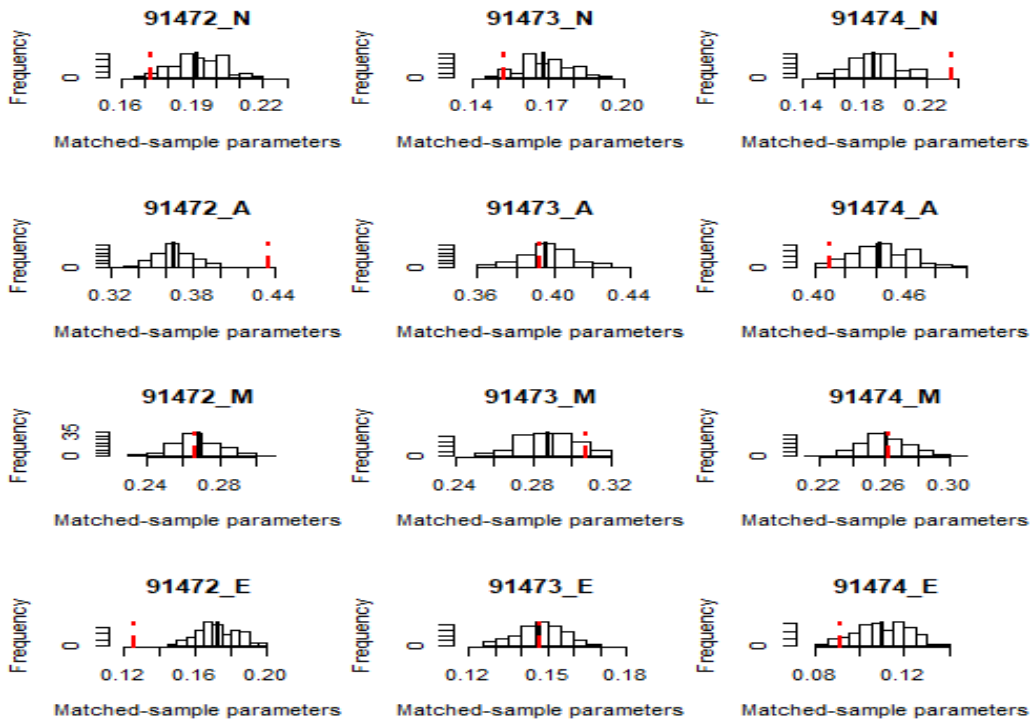


Figure 30. Grade distributions from Level 3 English externally-assessed achievement standards of matched paper-format student resamples (n=100). Vertical solid black lines denote the average percentage. Vertical dotted red lines denote the digital-format student percentage for the corresponding external standard and grade level.

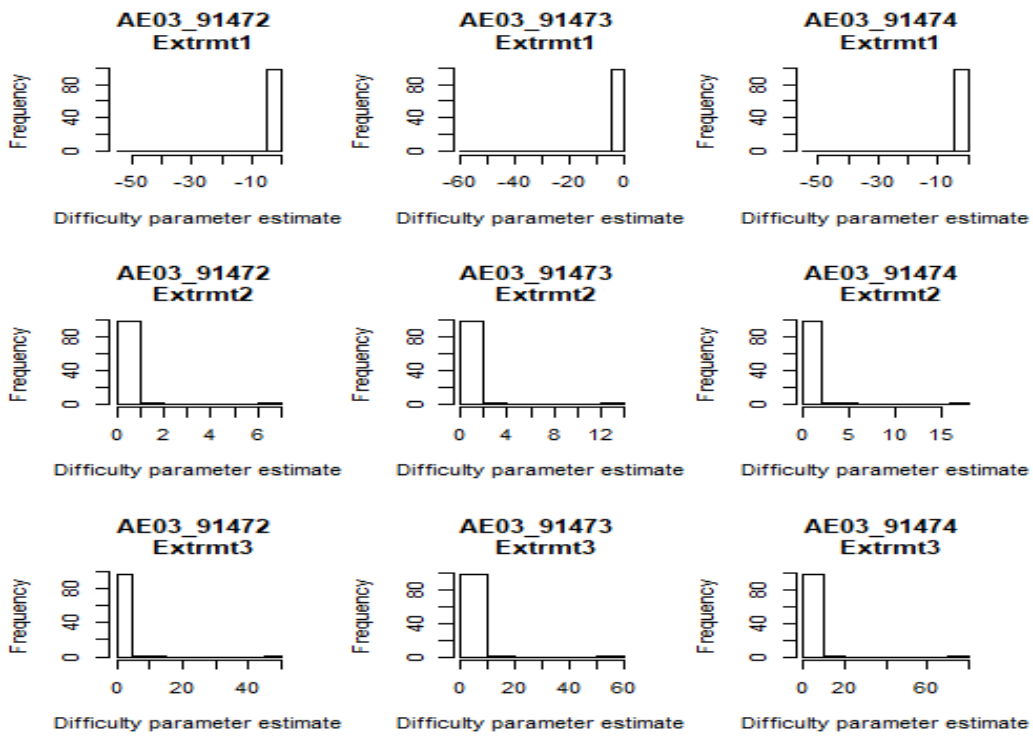


Figure 31. Difficulty parameter estimates of Level 3 English externally-assessed achievement standards from Rasch analysis of matched paper-format student resamples (n=100).

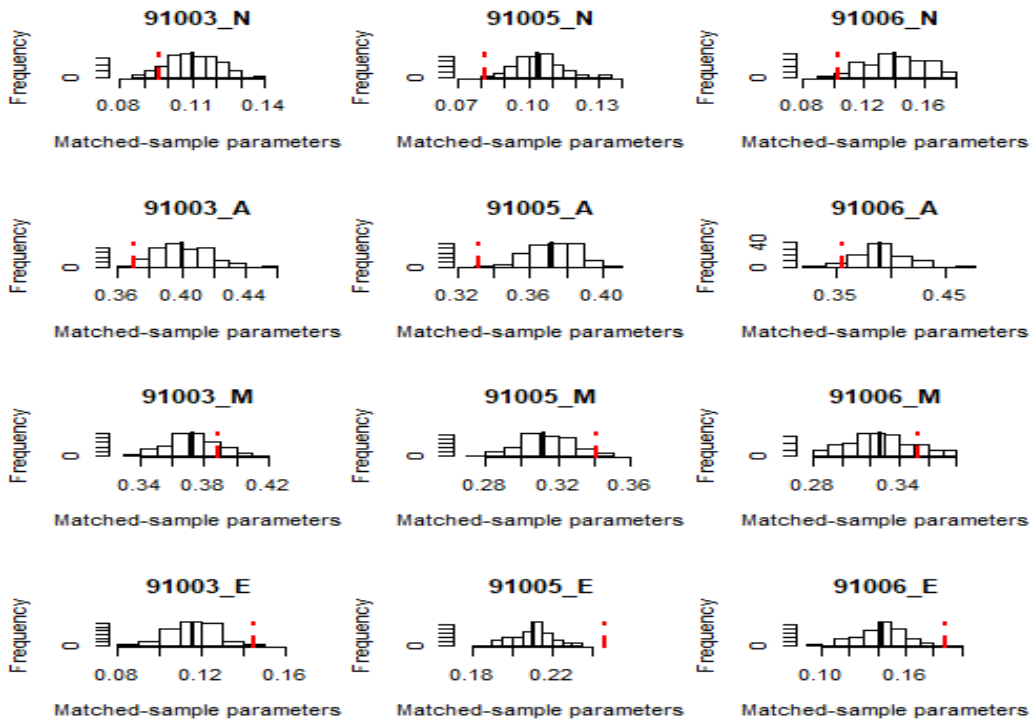


Figure 32. Grade distributions from Level 1 History externally-assessed achievement standards of matched paper-format student resamples (n=100). Vertical solid black lines denote the average percentage. Vertical dotted red lines denote the digital-format student percentage for the corresponding external standard and grade level.

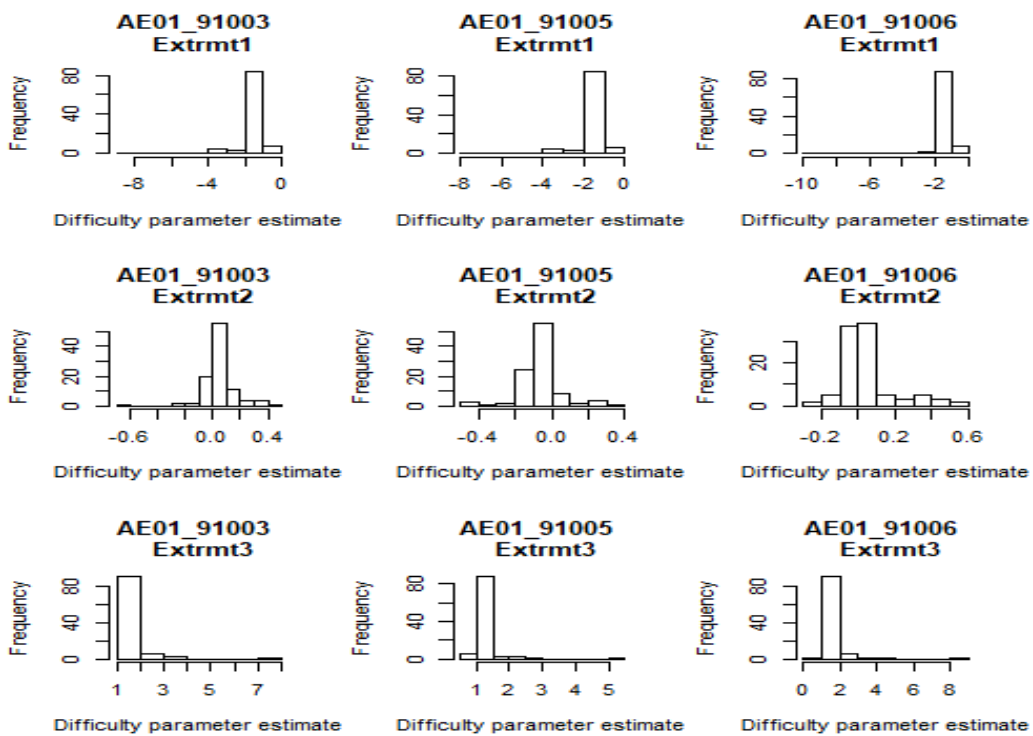


Figure 33. Difficulty parameter estimates of Level 1 History externally-assessed achievement standards from Rasch analysis of matched paper-format student resamples (n=100).

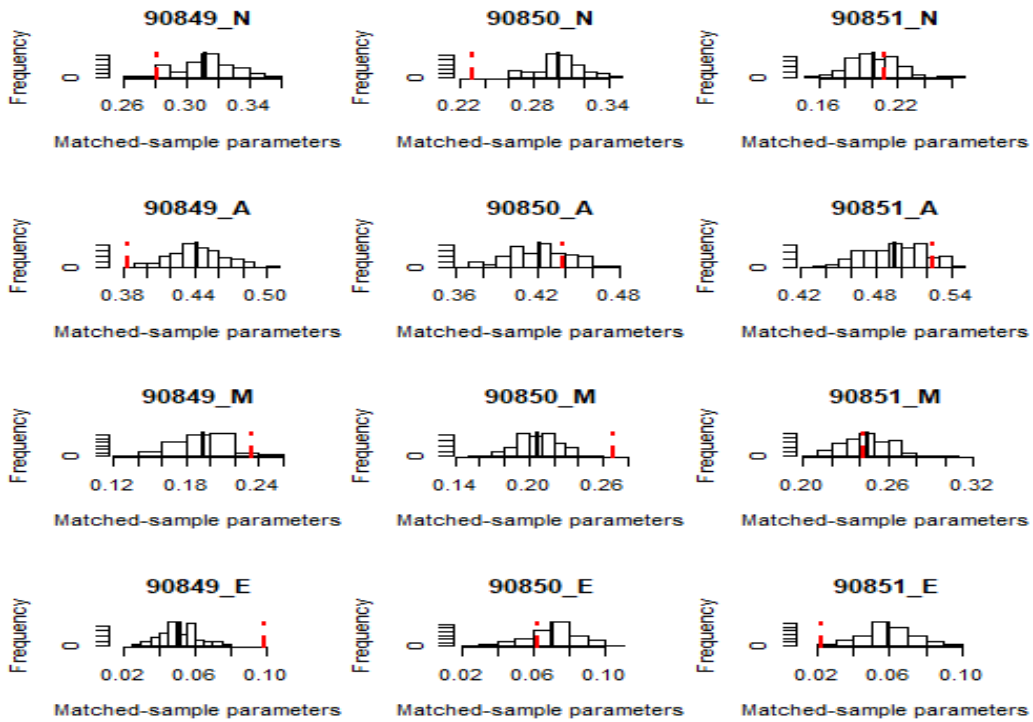


Figure 34. Grade distributions from Level 1 English - Māori externally-assessed achievement standards of matched paper-format student resamples (n=100). Vertical solid black lines denote the average percentage. Vertical dotted red lines denote the digital-format student percentage for the corresponding external standard and grade level.

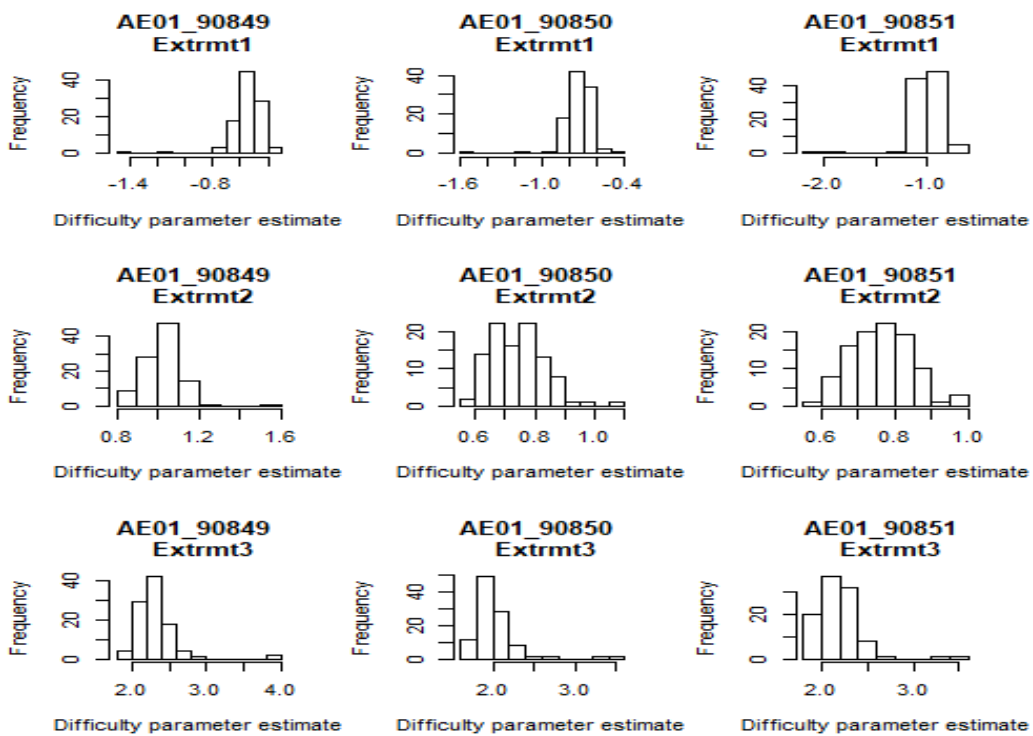


Figure 35. Difficulty parameter estimates of Level 1 English - Māori externally-assessed achievement standards from Rasch analysis of matched paper-format student resamples (n=100).

C. Level 1 English: Number of results in each grade category for each participating school, disaggregated by assessment format

90849	Digital					Paper				
School Index #	%N	%A	%M	%E	n	%N	%A	%M	%E	n
1	50	50	0	0	8	0	100	0	0	1
2	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	27	53	20	0	15
5	38	50	0	12	8	25	57	17	2	102
6	21	57	21	0	14	0	0	100	0	3
7	0	0	50	50	2	0	0	0	0	0
8	3	51	39	7	59	5	49	32	14	95
9	12	52	20	16	96	19	49	29	3	102
10	30	50	10	10	10	15	40	25	20	55
11	15	44	35	5	99	12	51	32	5	92
12	82	13	5	0	38	33	33	33	0	9
13	8	40	39	13	363	12	44	38	6	16
14	0	0	0	0	0	35	50	15	0	20
15	5	30	42	22	113	6	57	26	11	47
16	15	38	33	15	333	38	25	12	25	8
17	6	42	32	20	309	17	58	22	3	36
18	53	40	7	0	15	73	27	0	0	62
19	13	67	20	0	15	32	52	12	4	99
20	33	33	33	0	30	45	18	18	18	11
21	0	40	40	20	5	26	49	23	2	43
22	36	45	18	0	11	42	44	12	2	48
23	34	53	9	4	74	62	30	7	0	56
24	0	0	0	0	0	0	0	0	0	0
25	17	42	33	8	12	21	66	10	3	62
26	20	44	28	8	25	19	50	27	4	102
27	0	44	33	22	9	13	59	23	4	192
28	100	0	0	0	3	40	30	30	0	10
29	50	25	25	0	4	20	53	27	0	30
30	14	57	29	0	14	38	39	21	2	90
31	0	0	0	0	0	0	0	0	0	0
32	12	68	21	0	34	17	66	14	3	105
33	0	0	100	0	2	4	47	41	8	51
34	9	64	9	18	11	23	59	17	1	88
35	14	86	0	0	7	11	56	33	0	9
36	12	29	18	41	17	0	53	40	7	15
37	11	42	22	25	36	11	61	21	7	75
38	0	0	0	0	0	50	30	20	0	10

90849	Digital					Paper				
School Index #	%N	%A	%M	%E	n	%N	%A	%M	%E	n
39	0	0	0	0	0	11	39	38	12	218
40	0	75	12	12	8	18	64	16	2	50
41	67	17	17	0	6	0	0	0	0	0
42	11	61	16	11	44	17	33	33	17	6
43	71	29	0	0	7	0	0	0	0	0
44	39	50	11	0	18	0	0	0	0	0
45	0	0	0	0	0	37	50	9	5	82
46	32	58	6	3	31	23	62	12	4	26
47	13	36	26	26	98	29	57	0	14	7
48	18	41	30	12	74	28	37	19	16	43
49	0	0	0	0	0	37	42	16	5	19
50	67	21	12	0	24	0	100	0	0	1
51	22	45	27	5	135	26	43	30	0	23
52	12	46	33	8	72	0	67	33	0	3
53	8	35	38	20	80	27	36	27	9	11
54	0	0	0	0	0	100	0	0	0	1
55	0	0	100	0	1	5	32	44	20	85
56	0	0	0	0	0	0	0	0	0	0
57	0	0	100	0	1	24	43	29	5	21
58	20	20	40	20	5	3	52	28	16	153
59	36	43	21	0	14	16	48	28	8	159
60	67	28	6	0	18	23	59	17	1	88
61	100	0	0	0	1	100	0	0	0	2
62	30	54	15	0	46	0	100	0	0	1
63	0	0	0	0	0	0	0	0	0	0
64	33	67	0	0	3	5	55	20	20	20
65	19	57	18	7	134	25	38	12	25	8
66	0	31	59	10	29	8	60	27	5	122
67	0	0	0	0	0	19	24	48	10	21
68	13	53	27	7	15	0	33	67	0	3
69	9	45	33	13	67	18	50	25	7	367
70	38	62	0	0	8	25	38	25	12	8
71	20	73	7	0	15	30	59	11	0	88
72	0	33	67	0	3	13	57	17	13	23
73	3	40	35	22	88	18	35	18	29	17
74	4	31	47	18	68	0	40	60	0	10
75	0	0	0	100	1	7	31	44	18	110
76	0	100	0	0	1	0	0	67	33	3
77	34	54	11	0	87	20	60	20	0	5

90849	Digital					Paper				
School Index #	%N	%A	%M	%E	n	%N	%A	%M	%E	n
78	0	0	0	0	0	50	25	25	0	4
79	100	0	0	0	1	33	50	0	17	12
80	19	50	23	8	26	0	100	0	0	3
81	27	44	27	3	71	26	53	13	8	38
82	6	47	32	15	47	7	36	43	14	92
83	11	46	28	15	61	19	69	12	0	16
84	25	51	17	7	83	23	62	15	0	47
85	19	41	30	11	27	36	55	9	0	33
86	11	38	32	19	73	50	0	50	0	6
87	0	0	0	0	0	0	0	0	0	0
88	0	75	25	0	4	29	29	35	6	17
89	3	32	45	20	74	33	67	0	0	3
90	13	37	40	10	30	0	75	25	0	4
91	0	42	38	21	24	15	45	25	14	126
92	0	100	0	0	1	0	0	0	0	0
93	24	43	24	10	21	20	29	29	23	35
94	25	44	25	6	16	0	0	0	0	0
95	60	40	0	0	5	50	0	50	0	2
96	5	51	32	12	84	19	50	29	2	48
97	0	0	0	0	0	0	0	0	0	0
98	50	33	17	0	6	0	100	0	0	2
99	0	0	0	0	0	0	0	0	0	0
100	33	67	0	0	3	0	0	75	25	4
101	50	50	0	0	4	0	0	0	0	0
102	10	57	24	10	21	22	44	25	8	36
103	17	39	39	6	18	22	54	20	4	46
Total	16	43	29	12	3,678	19	49	25	7	4,137

90850	Digital					Paper				
School Index #	%N	%A	%M	%E	n	%N	%A	%M	%E	n
1	30	60	10	0	10	20	80	0	0	5
2	0	0	0	0	0	0	0	0	0	0
3	83	17	0	0	6	0	0	0	0	0
4	33	67	0	0	3	33	17	17	33	6
5	0	0	0	0	0	100	0	0	0	1
6	23	59	14	5	22	25	75	0	0	4
7	31	47	19	3	58	0	0	0	0	0
8	100	0	0	0	1	21	79	0	0	14
9	11	49	31	10	94	16	54	23	7	74
10	13	60	13	13	15	13	51	26	9	137
11	0	0	0	0	0	0	0	0	0	0
12	53	44	4	0	55	75	25	0	0	8
13	6	41	36	17	332	15	31	38	15	13
14	8	62	15	15	13	10	34	35	22	200
15	3	24	50	23	112	4	49	30	17	47
16	17	33	37	13	321	14	57	29	0	7
17	5	36	41	18	303	23	54	14	9	35
18	20	73	7	0	15	62	36	2	0	64
19	30	30	26	13	23	37	43	16	4	135
20	0	0	0	0	0	0	0	0	0	0
21	25	50	25	0	8	29	56	14	1	105
22	20	30	40	10	10	31	52	17	0	48
23	32	45	19	4	74	56	38	4	2	52
24	20	40	40	0	10	7	36	50	7	14
25	36	36	21	7	14	33	47	17	4	103
26	0	75	17	8	24	11	46	32	10	97
27	0	43	43	14	7	23	49	21	7	219
28	50	50	0	0	2	45	36	18	0	11
29	100	0	0	0	1	14	46	32	8	37
30	41	53	6	0	17	34	50	14	1	70
31	0	0	0	0	0	100	0	0	0	1
32	0	0	0	0	0	100	0	0	0	1
33	0	100	0	0	1	13	42	32	13	69
34	18	55	27	0	11	19	60	16	6	89
35	25	62	12	0	8	0	75	25	0	4
36	20	25	45	10	20	7	43	43	7	14
37	0	89	11	0	9	28	64	8	0	36
38	0	0	0	0	0	30	70	0	0	10
39	10	81	10	0	21	9	32	43	16	222

90850	Digital					Paper				
School Index #	%N	%A	%M	%E	n	%N	%A	%M	%E	n
40	0	100	0	0	3	48	43	10	0	21
41	50	50	0	0	2	82	18	0	0	11
42	18	66	14	2	44	20	40	40	0	5
43	67	33	0	0	12	0	0	0	0	0
44	35	61	4	0	23	0	0	0	0	0
45	63	30	7	0	30	30	55	12	3	102
46	20	60	20	0	25	33	48	19	0	27
47	8	44	29	19	85	40	37	20	3	30
48	15	45	32	7	108	21	41	30	7	56
49	36	43	21	0	14	50	12	25	12	8
50	35	58	8	0	26	0	0	100	0	1
51	16	50	30	4	145	23	50	23	4	26
52	23	60	13	4	104	33	50	17	0	6
53	5	30	55	10	87	0	56	22	22	9
54	38	50	12	0	8	0	33	33	33	3
55	0	0	0	0	0	9	32	35	24	107
56	100	0	0	0	3	0	0	0	0	0
57	50	50	0	0	2	33	25	33	8	12
58	17	67	0	17	6	9	45	30	16	151
59	0	0	0	0	0	20	66	14	0	65
60	0	0	0	0	0	0	0	0	0	0
61	100	0	0	0	1	50	50	0	0	2
62	0	0	0	0	0	0	0	0	0	0
63	19	61	16	3	31	50	50	0	0	2
64	67	33	0	0	3	9	64	23	5	22
65	41	46	13	0	46	50	50	0	0	2
66	0	31	48	21	29	1	50	43	5	76
67	6	60	32	2	50	27	49	19	5	74
68	0	0	50	50	2	0	0	0	0	0
69	13	33	43	10	69	13	51	27	9	380
70	67	33	0	0	9	40	30	20	10	10
71	14	71	7	7	14	15	54	21	10	130
72	33	33	33	0	3	14	56	23	7	95
73	2	34	36	28	86	17	44	6	33	18
74	4	39	41	17	54	12	62	25	0	8
75	0	0	0	100	1	2	40	33	26	126
76	36	57	7	0	14	36	47	11	7	45
77	0	0	0	0	0	0	0	0	0	0
78	0	0	0	0	0	0	0	0	0	0

90850	Digital					Paper				
School Index #	%N	%A	%M	%E	n	%N	%A	%M	%E	n
79	100	0	0	0	1	43	50	7	0	14
80	13	47	33	7	15	50	0	50	0	2
81	24	54	21	1	72	17	45	31	7	29
82	15	21	47	17	47	10	38	36	16	96
83	15	50	29	6	52	13	67	20	0	15
84	22	48	19	12	86	25	51	18	6	65
85	7	55	31	7	29	26	59	15	0	34
86	0	0	0	0	0	0	0	0	0	0
87	33	67	0	0	3	33	67	0	0	3
88	17	83	0	0	6	24	38	31	7	29
89	1	38	43	18	74	0	50	50	0	4
90	7	43	37	13	30	25	50	0	25	4
91	0	0	0	0	0	0	0	0	0	0
92	0	58	33	8	12	0	50	38	12	8
93	0	0	0	0	0	0	0	0	0	0
94	38	38	6	19	16	0	0	0	0	0
95	0	75	25	0	4	50	50	0	0	2
96	18	42	32	8	40	18	34	39	8	38
97	0	0	0	0	0	0	0	0	0	0
98	35	41	24	0	17	0	100	0	0	5
99	17	83	0	0	6	0	100	0	0	1
100	0	100	0	0	1	0	100	0	0	1
101	50	50	0	0	4	0	0	0	0	0
102	7	72	21	0	29	26	62	10	3	39
103	18	41	29	12	17	14	60	22	3	58
Total	16	43	30	11	3,320	20	47	24	9	4,029

90851	Digital					Paper				
School Index #	%N	%A	%M	%E	n	%N	%A	%M	%E	n
1	0	0	0	0	0	0	0	0	0	0
2	0	75	0	25	4	75	25	0	0	4
3	0	0	0	0	0	0	0	0	0	0
4	17	43	30	9	23	9	53	31	7	95
5	56	22	22	0	9	13	57	24	6	114
6	27	43	30	0	30	0	0	67	33	3
7	0	0	0	0	0	0	0	0	0	0
8	7	49	37	7	57	4	46	32	18	96
9	12	55	27	6	85	12	49	34	4	67
10	0	0	0	0	0	0	0	0	0	0
11	8	41	41	10	78	14	44	28	15	80
12	53	47	0	0	53	27	73	0	0	11
13	5	49	38	8	366	25	25	38	12	16
14	13	47	27	13	15	13	32	36	19	215
15	2	33	51	14	113	0	48	31	21	48
16	15	52	27	6	301	25	62	0	12	8
17	12	52	27	9	33	25	50	25	0	12
18	0	0	0	0	0	0	0	0	0	0
19	19	52	26	4	27	32	49	16	3	154
20	43	43	14	0	14	75	25	0	0	4
21	0	0	0	0	0	0	0	0	0	0
22	0	0	0	0	0	0	0	0	0	0
23	0	0	0	0	0	0	0	0	0	0
24	43	43	0	14	7	21	43	29	7	14
25	27	67	7	0	15	18	53	22	7	76
26	12	65	15	8	26	11	47	35	6	99
27	0	25	62	12	8	10	56	25	9	193
28	30	60	10	0	10	20	60	20	0	20
29	33	33	33	0	6	26	28	36	10	39
30	35	54	8	4	26	27	46	23	5	111
31	0	67	33	0	3	0	0	0	0	0
32	14	54	27	5	37	17	55	23	6	106
33	0	67	0	33	3	3	44	33	19	36
34	27	27	36	9	11	29	54	16	0	85
35	14	71	14	0	7	0	17	50	33	6
36	21	37	32	11	19	23	46	23	8	13
37	8	47	29	16	38	11	55	28	6	82
38	0	33	33	33	9	8	45	34	14	319
39	0	0	0	0	0	3	36	50	11	94

90851	Digital					Paper				
School Index #	%N	%A	%M	%E	n	%N	%A	%M	%E	n
40	9	55	27	9	11	19	61	20	0	69
41	67	33	0	0	6	0	100	0	0	1
42	0	0	0	0	0	0	0	0	0	0
43	80	20	0	0	10	0	0	0	0	0
44	0	0	0	0	0	0	0	0	0	0
45	0	0	0	0	0	18	53	21	8	130
46	0	0	0	0	0	0	0	0	0	0
47	5	38	38	19	117	24	43	29	5	21
48	12	59	22	7	112	25	40	25	10	60
49	0	100	0	0	1	27	50	18	5	22
50	54	38	8	0	13	100	0	0	0	1
51	0	0	0	0	0	0	0	0	0	0
52	2	60	38	0	48	0	100	0	0	2
53	5	36	39	20	85	11	11	44	33	9
54	29	57	14	0	7	0	67	33	0	6
55	0	0	0	0	0	8	45	35	12	95
56	33	67	0	0	3	0	0	0	0	0
57	25	50	25	0	4	3	35	42	19	31
58	0	0	0	0	0	0	100	0	0	1
59	20	20	60	0	5	8	27	47	18	73
60	29	53	18	0	17	22	42	28	7	95
61	0	0	0	0	0	0	0	0	0	0
62	38	56	6	0	79	0	80	20	0	5
63	13	63	20	3	30	0	100	0	0	1
64	67	33	0	0	3	29	62	10	0	21
65	20	60	18	2	162	9	55	36	0	11
66	0	0	0	0	0	0	0	0	0	0
67	0	0	0	0	0	12	45	31	11	97
68	15	54	23	8	13	0	100	0	0	3
69	2	39	49	10	59	11	49	30	10	297
70	0	0	0	0	0	0	0	0	0	0
71	0	0	0	0	0	0	0	43	57	14
72	0	25	50	25	4	9	51	30	11	91
73	0	22	35	43	23	0	0	62	38	13
74	7	57	29	8	92	19	59	22	0	37
75	0	0	0	100	1	10	41	34	14	97
76	0	67	22	11	9	15	56	15	15	27
77	35	56	8	1	89	0	100	0	0	4
78	11	67	22	0	18	10	39	32	20	41

90851	Digital					Paper				
School Index #	%N	%A	%M	%E	n	%N	%A	%M	%E	n
79	0	0	0	0	0	0	0	0	0	0
80	14	55	31	0	29	20	40	40	0	5
81	13	58	23	6	84	7	65	16	12	43
82	9	51	28	13	47	20	39	30	11	97
83	7	48	28	17	60	12	35	53	0	17
84	16	63	21	0	87	33	61	7	0	46
85	12	42	45	0	33	7	64	25	4	28
86	8	45	27	19	73	0	75	25	0	4
87	0	0	0	0	0	0	0	0	0	0
88	0	57	43	0	7	33	57	5	5	42
89	0	0	100	0	1	0	0	0	0	0
90	0	0	0	0	0	0	0	0	0	0
91	0	46	25	29	24	7	35	42	15	110
92	0	30	70	0	10	14	43	43	0	14
93	5	62	24	10	21	14	19	41	27	37
94	0	0	0	0	0	0	0	0	0	0
95	0	0	0	0	0	0	0	0	0	0
96	17	50	17	17	6	0	44	33	22	9
97	50	50	0	0	2	0	0	0	0	0
98	11	22	50	17	18	0	50	50	0	4
99	0	0	0	0	0	0	0	0	0	0
100	0	50	50	0	6	25	38	38	0	8
101	0	0	0	0	0	0	0	0	0	0
102	21	44	29	6	34	8	54	25	12	48
103	0	33	40	27	15	16	44	38	2	50
Total	14	50	29	8	3,011	14	47	29	10	4,157

D. Level 2 English: Number of results in each grade category for each participating school, disaggregated by assessment format

91098	Digital					Paper				
School Index #	%N	%A	%M	%E	n	%N	%A	%M	%E	n
1	67	33	0	0	3	50	50	0	0	2
2	0	0	0	0	0	0	0	0	0	0
3	0	100	0	0	1	12	75	0	12	8
4	0	0	0	0	0	0	0	0	0	0
5	25	25	25	25	4	35	45	14	6	69
6	50	0	0	50	2	50	12	38	0	8
7	0	67	33	0	3	0	0	100	0	1
8	16	55	21	8	103	16	59	18	7	61
9	22	56	17	6	18	22	45	30	3	64
10	100	0	0	0	8	33	33	33	0	3
11	15	50	26	8	340	28	42	19	11	36
12	8	36	45	11	109	20	37	26	17	35
13	14	42	28	16	275	41	29	18	12	17
14	14	43	24	19	205	50	33	6	11	18
15	83	17	0	0	6	62	36	2	0	50
16	41	27	27	5	22	0	33	0	67	3
17	67	33	0	0	3	50	42	8	0	24
18	0	35	59	6	17	0	0	0	0	0
19	40	47	7	7	30	57	43	0	0	7
20	0	60	20	20	5	20	0	60	20	5
21	0	0	0	0	0	0	0	0	0	0
22	17	33	50	0	6	19	38	38	6	16
23	23	34	31	11	35	27	45	21	7	67
24	0	0	0	0	0	100	0	0	0	1
25	57	29	14	0	7	16	51	25	8	51
26	0	0	0	0	0	0	100	0	0	1
27	19	58	19	5	43	36	40	21	3	72
28	30	30	40	0	10	33	56	8	3	39
29	7	47	27	20	15	0	0	0	0	0
30	28	34	31	7	29	28	52	15	5	40
31	22	35	35	9	46	41	46	10	3	180
32	0	0	0	0	0	0	0	0	0	0
33	0	0	0	0	0	0	0	0	0	0
34	11	56	22	11	27	55	18	27	0	11
35	100	0	0	0	1	0	0	0	0	0
36	75	25	0	0	4	0	0	0	0	0
37	73	27	0	0	26	26	39	30	4	46
38	40	36	12	12	25	44	33	22	0	18

91098	Digital					Paper				
School Index #	%N	%A	%M	%E	n	%N	%A	%M	%E	n
39	8	37	35	19	99	5	42	26	26	19
40	21	32	32	15	34	30	39	23	8	61
41	18	36	45	0	11	14	86	0	0	7
42	83	17	0	0	6	0	0	0	0	0
43	26	40	26	7	57	26	57	14	3	77
44	24	63	12	1	67	0	50	50	0	2
45	33	50	0	17	6	20	80	0	0	5
46	0	0	0	0	0	17	33	50	0	12
47	25	75	0	0	4	11	43	32	15	131
48	33	50	0	17	6	21	43	30	6	105
49	0	0	0	0	0	0	0	0	0	0
50	40	40	20	0	5	47	37	16	0	19
51	32	47	21	0	19	0	100	0	0	1
52	0	0	0	0	0	0	0	0	0	0
53	17	50	33	0	6	44	44	0	11	9
54	6	35	53	6	17	15	49	29	7	86
55	8	62	15	15	13	0	100	0	0	2
56	15	41	31	14	59	21	43	29	7	246
57	60	40	0	0	5	14	57	29	0	7
58	47	47	7	0	15	32	51	9	9	57
59	14	42	22	22	78	15	27	31	27	26
60	11	33	50	6	18	15	42	34	9	53
61	8	33	35	24	102	15	38	31	16	137
62	0	0	0	0	0	13	37	35	15	54
63	28	54	15	4	54	62	12	25	0	8
64	0	0	0	0	0	100	0	0	0	1
65	50	50	0	0	2	0	57	43	0	7
66	25	59	16	0	32	50	50	0	0	2
67	27	47	15	11	74	36	55	5	5	22
68	67	0	33	0	3	44	33	22	0	9
69	18	39	29	14	56	26	47	23	5	66
70	7	39	40	14	57	24	43	19	14	21
71	22	65	11	2	63	33	50	17	0	6
72	10	50	40	0	10	0	56	33	11	9
73	21	53	21	5	38	27	55	9	9	11
74	0	33	67	0	3	20	60	20	0	5
75	0	0	0	0	0	20	50	20	10	10
76	4	29	54	13	69	0	100	0	0	1
77	0	33	44	22	9	0	0	0	0	0

91098	Digital					Paper				
School Index #	%N	%A	%M	%E	n	%N	%A	%M	%E	n
78	0	71	29	0	7	13	48	32	7	143
79	0	100	0	0	1	26	46	21	7	72
80	100	0	0	0	1	100	0	0	0	1
81	0	70	20	10	10	37	19	26	19	27
82	0	100	0	0	2	100	0	0	0	1
83	26	28	28	19	47	22	31	35	12	51
84	0	100	0	0	1	100	0	0	0	1
85	0	0	0	0	0	100	0	0	0	1
86	29	57	14	0	7	17	67	17	0	6
87	40	60	0	0	5	60	40	0	0	5
88	14	86	0	0	7	0	0	0	0	0
89	18	54	18	11	28	22	44	17	17	18
90	40	50	0	10	10	47	51	0	2	45
91	33	50	17	0	6	20	37	37	7	30
92	20	80	0	0	5	50	25	25	0	4
Total	18	44	26	11	2,662	26	44	23	8	2,652

91099	Digital					Paper				
School Index #	%N	%A	%M	%E	n	%N	%A	%M	%E	n
1	75	25	0	0	4	50	50	0	0	2
2	0	0	0	0	0	0	0	0	0	0
3	0	100	0	0	1	100	0	0	0	1
4	100	0	0	0	3	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0
6	17	61	11	11	18	50	38	12	0	8
7	24	59	10	7	29	25	0	75	0	4
8	12	50	31	6	32	32	40	20	8	25
9	11	61	28	0	18	18	57	12	12	56
10	74	26	0	0	43	50	50	0	0	10
11	11	40	35	14	321	9	43	30	17	23
12	6	31	41	23	106	0	41	35	24	34
13	13	41	33	12	208	20	40	30	10	10
14	11	37	27	26	236	19	48	14	19	21
15	62	38	0	0	8	63	30	7	0	46
16	42	17	17	25	12	50	50	0	0	2
17	50	50	0	0	2	50	47	3	0	30
18	35	43	13	9	23	0	0	100	0	1
19	28	56	16	0	25	20	80	0	0	5
20	0	0	0	0	0	0	0	0	0	0
21	35	47	18	0	17	0	0	0	0	0
22	0	0	0	0	0	50	50	0	0	2
23	12	4	56	28	25	15	43	31	10	67
24	0	0	0	0	0	50	50	0	0	8
25	40	40	20	0	5	29	43	21	7	14
26	0	0	0	0	0	0	0	0	0	0
27	0	0	0	0	0	25	75	0	0	4
28	18	45	36	0	11	24	52	22	2	46
29	13	40	40	7	15	0	0	0	0	0
30	38	62	0	0	8	71	24	6	0	17
31	7	58	24	11	45	43	41	14	2	198
32	0	100	0	0	4	36	39	18	6	33
33	50	50	0	0	4	0	0	0	0	0
34	13	65	17	4	23	25	38	38	0	8
35	86	14	0	0	7	0	0	0	0	0
36	65	35	0	0	17	0	0	0	0	0
37	100	0	0	0	1	26	51	15	8	53
38	17	50	33	0	24	52	38	0	10	21
39	5	37	32	26	19	20	40	40	0	5

91099	Digital					Paper				
School Index #	%N	%A	%M	%E	n	%N	%A	%M	%E	n
40	12	38	32	18	40	27	39	18	15	84
41	10	40	50	0	10	25	75	0	0	4
42	46	46	8	0	13	0	0	0	0	0
43	15	63	17	4	46	22	45	30	3	77
44	36	48	14	2	64	33	33	33	0	3
45	0	50	50	0	2	0	100	0	0	1
46	0	0	0	0	0	25	50	25	0	4
47	50	50	0	0	2	10	33	38	18	130
48	25	50	25	0	4	33	48	11	7	27
49	50	0	50	0	2	100	0	0	0	1
50	50	25	25	0	4	57	30	13	0	23
51	58	32	5	5	19	100	0	0	0	1
52	50	50	0	0	2	14	64	14	7	14
53	33	33	0	33	3	14	57	14	14	7
54	14	21	36	29	14	14	49	26	12	86
55	0	0	100	0	1	0	50	50	0	2
56	7	58	22	13	60	18	45	29	9	260
57	17	67	0	17	6	20	40	40	0	5
58	10	75	15	0	20	17	47	29	8	66
59	2	28	38	32	50	0	30	40	30	20
60	0	33	67	0	6	8	29	42	21	24
61	1	29	47	22	89	13	45	27	15	135
62	0	0	0	0	0	8	48	34	10	61
63	0	0	0	0	0	0	0	0	0	0
64	0	0	0	0	0	0	0	0	0	0
65	50	50	0	0	2	25	62	12	0	8
66	7	48	45	0	29	0	100	0	0	4
67	60	40	0	0	5	75	25	0	0	4
68	33	67	0	0	3	17	67	17	0	6
69	19	42	28	12	43	22	54	19	5	63
70	0	0	0	0	0	0	0	0	0	0
71	16	53	26	5	77	26	56	11	7	27
72	8	38	38	15	13	40	60	0	0	5
73	0	0	33	67	3	0	0	0	0	0
74	18	64	9	9	11	56	17	17	11	18
75	0	50	0	50	2	30	40	30	0	10
76	6	33	46	16	70	0	100	0	0	1
77	0	11	44	44	18	0	0	0	0	0
78	0	0	0	0	0	0	0	0	0	0

91099	Digital					Paper				
School Index #	%N	%A	%M	%E	n	%N	%A	%M	%E	n
79	0	0	0	0	0	25	39	25	11	44
80	0	50	50	0	2	0	50	0	50	2
81	0	50	0	50	2	0	17	50	33	6
82	0	0	0	0	0	0	0	0	0	0
83	9	45	27	18	22	24	38	24	14	37
84	0	40	47	13	15	29	43	29	0	7
85	0	0	0	0	0	0	0	0	0	0
86	100	0	0	0	1	0	0	0	0	0
87	20	60	0	20	5	20	60	0	20	5
88	-	-	0	0	0	0	0	0	0	0
89	15	38	31	15	26	31	25	38	6	16
90	0	100	0	0	1	50	50	0	0	2
91	14	57	21	7	14	18	45	24	13	38
92	25	62	6	6	16	33	67	0	0	3
Total	16	42	29	14	2,151	24	43	23	9	2,095

91100	Digital					Paper				
School Index #	%N	%A	%M	%E	n	%N	%A	%M	%E	n
1	0	0	0	0	0	0	0	0	0	0
2	0	100	0	0	1	75	25	0	0	4
3	17	44	17	22	18	12	41	40	8	78
4	0	0	0	0	0	0	100	0	0	1
5	0	40	60	0	5	28	53	17	2	106
6	28	44	28	0	18	8	67	25	0	12
7	0	0	0	0	0	0	0	0	0	0
8	14	51	25	10	100	21	44	28	7	57
9	0	0	0	0	0	0	0	0	0	0
10	82	18	0	0	11	100	0	0	0	3
11	10	38	44	9	311	12	48	32	8	25
12	6	30	43	21	109	19	28	47	6	32
13	21	46	27	6	253	23	54	15	8	13
14	28	33	33	6	18	33	50	17	0	6
15	0	0	0	0	0	0	0	0	0	0
16	0	0	0	0	0	0	0	0	0	0
17	0	0	0	0	0	100	0	0	0	1
18	0	0	0	0	0	0	0	0	0	0
19	0	0	0	0	0	0	0	0	0	0
20	0	50	50	0	2	0	33	67	0	3
21	29	41	29	0	17	0	0	0	0	0
22	40	20	20	20	5	7	29	43	21	14
23	24	35	29	12	34	18	51	24	7	76
24	100	0	0	0	4	30	45	20	5	20
25	18	45	27	9	11	19	51	22	9	91
26	75	25	0	0	4	0	0	0	0	0
27	14	53	24	8	49	23	57	15	5	84
28	27	45	27	0	11	39	52	9	0	54
29	10	40	40	10	10	100	0	0	0	1
30	35	35	31	0	26	40	47	9	4	45
31	0	25	62	12	8	62	0	25	12	8
32	14	71	14	0	7	25	45	20	9	44
33	25	50	25	0	4	0	0	0	0	0
34	0	0	0	0	0	0	0	0	0	0
35	57	43	0	0	7	0	0	0	0	0
36	0	0	0	0	0	0	0	0	0	0
37	0	0	0	0	0	15	56	24	5	86
38	17	57	22	4	23	68	21	11	0	19
39	4	34	37	24	91	10	29	43	19	21

91100	Digital					Paper				
School Index #	%N	%A	%M	%E	n	%N	%A	%M	%E	n
40	6	45	29	20	49	39	43	14	4	79
41	10	10	70	10	10	50	17	33	0	6
42	60	40	0	0	5	0	0	0	0	0
43	26	45	24	5	38	44	47	9	0	34
44	23	47	29	2	66	0	100	0	0	2
45	0	0	80	20	5	0	60	20	20	5
46	0	67	33	0	3	5	35	35	25	20
47	0	0	0	0	0	0	0	0	0	0
48	0	40	40	20	5	9	44	36	11	75
49	0	0	0	0	0	0	0	0	0	0
50	0	20	80	0	5	48	29	16	6	31
51	21	53	19	7	43	67	0	33	0	3
52	0	100	0	0	1	40	60	0	0	10
53	0	0	0	0	0	0	0	0	0	0
54	0	0	0	0	0	0	0	0	0	0
55	0	50	33	17	12	0	50	0	50	2
56	12	42	35	12	43	10	48	33	9	151
57	0	0	0	0	0	0	0	0	0	0
58	0	0	0	0	0	0	0	0	0	0
59	0	0	100	0	1	0	0	100	0	1
60	0	31	31	38	13	10	46	29	15	41
61	0	22	53	25	32	6	12	59	24	17
62	0	0	100	0	1	0	25	75	0	4
63	23	45	26	6	62	22	44	22	11	9
64	0	67	33	0	3	0	48	48	5	21
65	0	0	0	0	0	0	0	0	0	0
66	0	0	0	0	0	0	0	0	0	0
67	11	49	27	12	81	31	36	31	3	36
68	50	50	0	0	2	57	43	0	0	7
69	13	54	20	13	61	22	43	29	6	79
70	6	48	31	15	54	20	60	20	0	20
71	27	37	29	8	63	14	76	10	0	21
72	20	47	33	0	15	0	80	20	0	10
73	12	46	35	6	48	8	69	15	8	13
74	0	0	0	0	0	0	0	0	0	0
75	0	67	0	33	3	29	58	13	0	31
76	0	0	0	100	1	0	0	0	0	0
77	0	0	0	0	0	0	0	0	0	0
78	0	17	67	17	6	12	42	36	10	113

91100	Digital					Paper				
School Index #	%N	%A	%M	%E	n	%N	%A	%M	%E	n
79	0	0	0	0	0	22	42	29	7	72
80	0	50	0	50	2	25	75	0	0	4
81	10	60	20	10	10	28	28	34	10	29
82	0	0	0	0	0	0	0	0	0	0
83	0	50	25	25	4	16	42	32	11	19
84	0	57	14	29	7	25	25	25	25	4
85	100	0	0	0	1	50	50	0	0	2
86	40	40	20	0	10	0	67	17	17	6
87	33	33	0	33	3	0	73	18	9	11
88	0	0	0	0	0	0	0	0	0	0
89	13	47	30	11	47	28	45	21	7	29
90	0	0	0	0	0	25	25	50	0	4
91	18	24	53	6	17	21	41	26	13	39
92	0	62	38	0	8	0	60	40	0	5
Total	15	42	32	10	1,997	21	46	26	7	1,969

E. Level 3 English: Number of results in each grade category for each participating school, disaggregated by assessment format

91472	Digital					Paper				
School Index #	%N	%A	%M	%E	n	%N	%A	%M	%E	n
1	0	0	0	0	0	0	0	0	0	0
2	100	0	0	0	5	100	0	0	0	2
3	50	0	50	0	2	0	0	0	0	0
4	0	0	0	0	0	0	100	0	0	1
5	50	50	0	0	2	0	0	0	0	0
6	0	0	0	0	0	0	25	75	0	4
7	0	0	0	0	0	0	0	0	0	0
8	29	51	17	3	59	30	37	23	10	30
9	100	0	0	0	2	0	0	0	0	0
10	14	45	29	11	148	30	45	20	5	20
11	2	38	38	22	50	22	44	22	11	18
12	28	33	28	11	82	0	0	0	0	0
13	14	51	21	14	94	25	38	38	0	8
14	57	0	43	0	7	50	50	0	0	4
15	56	33	11	0	9	33	33	17	17	6
16	20	50	30	0	10	38	62	0	0	8
17	0	0	0	0	0	0	0	0	0	0
18	20	47	20	13	15	62	38	0	0	8
19	0	0	0	0	0	0	0	0	0	0
20	0	0	0	0	0	0	0	0	0	0
21	100	0	0	0	2	0	0	0	0	0
22	17	17	33	33	6	16	28	30	26	43
23	100	0	0	0	1	100	0	0	0	4
24	0	0	0	0	0	0	0	0	0	0
25	0	100	0	0	1	67	17	0	17	6
26	100	0	0	0	1	0	0	0	0	0
27	0	100	0	0	2	0	0	0	100	2
28	0	50	50	0	6	27	42	27	4	26
29	0	70	19	11	27	33	49	15	4	55
30	0	80	20	0	5	10	50	20	20	10
31	50	50	0	0	4	0	0	0	0	0
32	0	44	44	11	9	11	44	44	0	9
33	11	44	33	11	9	0	0	100	0	1
34	0	40	20	40	5	0	100	0	0	3
35	25	0	25	50	4	33	50	17	0	6
36	6	38	25	31	16	14	29	57	0	7
37	8	33	25	33	12	0	25	75	0	4

91472	Digital					Paper				
School Index #	%N	%A	%M	%E	n	%N	%A	%M	%E	n
38	22	67	0	11	9	33	33	0	33	3
39	80	20	0	0	5	100	0	0	0	1
40	15	62	23	0	13	9	50	38	3	32
41	36	50	14	0	22	16	60	16	8	25
42	40	60	0	0	10	0	0	0	0	0
43	50	50	0	0	2	17	50	33	0	6
44	100	0	0	0	2	0	0	0	0	0
45	0	0	0	100	1	0	30	10	60	10
46	0	0	0	0	0	3	25	38	34	32
47	0	75	25	0	4	44	28	14	14	36
48	33	22	44	0	9	0	0	100	0	1
49	40	60	0	0	5	0	100	0	0	2
50	33	67	0	0	3	25	25	50	0	4
51	25	0	75	0	4	14	43	29	14	7
52	0	0	0	0	0	0	0	0	0	0
53	12	46	27	15	26	24	41	23	11	98
54	0	0	0	0	0	0	0	0	0	0
55	27	45	18	9	11	13	60	27	0	15
56	0	100	0	0	1	0	100	0	0	1
57	12	53	28	6	32	21	17	50	12	24
58	8	42	42	8	12	13	20	27	40	15
59	0	7	50	43	14	10	67	19	5	21
60	5	36	41	18	22	22	44	22	11	18
61	0	62	38	0	13	0	100	0	0	1
62	50	50	0	0	2	56	33	11	0	18
63	0	0	0	0	0	100	0	0	0	1
64	100	0	0	0	2	14	59	18	9	22
65	38	25	25	12	8	17	67	17	0	6
66	21	50	21	7	28	33	44	11	11	9
67	40	40	20	0	5	40	60	0	0	5
68	20	48	20	12	25	19	35	31	15	26
69	21	63	16	0	19	30	40	30	0	10
70	43	14	0	43	7	0	40	20	40	5
71	33	50	17	0	6	29	57	0	14	7
72	20	35	30	15	20	0	50	50	0	2
73	0	100	0	0	1	0	0	0	0	0
74	50	0	50	0	2	60	20	20	0	5
75	20	32	24	24	25	0	33	67	0	3
76	12	50	25	12	8	0	0	33	67	3

91472	Digital					Paper				
School Index #	%N	%A	%M	%E	n	%N	%A	%M	%E	n
77	5	37	32	26	19	18	43	25	14	28
78	11	33	39	17	18	29	29	21	21	14
79	0	0	100	0	1	0	0	100	0	1
80	0	0	0	0	0	0	0	0	0	0
81	43	43	0	14	7	0	100	0	0	1
82	100	0	0	0	1	50	0	0	50	2
83	100	0	0	0	3	0	0	0	0	0
84	6	38	50	6	16	25	62	0	12	8
85	0	67	33	0	6	27	47	7	20	15
86	0	67	33	0	3	10	40	40	10	10
87	0	0	0	100	1	0	0	0	0	0
Total	19	43	26	12	1,048	24	41	24	12	838

91473	Digital					Paper				
School Index #	%N	%A	%M	%E	n	%N	%A	%M	%E	n
1	0	100	0	0	3	67	33	0	0	3
2	100	0	0	0	2	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0
4	50	50	0	0	2	71	29	0	0	7
5	67	33	0	0	3	0	0	0	0	0
6	0	67	33	0	3	17	17	50	17	6
7	10	43	29	19	21	0	60	40	0	5
8	8	45	45	3	38	23	38	23	15	13
9	53	42	0	5	19	57	43	0	0	7
10	10	43	35	12	124	0	18	45	36	11
11	4	33	31	33	52	5	30	40	25	20
12	21	28	34	17	86	50	33	17	0	6
13	15	37	35	13	182	7	41	37	15	27
14	0	0	0	0	0	0	0	0	0	0
15	36	57	7	0	14	0	50	50	0	4
16	0	50	50	0	6	38	38	25	0	8
17	11	67	11	11	9	33	33	33	0	3
18	22	39	28	11	18	36	57	7	0	14
19	10	30	40	20	10	25	38	12	25	8
20	8	67	25	0	12	0	100	0	0	1
21	40	40	20	0	5	50	50	0	0	2
22	17	33	17	33	6	29	38	29	5	42
23	0	0	0	0	0	0	0	0	0	0
24	31	25	38	6	16	0	0	0	0	0
25	0	100	0	0	3	57	29	14	0	7
26	100	0	0	0	1	0	0	0	0	0
27	0	36	57	7	14	25	75	0	0	4
28	40	0	40	20	5	9	45	36	9	11
29	7	27	48	18	44	16	70	12	2	57
30	0	0	0	0	0	0	0	0	0	0
31	0	50	50	0	4	0	0	0	0	0
32	11	44	33	11	9	22	44	33	0	9
33	25	75	0	0	4	100	0	0	0	1
34	0	22	22	56	9	11	44	11	33	9
35	100	0	0	0	2	64	9	18	9	11
36	0	62	38	0	8	0	60	40	0	5
37	4	31	31	35	26	20	40	40	0	10
38	0	0	0	0	0	0	100	0	0	1
39	82	18	0	0	11	100	0	0	0	1

91473	Digital					Paper				
School Index #	%N	%A	%M	%E	n	%N	%A	%M	%E	n
40	8	50	42	0	12	21	46	26	8	39
41	18	27	36	18	22	9	44	32	15	34
42	33	45	21	0	33	0	50	50	0	2
43	0	0	0	0	0	0	0	0	0	0
44	50	50	0	0	2	0	0	0	0	0
45	0	0	0	0	0	0	0	0	0	0
46	0	100	0	0	2	15	38	28	18	71
47	0	60	0	40	5	25	42	22	11	36
48	22	22	22	33	9	67	0	33	0	3
49	20	40	40	0	5	50	50	0	0	4
50	0	100	0	0	2	0	60	40	0	5
51	0	40	20	40	5	0	14	57	29	7
52	100	0	0	0	2	33	33	33	0	3
53	4	52	22	22	27	14	52	24	11	114
54	33	33	33	0	3	0	0	0	100	1
55	33	56	0	11	9	33	50	17	0	6
56	0	50	0	50	2	11	39	39	11	36
57	14	30	35	22	37	5	32	42	21	19
58	0	33	67	0	3	30	30	30	10	10
59	18	9	36	36	11	31	49	14	7	59
60	9	44	35	12	43	4	52	30	13	23
61	0	0	0	0	0	46	54	0	0	13
62	0	0	0	0	0	0	0	0	0	0
63	0	0	0	0	0	0	100	0	0	1
64	100	0	0	0	1	11	71	14	4	28
65	19	50	25	6	16	17	50	33	0	6
66	19	38	31	12	16	11	56	22	11	9
67	40	40	20	0	5	20	80	0	0	5
68	14	36	29	21	28	40	47	7	7	30
69	17	48	26	9	23	19	44	25	12	16
70	19	67	10	5	21	0	75	0	25	4
71	0	75	25	0	4	20	20	60	0	5
72	0	100	0	0	1	0	0	0	0	0
73	0	0	0	0	0	0	0	0	0	0
74	31	38	31	0	16	0	75	25	0	8
75	7	33	27	33	30	0	33	33	33	3
76	0	50	29	21	14	0	40	60	0	5
77	0	0	0	0	0	0	0	0	0	0
78	19	35	35	12	26	8	52	28	12	25

91473	Digital					Paper				
School Index #	%N	%A	%M	%E	n	%N	%A	%M	%E	n
79	21	43	25	11	28	17	83	0	0	6
80	0	0	0	0	0	0	100	0	0	1
81	0	0	0	0	0	0	0	0	0	0
82	67	33	0	0	3	50	25	25	0	4
83	0	0	0	0	0	0	0	0	0	0
84	24	35	29	12	17	11	56	11	22	9
85	0	100	0	0	2	29	29	29	14	7
86	0	50	50	0	4	21	47	21	11	19
87	0	67	33	0	3	0	0	0	0	0
Total	16	39	30	14	1,263	20	46	24	10	989

91474	Digital					Paper				
School Index #	%N	%A	%M	%E	n	%N	%A	%M	%E	n
1	0	0	0	0	0	0	0	0	0	0
2	100	0	0	0	5	50	50	0	0	2
3	0	0	0	0	0	0	0	0	0	0
4	83	17	0	0	6	40	46	14	0	35
5	0	100	0	0	1	0	0	0	0	0
6	0	100	0	0	2	50	50	0	0	2
7	0	0	0	0	0	100	0	0	0	1
8	22	39	35	4	23	8	50	42	0	12
9	50	50	0	0	2	50	50	0	0	4
10	18	49	27	6	117	33	47	13	7	15
11	11	36	32	21	28	33	11	44	11	9
12	15	48	30	6	33	50	0	50	0	2
13	0	67	25	8	12	0	0	100	0	1
14	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0
16	0	0	0	0	0	0	0	0	0	0
17	0	0	0	0	0	0	0	0	0	0
18	0	0	0	0	0	0	0	0	0	0
19	33	33	33	0	3	0	25	75	0	4
20	50	33	17	0	12	100	0	0	0	2
21	67	17	17	0	6	0	100	0	0	2
22	29	43	14	14	7	16	43	31	10	49
23	100	0	0	0	2	50	50	0	0	8
24	0	0	0	0	0	0	0	0	0	0
25	0	50	0	50	2	23	36	27	14	22
26	75	25	0	0	4	0	0	0	0	0
27	0	0	100	0	1	0	0	100	0	1
28	0	100	0	0	4	14	76	10	0	21
29	17	50	17	17	18	35	55	10	0	20
30	57	0	29	14	7	35	35	29	0	17
31	0	0	0	0	0	0	0	0	0	0
32	0	0	0	0	0	0	0	0	0	0
33	0	0	0	0	0	0	0	0	0	0
34	0	67	17	17	6	20	50	10	20	10
35	0	0	0	0	0	0	0	0	0	0
36	18	27	32	23	22	30	30	20	20	10
37	23	46	31	0	13	38	0	38	25	8
38	0	100	0	0	1	0	100	0	0	1
39	67	33	0	0	3	0	0	0	0	0

91474	Digital					Paper				
School Index #	%N	%A	%M	%E	n	%N	%A	%M	%E	n
40	0	0	0	0	0	0	0	33	67	3
41	33	33	33	0	3	50	50	0	0	2
42	47	35	18	0	17	0	0	100	0	1
43	0	100	0	0	1	0	67	33	0	6
44	100	0	0	0	2	0	0	0	0	0
45	0	100	0	0	1	50	33	17	0	6
46	0	0	0	0	0	0	0	0	0	0
47	0	33	33	33	3	0	60	13	27	15
48	38	25	12	25	8	0	100	0	0	1
49	0	0	0	0	0	0	0	0	0	0
50	0	0	0	0	0	0	0	0	0	0
51	0	0	0	0	0	0	0	0	0	0
52	0	100	0	0	1	33	33	33	0	3
53	18	27	27	27	11	6	25	38	31	16
54	0	0	0	0	0	0	0	0	0	0
55	0	0	0	0	0	0	0	0	0	0
56	0	0	100	0	1	29	43	24	5	21
57	0	0	0	0	0	0	0	0	0	0
58	50	0	0	50	2	0	33	33	33	3
59	14	29	29	29	7	0	75	0	25	4
60	100	0	0	0	1	100	0	0	0	1
61	0	0	0	0	0	12	88	0	0	8
62	100	0	0	0	4	38	58	4	0	24
63	0	0	0	100	1	45	45	9	0	22
64	100	0	0	0	1	43	48	10	0	21
65	0	0	0	0	0	0	0	0	0	0
66	26	36	31	8	39	11	56	28	6	18
67	50	25	25	0	4	25	25	50	0	4
68	57	22	17	4	23	29	43	21	7	28
69	36	46	14	4	28	25	35	35	5	20
70	21	57	18	4	28	12	38	25	25	8
71	0	50	50	0	4	67	17	17	0	6
72	7	48	33	11	27	0	67	33	0	3
73	0	0	0	0	0	0	0	0	0	0
74	0	0	0	0	0	0	0	0	0	0
75	0	100	0	0	1	0	0	0	0	0
76	0	0	0	0	0	0	0	0	0	0
77	11	47	37	5	19	17	61	11	11	18
78	33	33	17	17	6	17	42	33	8	12

91474	Digital					Paper				
School Index #	%N	%A	%M	%E	n	%N	%A	%M	%E	n
79	33	33	33	0	3	0	50	0	50	2
80	0	100	0	0	1	0	100	0	0	1
81	31	38	31	0	13	0	0	0	0	0
82	0	50	50	0	2	20	40	40	0	5
83	0	0	0	0	0	0	0	0	0	0
84	5	36	50	9	22	41	47	6	6	17
85	0	0	0	0	0	33	67	0	0	3
86	0	14	57	29	7	40	40	20	0	10
87	0	0	0	0	0	0	0	0	0	0
Total	25	41	26	9	631	27	45	21	7	570

91003	Digital					Paper				
School Index #	%N	%A	%M	%E	n	%N	%A	%M	%E	n
38	0	0	0	0	0	0	0	0	0	0
39	0	0	0	0	0	0	0	0	0	0
40	0	0	0	0	0	0	0	0	0	0
41	50	25	25	0	4	50	25	25	0	8
42	0	0	0	100	1	3	15	49	32	65
43	0	0	0	0	0	0	0	0	0	0
44	15	40	32	12	40	14	43	43	0	7
45	9	47	32	12	34	9	55	36	0	11
46	0	75	25	0	4	0	75	25	0	4
47	20	27	40	13	15	0	100	0	0	2
48	0	0	0	0	0	0	0	0	0	0
49	0	0	0	0	0	0	0	0	0	0
50	2	41	43	14	44	0	33	33	33	6
51	14	33	48	5	21	0	100	0	0	2
52	0	0	0	0	0	0	0	0	0	0
53	0	30	60	10	10	0	100	0	0	1
54	33	0	67	0	3	80	20	0	0	5
55	0	0	100	0	1	21	62	17	0	29
56	0	0	0	0	0	0	0	0	0	0
57	18	45	32	5	22	50	50	0	0	2
58	0	100	0	0	1	20	60	20	0	5
59	0	0	0	0	0	44	44	11	0	9
60	0	0	0	0	0	17	25	58	0	12
61	0	50	25	25	4	0	0	0	0	0
62	0	0	0	0	0	50	43	7	0	14
63	0	0	0	0	0	27	45	25	4	112
64	0	20	52	27	44	8	33	17	42	12
65	0	26	46	29	35	0	78	0	22	9
66	9	47	41	3	32	10	35	47	8	79
67	0	0	0	0	0	0	0	0	0	0
68	0	40	25	35	40	8	42	21	29	24
69	20	20	50	10	10	16	48	24	12	25
70	0	0	0	0	0	32	58	10	0	31
71	0	0	0	0	0	11	67	22	0	18
72	0	0	0	0	0	18	55	27	0	11
73	25	75	0	0	4	0	0	0	0	0
74	0	0	0	0	0	0	38	46	15	13
75	100	0	0	0	1	17	67	8	8	12
76	0	40	60	0	5	25	75	0	0	4

91003	Digital					Paper				
School Index #	%N	%A	%M	%E	n	%N	%A	%M	%E	n
77	10	30	40	20	20	10	40	40	10	10
78	0	0	0	0	0	15	30	47	9	47
79	0	0	0	0	0	16	34	34	16	32
80	0	25	55	20	20	0	67	0	33	3
81	22	59	17	2	41	33	67	0	0	3
82	0	0	0	0	0	17	37	35	11	46
83	6	34	34	26	35	0	0	0	100	1
84	0	0	0	0	0	0	0	0	0	0
85	0	0	0	0	0	0	5	35	60	20
86	0	35	50	15	20	0	33	67	0	3
87	0	0	0	0	0	0	0	0	0	0
88	0	12	62	25	8	11	33	56	0	18
89	0	0	0	0	0	0	0	0	0	0
90	10	40	50	0	10	0	100	0	0	1
91	40	20	40	0	5	0	0	0	0	0
92	0	0	0	0	0	10	52	32	6	63
93	0	0	0	0	0	0	0	0	0	0
94	12	12	38	38	8	0	20	60	20	5
95	0	0	0	0	0	0	0	0	0	0
96	0	0	0	0	0	0	48	43	9	23
97	50	0	0	50	2	17	33	33	17	12
Total	10	37	39	14	1,004	15	43	32	11	1,413

91005	Digital					Paper				
School Index #	%N	%A	%M	%E	n	%N	%A	%M	%E	n
1	0	0	0	0	0	0	0	0	0	0
2	7	50	29	14	14	43	29	29	0	7
3	0	0	0	0	0	0	0	0	0	0
4	62	38	0	0	13	100	0	0	0	1
5	3	18	33	45	33	10	19	43	29	21
6	6	61	25	8	36	14	71	14	0	7
7	13	23	28	36	39	20	0	60	20	5
8	3	20	40	37	65	0	0	0	0	0
9	20	20	20	40	10	13	51	30	6	69
10	0	0	0	0	0	8	42	42	8	12
11	42	53	5	0	19	0	0	0	0	0
12	0	17	46	38	112	0	57	14	29	7
13	0	0	0	0	0	11	65	24	0	37
14	0	14	61	25	28	0	30	35	35	20
15	0	0	0	0	0	17	60	17	7	30
16	5	57	27	11	37	33	33	0	33	3
17	0	0	0	0	0	11	40	36	13	87
18	0	0	0	0	0	0	0	0	0	0
19	42	50	8	0	12	100	0	0	0	1
20	64	27	9	0	11	0	0	0	0	0
21	0	0	0	0	0	0	0	0	0	0
22	18	50	23	9	22	25	25	25	25	4
23	0	0	0	0	0	0	0	0	0	0
24	0	0	0	0	0	7	64	23	7	91
25	0	0	0	0	0	48	48	4	0	23
26	0	47	24	29	17	50	50	0	0	4
27	0	50	50	0	6	0	60	40	0	5
28	62	25	12	0	8	0	0	0	0	0
29	0	0	0	0	0	7	83	7	2	42
30	0	0	0	0	0	0	0	0	0	0
31	43	57	0	0	7	24	74	3	0	34
32	0	0	0	0	0	0	0	0	0	0
33	0	0	0	0	0	29	54	17	0	24
34	20	40	20	20	5	3	32	42	24	38
35	0	44	33	22	9	0	100	0	0	1
36	43	57	0	0	7	0	0	0	0	0
37	0	0	27	73	11	0	11	33	56	9
38	0	25	56	19	16	7	25	34	34	103
39	0	0	0	0	0	7	29	31	33	85

91005	Digital					Paper				
School Index #	%N	%A	%M	%E	n	%N	%A	%M	%E	n
40	33	33	17	17	6	25	75	0	0	4
41	0	0	0	0	0	0	0	0	0	0
42	0	0	0	0	0	0	0	0	0	0
43	0	0	0	0	0	12	62	12	12	8
44	2	39	44	15	41	29	29	14	29	7
45	6	27	39	27	33	18	9	55	18	11
46	100	0	0	0	1	50	25	25	0	4
47	25	44	19	12	16	0	33	33	33	3
48	33	0	0	67	3	100	0	0	0	1
49	0	0	0	0	0	40	53	7	0	15
50	7	36	26	31	42	33	33	33	0	6
51	0	29	47	24	17	0	0	100	0	1
52	0	0	0	0	0	0	0	0	0	0
53	0	70	30	0	10	0	0	0	0	0
54	67	33	0	0	3	100	0	0	0	1
55	0	0	0	0	0	6	42	45	6	31
56	3	21	27	48	33	5	32	37	26	19
57	29	50	14	7	14	100	0	0	0	1
58	0	0	100	0	1	25	50	25	0	4
59	0	0	0	0	0	56	44	0	0	9
60	0	0	0	0	0	0	75	25	0	12
61	0	67	33	0	3	0	0	0	0	0
62	0	0	0	0	0	18	53	29	0	17
63	0	0	0	0	0	57	35	7	2	46
64	2	17	26	55	42	11	22	11	56	9
65	0	26	38	36	39	10	40	40	10	10
66	0	24	61	15	33	3	26	57	14	72
67	0	17	39	43	23	0	42	33	25	12
68	2	49	43	6	47	0	81	19	0	21
69	0	100	0	0	1	67	0	33	0	3
70	0	0	0	0	0	50	33	6	11	18
71	0	0	0	0	0	39	50	11	0	18
72	0	0	0	0	0	17	33	8	42	12
73	0	0	100	0	4	0	0	0	0	0
74	0	0	0	0	0	18	27	9	45	11
75	0	0	0	0	0	50	50	0	0	2
76	0	60	40	0	5	0	100	0	0	4
77	0	0	0	0	0	0	0	0	0	0
78	0	0	0	0	0	3	31	41	26	39

91005	Digital					Paper				
School Index #	%N	%A	%M	%E	n	%N	%A	%M	%E	n
79	0	0	0	0	0	17	50	23	10	30
80	0	33	37	30	30	0	100	0	0	2
81	7	45	40	7	42	33	33	33	0	3
82	0	0	0	0	0	11	43	41	4	46
83	2	40	35	22	40	0	0	0	100	1
84	0	0	0	0	0	14	45	27	14	22
85	0	0	0	0	0	0	0	0	0	0
86	10	50	25	15	20	33	67	0	0	3
87	0	0	100	0	1	0	100	0	0	2
88	0	25	0	75	8	6	56	19	19	16
89	0	0	0	0	0	0	0	0	0	0
90	17	50	33	0	6	0	0	100	0	1
91	0	0	0	0	0	0	0	0	0	0
92	0	0	0	0	0	10	33	37	21	63
93	0	0	0	0	0	0	0	0	0	0
94	0	0	0	0	0	0	0	0	0	0
95	0	33	0	67	3	0	0	0	0	0
96	0	0	0	0	0	0	19	46	35	26
97	0	0	40	60	5	5	16	53	26	19
Total	8	33	34	25	1,109	14	43	29	15	1,435

91006	Digital					Paper				
School Index #	%N	%A	%M	%E	n	%N	%A	%M	%E	n
1	6	50	25	19	16	0	0	100	0	1
2	0	0	0	0	0	0	0	0	0	0
3	0	60	30	10	10	0	40	60	0	5
4	50	50	0	0	4	0	0	0	0	0
5	0	34	46	20	35	26	39	22	13	23
6	5	26	42	26	38	0	56	44	0	9
7	32	38	12	18	34	75	0	25	0	4
8	0	0	0	0	0	0	0	0	0	0
9	0	0	0	0	0	100	0	0	0	1
10	0	0	0	0	0	0	0	0	0	0
11	0	0	0	0	0	0	0	0	0	0
12	0	0	0	0	0	0	0	0	0	0
13	0	0	0	0	0	0	0	0	0	0
14	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	9	27	48	16	44
16	15	35	41	9	34	50	0	0	50	2
17	0	0	0	0	0	0	0	0	0	0
18	0	0	0	0	0	0	0	0	0	0
19	0	0	0	0	0	0	0	0	0	0
20	0	0	0	0	0	0	0	0	0	0
21	0	0	0	0	0	0	0	0	0	0
22	0	0	0	0	0	0	0	0	0	0
23	0	0	0	0	0	0	0	0	0	0
24	0	0	0	0	0	12	62	25	0	24
25	0	0	0	0	0	0	0	0	0	0
26	0	0	0	0	0	0	0	0	0	0
27	0	0	100	0	2	0	50	50	0	2
28	0	0	0	0	0	0	0	0	0	0
29	0	0	0	0	0	20	50	28	2	40
30	0	0	0	0	0	43	48	9	0	23
31	40	0	40	20	5	14	46	25	14	28
32	0	0	0	0	0	0	0	0	0	0
33	0	0	0	0	0	0	50	0	50	2
34	0	0	0	0	0	0	0	0	0	0
35	0	0	0	0	0	0	0	0	0	0
36	0	0	0	0	0	0	0	0	0	0
37	0	0	0	0	0	0	0	0	0	0
38	0	0	0	0	0	0	0	0	0	0
39	0	0	0	0	0	7	29	47	17	83

91006	Digital					Paper				
School Index #	%N	%A	%M	%E	n	%N	%A	%M	%E	n
40	0	0	0	0	0	0	0	0	0	0
41	33	67	0	0	3	40	40	20	0	5
42	0	0	50	50	4	0	22	70	9	23
43	0	0	0	0	0	0	55	36	9	11
44	0	0	0	0	0	0	0	0	0	0
45	0	0	0	0	0	0	0	0	0	0
46	0	0	0	0	0	0	0	0	0	0
47	0	0	0	0	0	0	0	0	0	0
48	0	0	0	0	0	0	0	0	0	0
49	0	0	0	0	0	27	60	13	0	15
50	0	0	0	0	0	0	0	0	0	0
51	0	0	75	25	4	0	0	100	0	1
52	0	0	0	0	0	0	0	0	0	0
53	0	0	0	0	0	0	0	0	0	0
54	0	0	0	0	0	100	0	0	0	3
55	0	0	100	0	1	10	37	43	10	49
56	0	40	20	40	5	50	50	0	0	2
57	19	48	29	5	21	100	0	0	0	1
58	100	0	0	0	1	33	67	0	0	3
59	0	0	0	0	0	0	0	0	0	0
60	0	0	0	0	0	0	0	0	0	0
61	0	0	0	0	0	0	0	0	0	0
62	0	0	0	0	0	0	0	0	0	0
63	0	0	0	0	0	39	44	15	2	59
64	0	0	0	0	0	0	0	0	0	0
65	0	0	0	0	0	0	0	0	0	0
66	0	100	0	0	1	0	100	0	0	1
67	5	33	43	19	21	36	36	9	18	11
68	0	0	0	0	0	0	0	0	0	0
69	0	100	0	0	1	50	50	0	0	2
70	0	0	0	0	0	0	0	0	0	0
71	0	0	0	0	0	0	0	0	0	0
72	0	0	0	0	0	0	38	62	0	8
73	0	0	0	0	0	0	0	0	0	0
74	0	0	0	0	0	0	0	0	0	0
75	0	0	0	0	0	0	0	0	0	0
76	20	60	20	0	5	0	100	0	0	2
77	0	38	38	23	26	0	22	22	56	9
78	0	0	0	0	0	0	0	0	0	0

91006	Digital					Paper				
School Index #	%N	%A	%M	%E	n	%N	%A	%M	%E	n
79	0	0	0	0	0	10	40	30	20	20
80	0	17	50	33	24	0	0	100	0	3
81	0	0	0	0	0	0	0	0	0	0
82	0	0	0	0	0	0	0	0	0	0
83	14	36	32	18	22	0	0	0	0	0
84	0	0	0	0	0	29	43	29	0	14
85	0	0	0	0	0	0	0	0	0	0
86	0	0	0	0	0	0	0	0	0	0
87	0	0	0	0	0	0	0	0	0	0
88	0	0	0	0	0	0	0	0	0	0
89	0	0	0	0	0	0	0	0	0	0
90	0	43	29	29	7	0	0	0	0	0
91	0	67	0	33	3	0	0	0	0	0
92	0	0	0	0	0	0	0	0	0	0
93	0	0	0	0	0	0	0	0	0	0
94	0	0	0	0	0	0	0	0	0	0
95	0	67	33	0	3	0	0	0	0	0
96	0	0	0	0	0	0	22	56	22	18
97	0	0	0	0	0	0	0	0	0	0
Total	10	36	35	19	330	18	39	34	10	551

G. Level 1 English - Māori: Number of results in each grade category for each participating school, disaggregated by assessment format

90849	Digital					Paper				
School Index #	%N	%A	%M	%E	n	%N	%A	%M	%E	n
1	57	43	0	0	7	0	100	0	0	1
2	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	20	60	20	0	5
5	50	50	0	0	4	42	29	29	0	24
6	33	67	0	0	3	0	0	0	0	0
7	0	0	0	100	1	0	0	0	0	0
8	0	29	43	29	7	0	50	40	10	10
9	18	55	18	9	11	18	47	29	6	17
10	33	33	33	0	3	17	33	33	17	12
11	22	44	33	0	9	20	53	20	7	15
12	100	0	0	0	7	0	50	50	0	2
13	15	35	42	8	26	0	0	0	0	0
14	0	38	38	25	8	0	0	100	0	1
15	23	47	20	10	30	100	0	0	0	1
16	17	21	33	29	24	50	50	0	0	4
17	100	0	0	0	3	88	12	0	0	8
18	0	0	0	0	0	38	46	15	0	13
19	0	0	100	0	1	0	100	0	0	3
20	0	100	0	0	1	55	35	5	5	20
21	38	57	5	0	21	60	40	0	0	10
22	0	0	0	0	0	0	0	0	0	0
23	0	33	33	33	3	25	75	0	0	4
24	0	50	50	0	2	28	56	17	0	18
25	0	0	100	0	1	19	56	25	0	16
26	100	0	0	0	1	60	20	20	0	5
27	0	0	100	0	1	12	62	25	0	8
28	67	33	0	0	3	62	25	12	0	24
29	0	0	0	0	0	0	0	0	0	0
30	25	75	0	0	4	11	79	11	0	19
31	0	0	0	0	0	0	56	44	0	9
32	0	0	0	0	0	46	46	8	0	13
33	0	0	0	0	0	0	100	0	0	1
34	0	100	0	0	3	0	0	0	0	0
35	0	60	40	0	5	11	61	22	6	18
36	0	0	0	0	0	7	50	26	17	42
37	100	0	0	0	1	0	0	0	0	0

90849	Digital					Paper				
School Index #	%N	%A	%M	%E	n	%N	%A	%M	%E	n
38	30	50	20	0	10	50	0	50	0	2
39	71	29	0	0	7	0	0	0	0	0
40	50	50	0	0	8	0	0	0	0	0
41	0	0	0	0	0	27	59	5	9	22
42	27	67	7	0	15	36	55	0	9	11
43	57	29	0	14	7	67	33	0	0	3
44	18	45	18	18	11	43	29	14	14	7
45	0	0	0	0	0	50	0	50	0	2
46	0	0	100	0	1	0	0	0	0	0
47	33	50	17	0	12	50	50	0	0	2
48	23	38	31	8	13	0	100	0	0	1
49	17	33	50	0	6	0	0	0	0	0
50	0	0	0	0	0	0	0	0	0	0
51	0	0	100	0	1	12	12	62	12	8
52	0	0	100	0	1	17	33	42	8	12
53	75	25	0	0	4	50	43	7	0	14
54	43	57	0	0	7	0	100	0	0	1
55	0	0	0	0	0	0	0	0	0	0
56	17	58	17	8	12	0	0	0	0	0
57	0	0	0	0	0	0	0	0	100	1
58	17	33	17	33	6	16	49	27	8	37
59	50	50	0	0	2	25	50	0	25	4
60	33	67	0	0	3	23	69	8	0	13
61	0	50	50	0	6	50	0	0	50	2
62	0	50	50	0	4	0	0	100	0	1
63	50	43	7	0	14	0	100	0	0	1
64	0	0	0	0	0	0	0	0	0	0
65	0	100	0	0	5	0	0	0	0	0
66	71	29	0	0	7	25	75	0	0	4
67	0	33	67	0	3	7	20	60	13	15
68	0	33	33	33	6	33	67	0	0	3
69	23	46	23	8	13	46	54	0	0	13
70	22	22	33	22	9	14	43	43	0	7
71	10	50	30	10	10	0	0	100	0	1
72	20	60	20	0	5	0	0	0	0	0
73	50	50	0	0	2	0	0	0	0	0
74	0	0	0	0	0	0	0	0	0	0
75	60	40	0	0	5	50	0	50	0	2
76	0	75	25	0	8	0	83	17	0	6

90849	Digital					Paper				
School Index #	%N	%A	%M	%E	n	%N	%A	%M	%E	n
77	67	33	0	0	3	0	0	0	0	0
78	0	0	0	0	0	0	0	0	0	0
79	50	50	0	0	4	0	0	0	0	0
80	0	67	0	33	3	0	60	20	20	5
Total	28	44	21	8	423	27	47	20	6	523

90850	Digital					Paper				
School Index #	%N	%A	%M	%E	n	%N	%A	%M	%E	n
1	33	56	11	0	9	20	80	0	0	5
2	0	0	0	0	0	0	0	0	0	0
3	80	20	0	0	5	0	0	0	0	0
4	0	100	0	0	2	25	25	0	50	4
5	0	0	0	0	0	0	0	0	0	0
6	40	40	20	0	5	0	0	0	0	0
7	30	50	20	0	10	0	0	0	0	0
8	0	0	0	0	0	0	100	0	0	2
9	0	62	25	12	8	12	50	38	0	8
10	25	50	0	25	4	19	48	23	10	31
11	0	0	0	0	0	0	0	0	0	0
12	60	40	0	0	10	100	0	0	0	2
13	8	38	46	8	24	0	0	0	0	0
14	0	43	43	14	7	0	0	100	0	1
15	27	27	42	4	26	0	0	0	0	0
16	0	35	39	26	23	100	0	0	0	4
17	33	67	0	0	3	80	20	0	0	10
18	0	0	0	100	1	60	20	20	0	20
19	100	0	0	0	1	55	27	18	0	11
20	0	100	0	0	1	40	45	15	0	20
21	52	38	10	0	21	88	0	12	0	8
22	25	50	25	0	4	0	33	50	17	6
23	50	0	25	25	4	60	40	0	0	10
24	0	67	0	33	3	19	38	25	19	16
25	0	100	0	0	1	16	58	21	5	19
26	0	100	0	0	1	60	40	0	0	5
27	0	0	0	0	0	25	38	38	0	8
28	75	25	0	0	4	39	61	0	0	23
29	0	0	0	0	0	0	0	0	0	0
30	0	0	0	0	0	0	0	0	0	0
31	0	0	0	0	0	25	33	33	8	12
32	100	0	0	0	1	43	50	7	0	14
33	0	100	0	0	1	0	0	100	0	1
34	33	0	67	0	3	0	0	0	0	0
35	0	100	0	0	1	50	42	8	0	12
36	0	88	12	0	8	7	44	40	9	43
37	0	0	0	0	0	50	50	0	0	4
38	27	55	18	0	11	0	67	33	0	3
39	67	33	0	0	12	0	0	0	0	0

90850	Digital					Paper				
School Index #	%N	%A	%M	%E	n	%N	%A	%M	%E	n
40	50	50	0	0	12	0	0	0	0	0
41	62	38	0	0	13	29	61	6	3	31
42	27	36	36	0	11	31	54	15	0	13
43	0	46	31	23	13	43	43	14	0	7
44	12	50	31	6	16	50	25	25	0	8
45	0	0	100	0	2	75	25	0	0	4
46	0	100	0	0	1	0	0	0	0	0
47	21	71	7	0	14	67	33	0	0	3
48	26	61	9	4	23	0	100	0	0	2
49	0	14	86	0	7	0	0	0	0	0
50	33	33	33	0	3	0	0	0	0	0
51	0	0	0	0	0	17	42	17	25	12
52	0	0	0	0	0	17	67	17	0	6
53	0	0	0	0	0	0	0	0	0	0
54	0	0	0	0	0	0	0	0	0	0
55	20	80	0	0	5	50	50	0	0	2
56	44	56	0	0	9	0	0	0	0	0
57	0	75	25	0	4	15	54	31	0	13
58	17	33	50	0	6	5	57	32	5	37
59	100	0	0	0	3	40	20	40	0	5
60	33	67	0	0	3	12	52	28	8	25
61	0	50	50	0	6	0	50	0	50	2
62	0	50	50	0	2	0	0	0	0	0
63	0	0	0	0	0	0	0	0	0	0
64	0	0	0	0	0	0	0	0	0	0
65	0	0	100	0	1	0	0	0	0	0
66	40	40	20	0	5	50	50	0	0	2
67	25	25	50	0	4	21	36	36	7	14
68	0	17	83	0	6	33	67	0	0	3
69	0	50	21	29	14	27	67	7	0	15
70	11	44	44	0	9	20	40	40	0	5
71	0	0	0	0	0	0	0	0	0	0
72	0	80	20	0	5	0	0	0	0	0
73	0	100	0	0	1	0	0	0	0	0
74	0	25	50	25	4	0	0	50	50	2
75	0	75	25	0	4	50	50	0	0	2
76	25	25	50	0	4	0	100	0	0	1
77	33	33	33	0	3	0	0	0	0	0
78	17	83	0	0	6	0	100	0	0	1

90850	Digital					Paper				
School Index #	%N	%A	%M	%E	n	%N	%A	%M	%E	n
79	50	50	0	0	4	0	0	0	0	0
80	0	67	33	0	3	20	80	0	0	5
Total	25	46	24	6	440	29	46	20	5	522

90851	Digital					Paper				
School Index #	%N	%A	%M	%E	n	%N	%A	%M	%E	n
1	0	0	0	0	0	0	0	0	0	0
2	0	75	0	25	4	75	25	0	0	4
3	0	0	0	0	0	0	0	0	0	0
4	14	29	57	0	7	11	49	30	11	37
5	50	50	0	0	4	7	74	19	0	27
6	33	50	17	0	6	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0
8	0	57	43	0	7	0	40	50	10	10
9	0	88	12	0	8	25	38	38	0	8
10	0	0	0	0	0	0	0	0	0	0
11	0	60	40	0	5	23	46	31	0	13
12	60	40	0	0	10	67	33	0	0	3
13	14	52	28	7	29	0	0	0	0	0
14	12	62	25	0	8	0	0	100	0	1
15	32	44	24	0	25	0	100	0	0	1
16	33	33	33	0	3	67	33	0	0	3
17	0	0	0	0	0	0	0	0	0	0
18	0	50	50	0	2	40	40	20	0	25
19	0	0	0	0	0	0	0	0	0	0
20	0	0	0	0	0	0	0	0	0	0
21	0	0	0	0	0	0	0	0	0	0
22	67	33	0	0	3	17	50	33	0	6
23	0	75	25	0	4	25	25	50	0	4
24	0	100	0	0	3	22	50	28	0	18
25	0	0	0	0	0	29	53	12	6	17
26	43	57	0	0	7	23	54	23	0	13
27	0	0	100	0	1	27	27	36	9	11
28	57	43	0	0	7	35	57	8	0	37
29	0	100	0	0	1	0	0	0	0	0
30	25	50	0	25	4	16	42	42	0	19
31	0	100	0	0	1	0	50	0	50	2
32	0	100	0	0	1	54	31	15	0	13
33	0	100	0	0	1	0	0	0	100	1
34	50	25	25	0	4	0	0	0	0	0
35	33	17	50	0	6	10	52	33	5	21
36	0	0	0	0	0	0	58	42	0	12
37	100	0	0	0	1	0	0	0	0	0
38	0	0	0	0	0	0	0	0	0	0
39	80	20	0	0	10	0	0	0	0	0

90851	Digital					Paper				
School Index #	%N	%A	%M	%E	n	%N	%A	%M	%E	n
40	0	0	0	0	0	0	0	0	0	0
41	0	0	0	0	0	12	62	21	6	34
42	0	0	0	0	0	0	0	0	0	0
43	0	53	47	0	15	75	0	25	0	4
44	0	73	27	0	11	43	57	0	0	7
45	0	0	0	0	0	25	0	75	0	4
46	0	0	0	0	0	0	0	0	0	0
47	0	0	0	0	0	0	0	0	0	0
48	0	71	29	0	7	0	0	0	0	0
49	0	33	33	33	6	0	0	0	0	0
50	0	100	0	0	2	0	50	50	0	2
51	0	0	0	0	0	8	62	31	0	13
52	0	0	100	0	1	0	25	50	25	4
53	0	33	67	0	3	38	56	6	0	16
54	67	33	0	0	12	0	50	50	0	2
55	0	80	20	0	5	0	100	0	0	1
56	24	53	24	0	17	0	0	0	0	0
57	0	0	0	0	0	20	53	20	7	15
58	0	50	50	0	4	14	57	14	14	28
59	0	0	0	0	0	0	0	0	0	0
60	0	0	0	0	0	0	0	100	0	2
61	0	0	0	0	0	0	0	0	100	1
62	0	67	33	0	3	0	100	0	0	2
63	50	50	0	0	14	0	0	0	0	0
64	25	50	25	0	4	33	0	67	0	3
65	20	60	20	0	5	0	0	0	0	0
66	30	60	10	0	10	0	100	0	0	3
67	33	33	33	0	3	7	47	40	7	15
68	0	20	60	20	5	0	67	33	0	3
69	8	54	38	0	13	100	0	0	0	6
70	25	0	75	0	8	14	57	14	14	7
71	9	45	45	0	11	0	100	0	0	1
72	0	0	0	0	0	0	0	0	0	0
73	0	0	0	0	0	0	0	0	0	0
74	0	0	100	0	4	0	50	50	0	4
75	0	0	0	0	0	0	0	0	0	0
76	0	100	0	0	1	0	67	0	33	3
77	50	0	0	50	2	0	0	0	0	0
78	0	0	0	0	0	0	0	0	0	0

90851	Digital					Paper				
School Index #	%N	%A	%M	%E	n	%N	%A	%M	%E	n
79	0	0	0	0	0	0	0	0	0	0
80	67	33	0	0	3	17	33	33	17	6
Total	23	49	26	2	341	21	50	24	5	492

