

STUDENT SURVEY - LEVEL 1 DIGITAL TRIAL EXAMINATIONS 2017

INFORMATION ON THE SURVEY AND PARTICIPANTS

The student survey was designed to measure students' self-reported satisfaction and experience of the Digital Trial examinations, administered by schools during September and October 2017. The survey included establishing whether the students regularly use electronic devices at home and at school.

Fourteen Level 1 Digital Trial examinations were offered (Business Studies, Classical Studies, Economics, English, French, Geography, Health, History, Media Studies, Physics, Samoan, Science, Spanish, Te Reo Rangatira). 4,985 students¹ participated in at least one of the Digital Trial Examinations, from 89 schools.

NZQA received 1,035 survey responses from 944 students. Some students sat more than one trial examination and therefore have answered the survey more than once. Students logged into 5,764 sessions. This gives a survey response rate of 18%.

The table below shows the number of responses received by Trial subject, in order of frequency.

Trial subject	Number of responses	Percentage
Science	270	26.1
English	247	23.9
Economics	154	14.9
History	91	8.8
Health	82	7.9
Geography	79	7.6
Business Studies	33	3.2
Spanish	26	2.5
Physics	20	1.9
French	18	1.7
Media Studies	13	1.3
Classics	1	0.1
Samoan	1	0.1
Te Reo Rangatira	-	-
	1035	100

The survey was made available to students within the SoNET system, directly after they submitted their trial examination. The survey consisted of 12 questions, with three open ended

¹ The figure of 4,985 includes two respondents who did not provide NSNs and therefore cannot be confirmed as unique students.

questions. See Appendix 1 for a list of the survey questions. The survey was designed to take approximately 5 minutes to complete. Not all the students answered all the questions in the survey. See Appendix 2 for summary tables of responses to the closed-ended questions.

2016 COMPARISON

Only 10 trials were offered in 2016 compared with 14 in 2017. 4,086 students participated in trials in 2016, compared with 4,985 in 2017.

The 2016 student survey was longer, and included more open-ended questions

Only 663 students responded to the survey in 2016 – a response rate of 16%. In 2017, the response rate improved to 18% with 1,035 responses received.

MAIN FINDINGS

OVERALL SATISFACTION

Respondents were positive about completing a Digital Trial examination, with 80% (755 of 939) agreeing or strongly agreeing it was a positive experience. Levels of satisfaction were higher than for the 2016 trials when only 64% felt it was a positive experience.²

Responses were analysed separately by Digital Trial subject to determine whether there were any differences in satisfaction levels depending on the type of subject being examined digitally. Responses are presented in the table below for those subjects where more than 20 responses were received. For the purpose of the analysis, Spanish and French are presented together. Those respondents who completed the Health trial were the most positive, with 95% agreeing or strongly agreeing that completing a Digital Trial examination was a positive experience. Those completing the Science and Economics trials were the least positive, at 72% and 71% respectively.

	Science	English	Economics	History	Health	Geography	Business Studies	Spanish and French
Strongly Agree/Agree	72% (174)	89% (204)	71% (105)	77% (64)	95% (73)	81% (53)	73% (21)	88% (35)
Strongly Disagree/Disagree	28% (66)	11% (25)	29% (42)	23% (19)	5% (4)	19% (12)	27% (8)	12% (5)

² There were some technical and software issues in 2016 that have since been addressed.

Responses were mixed when students were asked whether they preferred completing the examination digitally or on paper, with 61% (576 of 941) agreeing or strongly agreeing that digital was preferable, and 39% (365 of 941) disagreeing or strongly disagreeing³

Again, responses were analysed separately by Digital Trial subject to determine whether there were any differences depending on the examination the respondents completed digitally.

Responses are presented in the table below for those subjects where more than 20 responses were received. For the purposes of the analysis, Spanish and French are presented together. There are clear differences by subject. For Science and Economics, 43% and 44% of respondents respectively agreed or strongly agreed that they preferred completing the examination digitally. In contrast, for Health it was 81%, for English 79%, and for Spanish and French, 78%.

	Science	Economics	English	Geography	Health	History	Business Studies	Spanish and French
Strongly Agree/Agree	43% (103)	44% (64)	79% (182)	58% (38)	81% (62)	64% (53)	69% (20)	78% (32)
Strongly Disagree/Disagree	57% (138)	56% (81)	21% (48)	42% (27)	19% (15)	36% (30)	31% (9)	22% (9)

Respondents were asked what they liked most about completing the Digital Trial examination and what they disliked most. The answers were free text. Key themes and selected representative quotes are presented by Digital Trial subject in the table below. The responses show some differences depending on the Digital Trial subject examined. Responses for subjects requiring essay type answers, e.g. English, History, Classics, Business Studies and Language subjects, e.g. French and Spanish, were more positive than responses for subjects where graphs and formulas had to be created, e.g. Geography, Economics, Science and Physics.

Trial subject	Key themes	Quotes
Business Studies	Likes Being able to type and edit Faster than hand writing Exam layout Dislikes	Likes <i>I liked that i could edit my answer if i had realised i needed to add or change anything and i didn't have to scribble it out. I also liked that because i use a laptop quite often i can type quite fast and my hand doesn't get sore like it would writing.</i> <i>Quick and easy to type. Information was set out easily. Easy to use resources instead of having to look over pages, Easy to access</i>

³ This was not a question in the 2016 survey.

Trial subject	Key themes	Quotes
	Video didn't work Video not relevant	Dislikes <i>The video did not work and i feel that because of that i was unable to complete the exam to the best of my ability</i> <i>i dislike the video that was put at the end of the exam. it was hardly even relevant to the exam itself it just had what you could put into words i just find it unnecessary and that's probably the only thing i disliked.</i>
Classical Studies	Likes Being able to type Dislikes: Typing	Likes <i>i wont have to worry at how ugly my hand writing is</i> Dislikes <i>its more stressful than writing like writing it more than tying it... I can see what I'm writing more and can see the mistakes I do more kind of.</i>
Economics	Likes Being able to type and edit Faster than hand writing Graphing tools Dislikes Noisy keyboards Graphing tool Scroll bar Possibility of cheating Video	Likes <i>I like that typing is faster than handwriting in most occasions. I like it being digital in the sense that you can edit things you have done and easily go back and add information while keeping your answer organised and easy to read.</i> <i>It tells you the time you have left to go and also informs you about the standard you have completed/haven't finished/are no right now by showing green/orange/blue.</i> <i>The graphing tools were efficient and not complicated at all. Faster to write worded answers as I find typing is usually less time consuming than writing by hand. The exam was well set out and was not confusing or unclear.</i> Dislikes <i>We did it in a school computer room and the keyboards are really loud so it was distracting</i> <i>For the economics exam, we had to draw graphs using the online software which was difficult to use and there were no instructions how to use it.</i> <i>the graphing system is very hard to use. maybe if the scale was already given it would make it a lot easier. I was unable to create different types of line and/or</i>

Trial subject	Key themes	Quotes
		<p><i>arrows and could only make a solid black line. It was quite hard to plot the points accurately.</i></p> <p><i>the separate scroll bar for the graph is complicated to navigate</i></p> <p><i>The Graphs were really touchy. I suggest adding a dot tool so you can place the dots first and then run the lines through them</i></p> <p><i>having to fill in the graphs. was so fiddly!!! and took ages</i></p> <p><i>The graphs were timely and a bit difficult to work as it involved a lot of clicking and dragging. I also disliked the video as I found it hard to understand and it wasn't very informative.</i></p> <p><i>I disliked mostly the worry that others behind me could see me screen.</i></p>
English	<p>Likes:</p> <p>Being able to type and edit</p> <p>Faster than hand writing</p> <p>Clock timer, word count, and spell check</p> <p>Dislikes</p> <p>No dislikes</p> <p>Possibility of cheating</p> <p>Network and device errors</p> <p>Not able to plan on paper</p> <p>Sore eyes</p> <p>Possibility of losing your work</p>	<p>Likes</p> <p><i>I liked doing the exam digitally because we're able to use modern day technology to assess and I find that really cool.</i></p> <p><i>The ease of being able to copy and paste, move sentences around and change my answers without having to cross it all out</i></p> <p><i>My handwriting is rather shoddy and being able to type allowed me to clearly and rapidly convey my ideas in a much more concise and easy manner compared to doing it by hand which is much slower and messy</i></p> <p><i>I liked how little was on the screen so it didn't overwhelm me when I was doing my work, I also liked the little clock constantly in the corner to tell me how much time I had left</i></p> <p>Dislikes</p> <p><i>I feel it would be very easy for people to cheat and that make it unfair</i></p> <p><i>It was stuck on Loading for 6 minutes, I eventually refreshed and it worked.</i></p> <p><i>The planning boxes need to be taken out or improved. Just give us paper planning sheets.</i></p> <p><i>It is quite difficult staring at a computer screen for 3 hours, but is so much easier to complete to a high standard</i></p>

Trial subject	Key themes	Quotes
		<p><i>I lost connection as I finished my essay and once i logged in most of my essay was deleted.</i></p> <p><i>My computer had a network error, i'm not sure if it was the computer's or NZQA's fault, but I had to switch computer mid exam and relog in, which did effect my trail of thought. Luckily I was ahead of the timer and did not fail to complete my exam. But, had I been behind the timer it would have been a big setback for me to have to change computer.</i></p>
French	<p>Likes:</p> <p>Audio controlled by student</p> <p>Being able to type and edit</p> <p>Dislikes</p> <p>Notes system</p> <p>Headphones</p>	<p>Likes</p> <p><i>Being able to hear the listening texts as many times as I liked</i></p> <p><i>The audio was very clear and easy to follow, also that it had a pause button and you could rewind it to wherever you wanted it.</i></p> <p>Dislikes</p> <p><i>The possibility for limitations to one's work because of the type of device used, poor quality headphones or bad and slow typing.</i></p> <p><i>I would've liked a better notes system because when i had got to the bottom of the box the audio recording was too high so when i typed while listening the page kept jumping up and back down.</i></p>
Geography	<p>Likes</p> <p>Being able to type and edit</p> <p>Faster than hand writing</p> <p>Dislikes</p> <p>Inability to draw supporting diagrams to explain ideas</p> <p>Scrolling</p> <p>Slow typing</p>	<p>Likes</p> <p><i>You are able to change and edit answers a lot easier. The ability to easily go back and add information, or change information was great for a scatterbrain like me.</i></p> <p>Dislikes</p> <p><i>i was not able to draw any supporting diagrams for my answers, so i had to do that on a hard copy. this was impractical and took longer than required to do so then on the computer</i></p> <p><i>On the drag and drop precis map question i was unable to move the symbols therefore leaving me unable to answer the question</i></p> <p><i>Some things were a bit difficult to do on the computer and scrolling up and down the page constantly to view everything was very annoying.</i></p> <p><i>Better to use original method for exams (books and paper) because that is how we are taught in class.</i></p>

Trial subject	Key themes	Quotes
		<i>I'm not as quick at typing as i am at writing by hand. And also spelling mistakes</i>
Health	<p>Likes</p> <p>Exam layout</p> <p>Being able to type and edit</p> <p>Faster than hand writing</p> <p>Dislikes</p> <p>No guidance as to length of answers</p> <p>Loud typing noises</p> <p>Possibility of cheating</p> <p>Prefer pen and paper</p> <p>Scrolling</p>	<p>Likes</p> <p><i>it was set out nicely and easy to understand didn't have to flick back pages to look and reread scenarios and ads</i></p> <p><i>i was able to answer faster, as i find it easier to type than write. I was also able to easily organise my ideas. and rearrange my answers when i changed my mind.</i></p> <p>Dislikes</p> <p><i>There was no lines to indicate if I wrote heaps or wrote too little</i></p> <p><i>I disliked how the typing caused alot of noise and how there was alot of errors typed</i></p> <p><i>I'd rather write things down as they are in my head and put pen to paper makes it much easier.</i></p> <p><i>Scrolling through the pages was touchy</i></p>
History	<p>Likes</p> <p>Being able to type and edit</p> <p>Faster than hand writing</p> <p>Video and audio resources</p> <p>Dislikes</p> <p>Cannot highlight</p> <p>Loud typing noises</p> <p>Possibility of cheating</p> <p>No scrap paper to make notes</p> <p>Limited number of times video could be watched.</p>	<p><i>When writing essays you are free to add things afterwards that you may have forgotten or to change things as you please.</i></p> <p><i>I found my hands weren't as sore and I didn't lose my train of thought through having to take breaks to let my hands rest and I was able to link my ideas better.</i></p> <p><i>the use of the computer and the audio/video files were useful as they showed information that would be difficult to get in such an effective way otherwise.</i></p> <p>Dislikes</p> <p><i>Unable to highlight any key points or ideas when reading Sources (history)</i></p> <p><i>The layout, the essays writing space was very small so it was hard to scan and read everything. Also there is spell check on the exams? That like having a dictionary in the real exams. I personally prefer writing things, listening to everyone smash keyboards was rather distracting. It extremely easy to cheat. Was annoying to type not a fast typer.</i></p> <p><i>I wasn't able to use certain tactics or methods that requires just pen and paper that helps me remember certain patterns or things that I could use in my exam. Some scrap paper or a notebook would be helpful for if</i></p>

Trial subject	Key themes	Quotes
		<p><i>I needed to use other methods or techniques to help me remember or figure out things i need to know.</i></p> <p><i>I didn't like the layout of the questions, or the limited amount of runs for videos and sound clips. Also i found it difficult to structure my questions and often wished for a piece of paper to write my ideas out, and in the end felt frustrated with the digital exam as I prefer to write my answers out by hand in essay format to typing, as it made my fingers start to cramp. times at the top of the screen also made me feel like i had to rush, and watching the times count down made me feel anxious as i kept looking up to see how much time I had left.</i></p>
Media Studies	Likes Being able to type and edit Faster than hand writing Dislikes Network connections Typing noise	Likes <i>I'm far more comfortable typing than I am writing by hand. I can type faster than I can write, and typing smooths nicer for me</i> Dislikes <i>Took me three tries to get working computer the noise of everyone typing. its a mass distraction to me and to others i would imagine</i>
Physics	Likes Being able to type and edit Faster than hand writing Dislikes Scrolling to see formulas Pen and paper easier	Likes <i>The writing parts</i> <i>I find that when hand writing a physical exam, ones hands tend to get very tired. On a digital exam my hands did not get tired and I was also able to write faster than had I done a physical exam.</i> Dislikes <i>the formulas were only on the 1st page so i had to keep flicking back >:-)</i> <i>I found many small inconveniences and overall found the concept of digital assessment a downgrade of written assessments. In theory it seems nice but there are very little things i frequently felt were improvements over written assessments and there were plenty of inconveniences that I felt where a step backwards from written assessments.</i> <i>Not being able to do calculations or annotate by hand.</i>

Trial subject	Key themes	Quotes
		<p><i>A keyboard and mouse restrict how easily work can be shown. using pen and paper it is rather simple but keyboards don't always have the symbols required in an assessment, this can slow down my working</i></p>
Samoan	<p>Likes</p> <p>Being able to type</p> <p>Dislikes</p> <p>Nothing</p>	<p>Likes</p> <p><i>The fact that I was able to type, because typing in this day and age is very common.</i></p> <p>Dislikes</p> <p><i>Nothing</i></p>
Science	<p>Likes</p> <p>Being able to type and edit</p> <p>Faster than hand writing</p> <p>Clock timer Dislikes</p> <p>Scrolling back and forth</p> <p>Eye strain</p> <p>Slower than on paper</p> <p>Using keyboard and mouse to type formulas and equations</p> <p>Not being able to touch type</p> <p>Not being well prepared for digital.</p> <p>Font size</p> <p>Noisy typing</p>	<p>Likes</p> <p><i>I found that the timer in the corner was really helpful and helped me keep to my time management plan</i></p> <p><i>I liked how it was easy to enter data and text. The pages mostly loaded quickly, although there was one time where the page would not load. However, this was fixed by refreshing the page</i></p> <p><i>It feels more natural as a student who mostly works on a device (my school has a BYOD program in place for my year group and some others)</i></p> <p><i>I liked the fact that you could go back and delete and change your work/answers easily if you mucked up. It was alot easier than having to cross everything out and then trying cram the new answer into the space provided when writing.</i></p> <p><i>the fact that NZQA is attempting to appeal to us in a digital way.</i></p> <p><i>the modernisation of NZQA external exams</i></p> <p><i>Personally I work better using computers/digital technology so it was a very nice change, for me at least. I loved the layout and was very pleased with this overall.</i></p> <p>Dislikes</p> <p><i>It was not vey polished. There needed to be keyboard shortcuts for using the subscript, and superscript functions when writing things like chemical formulas, and mechanics units like acceleration and speed. It was very strenuous and slow to manually click the buttons each time. There were also times were the questions were unclear, that could have been interpreted in a few DIFFERENT ways, not allowing the student to get a question correct, that the student</i></p>

Trial subject	Key themes	Quotes
		<p><i>might of been able to get correct, which could result in a lower overall grade. There were 2 things that I didn't like here, but I equally disliked them both, so I thought I would mention them.</i></p> <p><i>having to type up the formulas it took too long and wasted time.</i></p> <p><i>Writing equations took 5 years compared to writing it on paper. bad idea.</i></p> <p><i>Managing my time and answering the questions is harder and takes more time because we have not prepared for exams like this in class, we have only ever learnt exam management skills that translate to paper exams.</i></p> <p><i>I couldn't answer the balancing equations easily without paper, and I didn't know how much time I had left as I mistracked the time that I had started on. There weren't all of the resources on the device the we needed to complete the exam, such as the ion table, which used up quite a bit of my time trying to find it. The size of the font was really small and you couldn't zoom in. You couldn't highlight the questions, so it was harder to make sense of the questions when constructing my answers. It really make sense of how much you were writing, and there was no indication of how much we should write (using lines) like in the usual paper exams. didn't enjoy scrolling up and down while answering questions.</i></p>
Spanish	<p>Likes:</p> <p>Audio controlled by student</p> <p>Being able to type and edit</p> <p>Faster than hand writing</p> <p>Dislikes</p> <p>Network and connection problems</p> <p>Not being able to highlight and take notes</p>	<p>Likes</p> <p>That in the listening section it was less rushed and I could work at my own pace, I could pause the audio to write down notes and replay sections in order to listen to and understand the audio more thoroughly. Also it is a lot easier to type answers than to write them, as typing is faster and easier</p> <p>Dislikes</p> <p><i>I couldn't highlight, circle words etc.</i></p> <p><i>That I had to self manage my time more on the listening because I found it was easy to lose time by replaying sections a lot in order to try to get a perfect answer.</i></p> <p><i>The loading froze twice so i had to refresh my page.to adjust volume and when skipping to specific segment parts</i></p>

Trial subject	Key themes	Quotes
Te Reo Rangatira	No responses received.	

THE DIGITAL TRIAL EXAMINATION EXPERIENCE

Preparation

NZQA made familiarisation activities available, including to students who were participating in the trials. The purpose of the familiarisation activities was to provide students with the opportunity to experience the look and feel of a digital examination, including the login and submission process that students would experience, and the different tools that are part of the digital examinations.

73% of respondents (712 of 972) agreed or strongly agreed that they found the familiarisation activities useful in their preparation for their digital examination. 19% of respondents (184 of 972) said that they did not know the familiarisation activities existed.

On the day

65% of respondents (392 of 602) reported using a school-provided device to complete their Digital Trial examination, and 35% of respondents (210 of 602) reported using their own device. More students reported using their own device in 2017 than in 2016.

41% of respondents (369 of 894) reported they used a desktop computer to complete their Digital Trial Examination, and 57% (509 of 894) reported they used a laptop. Only 16 respondents (2%) reported they used a tablet. Usage of laptops was greater than in 2016, when more respondents reported using desktop computers than laptops.

18% of respondents (176 of 981) reported experiencing network problems and 7% (71 of 981) reported experiencing device problems when accessing or completing the Digital Trial examination. This is slightly lower than in 2016 when 30% of respondents reported experiencing network or device problems.

90% of respondents (852 of 948) found it very easy or easy to navigate through the Digital Trial examination, 9% (84 of 948) found it difficult and 1% (12 of 948) found it very difficult. Analysed by Digital Trial subject ⁴, responses were slightly less strongly positive for Economics and Science than for English, Geography, Health, History, Spanish, French and Business Studies.

⁴ For those Digital Trial subjects where more than 20 responses were received

	Economics	English	Geography	Health	History	Business Studies	Science	Spanish and French
Strongly Agree/Agree	86% (127)	94% (217)	93% (59)	97% (73)	95% (81)	89% (26)	82% (201)	98% (40)
Strongly Disagree/Disagree	14% (20)	6% (15)	8% (5)	4% (3)	5% (4)	10% (3)	18% (43)	2% (1)

87% of respondents (820 of 944) found entering their responses to the Digital Trial examination very easy or easy, 11% (105 of 944) found it difficult and 2% (19 of 944) found it very difficult. Analysed by Digital Trial subject⁵, responses were slightly less strongly positive for Economics, Science, and Spanish and French than for English, Geography, Health, History and Business Studies.

	Economics	English	Geography	Health	History	Business Studies	Science	Spanish and French
Strongly Agree/Agree	83% (122)	91% (210)	91% (59)	93% (71)	91% (77)	97% (28)	80% (195)	81% (46)
Strongly Disagree/Disagree	17% (25)	9% (21)	9% (6)	7% (5)	9% (8)	3% (1)	19% (47)	11% (19%)

74% of respondents (701 of 944) agreed or strongly agreed that completing the digital examination took less time than they would have expected had it been paper-based. Analysed by Digital Trial subject⁶, responses were more mixed, with much stronger agreement rates for English, Health, Business Studies, Spanish and French, and weaker agreement rates for Science and Economics. See table below.

	Economics	English	Geography	Health	History	Business Studies	Science	Spanish and French
Strongly Agree/Agree	64% (95)	87% (199)	78% (51)	91% (70)	75% (63)	93% (27)	56% (136)	85% (35)
Strongly Disagree/Disagree	36% (52)	13% (30)	22% (14)	9% (7)	25% (21)	6% (2)	44% (106)	15% (6)

DIGITAL TECHNOLOGY AT HOME AND AT SCHOOL

At home

⁵ For those Digital Trial subjects where more than 20 responses were received

⁶ For those Digital Trial subjects where more than 20 responses were received

87% of respondents (892 of 1020) reported having more than one device at home. 65% of respondents (659 of 1020) reported having three different types of devices available at home.

At school

Very few respondents reported never using digital technology to support their learning in class or for homework.

70% of respondents (711 of 1020) reported that digital technology is used in class to support their learning very often or quite often. A further 29% (291 of 1020) reported using digital technology in class occasionally.

80% of respondents (813 of 1011) reported that digital technology is used for homework very often or quite often. A further 18% (182 of 1011) reported using digital technology in class occasionally.

55% of respondents (557 of 1010) reported that digital technology is used in internal assessment very often or quite often, 36% (360 of 1020) reported it was used occasionally, and 9% reported it was never used.

2017 findings are similar to those reported for the 2016 trials.

SUGGESTIONS/FEEDBACK

Respondents provided a range of suggestions in answer to the question “Are there any features or functions that you think future digital assessments should include?”. Representative quotes are listed in the table below by Digital Trial subject.

Trial subject	Features and functions for future digital assessments
Business Studies	<i>I think that the interface could be easier to navigate the video took me off task towards the end it wasn't needed Maybe a spell check, not so much for english exams but for things that aren't marked on spelling it is still nice to have good spelling so the marker can read and understand.</i>
Classical Studies	No responses received.
Economics	<i>I think they should include scratch paper to the side of the exam for writing down ideas. Fix the graphing on all devices. It would be cool if we can draw our graphs onto the computer by using a drawing pad connected to the computer like the ones used in art . Supplying drawing tablets such as those from Wacom is the only reasonable solution I can see to this issue, but of course the cost of that would be significant.</i>

Trial subject	Features and functions for future digital assessments
	<p>Systems like this are likely to give RSI to users. It would also be easier to put graphs and tables on the side of the typing area, so we don't have to scroll up and down the page every time we want a number from it. Buttons such as the superscript and subscript ones should have hotkeys. Yet again, all the scrolling and unnecessary button clicking is painful for my wrist.</p> <p>Perhaps you could be able to draw you graphs on paper to hand them in (or on a drawing tablet). That would be a lot easier and simpler. Also think the text boxes of information should be used instead of the video format. The video is irritating.</p>
English	<p>You could make the timer/navigation bar move along with the page so that the timer is always visible as it was annoying to scroll back up to look at the remaining time.</p> <p>Was much better than the written exam. Just need to improve the planning boxes and it will be good!</p> <p>Word limit reached should be more obvious. Should be visible to check</p> <p>Too many separate scrolling bars, some pages has upwards of three separate scroll bars which made it really annoying to try and get from the top to the bottom.</p> <p>Just work on the scrolling but it was indeed a great experience to have.</p> <p>I was happy with everything aside from my network error. I would very much prefer to do all History and english exams digitally. I think it is a good idea to do exams digitally except exams like maths and science which I would prefer to do on paper. I would have thought that hearing everybody type would put me off but it really didn't. I hope next year we can complete this exam on computers again!</p>
French	<p>I was confused by how open it was. If you had wanted it could have been easy to use google or word reference because it wasn't locked on that tab.</p> <p>In the listening notes section, if there were more notes than the original space provided, it would glitch really badly every time you typed a character, with the screen scrolling up and down while you typed which got really annoying</p>
Geography	<p>I think that you should be able to use a drawing tool or something like that if you needed to show a map or diagram of some sort</p> <p>i think within a 3 hour time bracket there should be 5 minutes to look away from your screens as it is really harsh on your eyes and hands this can in the future cause RSI. I also had problems with loading the exam and there was an issue as half way though the exam as i lost all my work and had to start again.</p> <p>Word count and highlighter as well as a line that represents an A4 page so we know that its equivalent to writing the exam. Also the questions they should highlight the main points so it's easier to read.</p> <p>auto correct. automatic capital letters</p>
Health	<p>make it easier to flip through parts of the paper and back. offer people to type if you are a slow typer. offer to have the option of doing it on paper.</p> <p>I personally think that all internals and externals should be digital as it creates less stress and anxiety for students as technology is everywhere and teenagers are used to typing fast and it lets our talent of typing be useful :))))</p>

Trial subject	Features and functions for future digital assessments
	<p><i>I think it should be an option to complete an exam digitally or written because some students are faster typers and other writers which may put them at an advantage or disadvantage to others.</i></p> <p><i>I think that there should be a function to say that you should full-screen the computer to stop people from opening tabs, and if they un-full-screen it, then it should stop the exam until a supervisor has checked your computer including your history.</i></p>
History	<p><i>I think the lines on a paper exam are a good indication of how much generally someone should write- I think the blank page meant I wasn't really sure how much detail to go into for the question. Some clarity on this would be great. :)</i></p> <p><i>If you watch any video or resource of a certain topic, you should be able to replay the video instead of it just cancelling out after you watch it once. Cause people can't interpret information that quick, for how long any video would play.</i></p> <p><i>I think there should be a word count included for all questions, not just essays as well as spellchecks be on all questions not just essays.</i></p> <p><i>I think that there should always be an option of digital or handwritten exams as I much prefer handwritten</i></p>
Media Studies	No responses received.
Physics	<p><i>The ability to annotate questions and/or highlight key words in the questions.</i></p> <p><i>Showing equations without going back to the first page</i></p> <p><i>They should add an approximate amount of text that should be written for the answer</i></p>
Samoan	No responses received.
Science	<p><i>The only feedback is to increase the window size to the full size of the browser it should disable us from going into other websites that students can use to cheat. Other than that, the experience is great.</i></p> <p>KEYBOARD SHORTCUTS FOR THE SUBSCRIPT AND SUPERSCRIPT FUNCTIONS!!! <i>It was extremely annoying to click the buttons each time, If this exam was a chemistry paper only, I would much rather prefer to do it on paper, because formulas are much easier to write and less excruciating when done by hand, but for long answers, definitely typing was a huge advantage over writing.</i></p> <p><i>Calculator, formulae on each page, something that allows you to type in calculations easier.</i></p> <p><i>It would be cool if you could click a button (similar to calculator) to open periodic table table of ions and physics formula sheet for quick access</i></p> <p><i>I think the subscript buttons in chemistry need to be more efficient and easier to use.</i></p>

Trial subject	Features and functions for future digital assessments
	<p><i>It would be great if during the digital exam, especially for science, that we are given a paper copy of the periodic and ions tables for chemistry and the formulas needed in physics.</i></p> <p><i>The superscript and subscript buttons really need an obvious hotkey, as it is painful and unergonomical to move and click those buttons all the time.) When I zoom out the page using normal controls within the browser, it is impossible to zoom back in again without refreshing and restarting the assessment.) The ability to change line height and font is completely unnecessary.) It isn't great having to scroll up and down and switch questions all the time to view graphs and formulas required for questions. I would like to see graphs and formulas displayed to the side of the questions, rather than on the same page as it. CSS display: flex; could be useful for this.) Math editor makes no sense.) Other than that, just a few minor alignment issues that don't matter much, and some inefficient HTML and CSS.</i></p>
Spanish	<i>no, i think it was pretty good. it was very helpful that the teacher let us know what we were doing beforehand and how to get onto the website</i>
Te Reo Rangatira	No responses received

STUDENT SURVEY 1 QUESTIONS

1. What device did you use to complete this digital exam?

School provided
Your own device

Desktop
Laptop
Tablet

2. What devices do you have access to in your home? Select all that apply.

Smart phone Laptop Desktop computer Tablet

3. How often is digital technology used in your learning?

	Very Often	Quite Often	Occasionally	Never
In class				
For homework				
For Internal Assessments				

4. Did you experience any network or device problems while accessing or completing this digital exam?

No problems

Or (tick all that apply)

Network problems

Device problems

5. I found the familiarisation activities useful in my preparation for my digital exam.

Strongly agree Agree Disagree Strongly disagree I didn't know they existed

6. What did you like most about completing the exam digitally?

What did you dislike most about completing the exam digitally?

7. How easy was it to navigate through the digital exam?

Very easy Easy Difficult Very difficult

8. How easy did you find entering your responses to the digital exam?

Very easy Easy Difficult Very difficult

9. I found completing the digital exam took less time than I expected than if it had been paper based.

Strongly agree Agree Disagree Strongly disagree

10. I preferred completing the exam digitally rather than on paper
Strongly agree Agree Disagree Strongly disagree
11. Overall, I found completing this exam digitally was a positive experience.
Strongly agree Agree Disagree Strongly disagree
12. Are there any features or functions that you think future digital exams should include, or
do you have any other feedback?

Appendix 2

SUMMARISED RESPONSES BY QUESTION

Q1a What device did you use to complete this digital exam?

	frequency	percentage
Desktop	369	41
Laptop	509	57
Tablet	16	2
	894	

Q1b What device did you use to complete this digital exam, school provided or your own device?

	frequency	percentage
School Provided	392	65
Own Device	210	35
	602	

Q2 What devices do you have access to in your home?

	frequency	percentage
Tablet	3	0
Desktop Computer	17	2
Laptop	72	7
Laptop Tablet	10	1
Laptop Desktop Computer	16	2
Laptop Desktop Computer Tablet	5	1
Smart phone	36	4
Smart phone Tablet	11	1
Smart phone Desktop Computer	24	2
Smart phone Desktop Computer Tablet	21	2
Smart phone Laptop	212	21
Smart phone Laptop Tablet	162	16
Smart phone Laptop Desktop Computer	142	14
Smart phone Laptop Desktop Computer Tablet	289	28
	1020	

Q3 How often is digital technology used in your learning?

In Class	frequency	percentage
Very Often	340	33
Quite Often	371	36
Occasionally	291	29
Never	18	2
	1020	
For Homework	frequency	percentage
Very Often	447	44
Quite Often	366	36
Occasionally	182	18
Never	16	2
	1011	
For Internal Assessments	frequency	percentage
Very Often	259	26
Quite Often	298	30
Occasionally	360	36
Never	93	9
	1010	

Q4 Did you experience any network or device problems while accessing or completing this digital exam?

	frequency	percentage
No Problems	734	75
Network Problems	176	18
Device Problems	71	7
	981	

Q5 I found the familiarisation activities useful in my preparation for my digital exam.

	frequency	percentage
Strongly Agree	144	15
Agree	568	58
Disagree	57	6
Strongly Disagree	19	2
I didn't know they existed	184	19
	972	

Q7 How easy was it to navigate through the digital exam?

	frequency	percentage
Very Easy	343	36
Easy	509	54
Difficult	84	9
Very Difficult	12	1
	948	

Q8 How easy did you find entering your responses to the digital exam?

	frequency	percentage
Very Easy	327	35
Easy	493	52
Difficult	105	11
Very Difficult	19	2
	944	

Q9 I found completing the digital exam took less time than I expected than if it had been paper based

	frequency	percentage
Strongly Agree	318	34
Agree	383	41
Disagree	166	18
Strongly Disagree	77	8
	944	

Q10 I preferred completing the exam digitally rather than on paper.

	frequency	percentage
Strongly Agree	251	27
Agree	325	35
Disagree	226	24
Strongly Disagree	139	15
	941	

Q11 Overall, I found completing this exam digitally was a positive experience.

	frequency	percentage
Strongly Agree	229	24
Agree	526	56
Disagree	138	15
Strongly Disagree	46	5
	939	