BHS Chromebook Impact Evaluation

Attitudes to Digital Learning & Confidence Using Technology

Responses from parents and pupils indicate an increase in pupil confidence using digital technology and preparedness for the digital workplace.

Parental view on advantages: *"Easy access to all the online resources that are on offer. Has allowed early development of IT literacy. Has fostered life skills that are now essential i.e. working off shared drives etc. Has not experienced having to work with out of date or unreliable pcs, as his elder sister has"*

Has using your Chromebook made you feel more confident about using digital technology for studying or work in the future?
80 responses

- Yes
- No
- Not sure

11.3%
18.8%
70%

In the yearly school survey pupils are asked to rate their confidence in applying a broad range of digital skills. S1 responses this year show significant improvement across these skills when compared to the pre-Chromebook cohort from 2018. Particularly in areas such as online file sharing and collaboration. Access to Code.org & Microbit.org have also provided a great opportunity for pupils to develop a basic appreciation of programming, hitherto difficult to access in class due to a lack of ICT suites.

Feedback also broadly supports the conclusion that the introduction of Chromebooks has led to increased teacher confidence in using digital technology within their lessons and many staff have been proactive in using Chromebooks to enhance lessons. While CLPL sessions have taken place, comments suggest that further CLPL will be necessary to reach a point where all staff feel fully confident.

My confidence to use digital technology within my lessons has improved as a consequence of the Chromebook rollout.
28 responses

2 (7.1%) 3 (10.7%) 4 (14.3%) 8 (28.6%) 11 (39.3%)
5
Count: 11

Responses given on a scale from 1: Strongly Disagree to 5: Strongly Agree
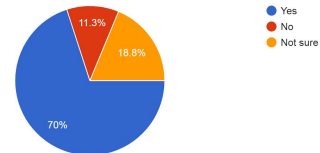
Literacy

Feedback from the Languages faculty, (English and Modern Languages) highlighted that having access to the Chromebook in lessons has allowed both teams to utilise learning platforms such as Accelerated Reader, Sumdog Literacy and Linguascope. In particular, access to Accelerated Reader data indicates that, on average, S1 pupils are reading seven books per six months, contrasting a national decline in reading for pleasure. Teachers found it particularly useful to view pupil work live through Classroom allowing immediate feedback for improvements to extended writing.

Numeracy

Feedback from the Mathematics faculty was very positive overall. While using Google Drive and online docs was not felt to be as beneficial in this setting as it was in others, access to online
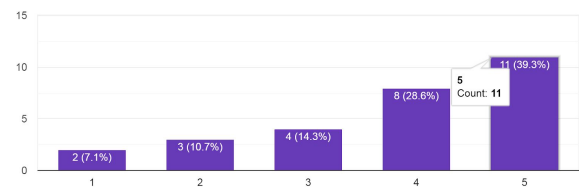
services such as Maths Workout significantly improved pupil engagement across a range of topics. Particular advantages identified were; high degree of differentiation & individualised progression, immediate feedback to both pupils and teachers, ability to deliver homework and revision materials online and pupil access to self-learning at home through online services such as YouTube.

Support for Pupils with Additional Support Needs

Chromebooks have been of significant benefit to these pupils. All S1s have been instructed on accessibility features and SfL teachers have provided targeted guidance to pupils who benefit from features such as voice dictation, screen reader and coloured overlays. Teachers commented that this has allowed these pupils to engage with lessons more fully, with less support and without the stigma attached to having an SLA or being the only pupil using ICT. Pupils who previously worked on open area computers due to lack of ICT no-longer

Chromebooks have made it easier for pupils with additional support needs to engage with my lessons.
27 responses

Responses given on a scale from 1: Strongly Disagree to 5: Strongly Agree

need to leave the classroom. In some non-SQA assessments, pupils have been able to make use of these accessibility features rather than requiring a reader, scribe or personalised format (e.g. coloured paper). In some cases this avoided separate accommodation.
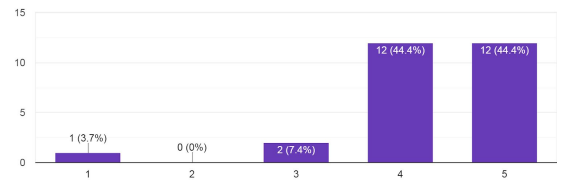
Teacher: "As both a classroom teacher and an SfL teacher the impact has been very positive. It has really allowed dyslexic pupils to fully engage with lessons by reducing the barriers they face. All S1 pupils know how to use speech to text and also select to speak which has really created equal opportunities. I also love the screen tinting which was rolled out in such a way that it became a fun thing to do and so those with visual impairment did not feel anxious about needing coloured glasses, overlays, etc. I think I had best stop there but for pupils with ASN the impact has been very significant."

*Pupil*: "If I am writing an essay or story I feel like I write more because I can type faster than I can write."

Parent: "My son has had difficulty with his hand writing and more recently has needed some additional support with his work and the chromebook has been a major turning point for him, being able to use it in all of his classes has helped make his learning less stressful and he has managed to complete most work in class which in turn has reduced some of his anxiety surrounding homework and feeling pressure in class"

Equity

There is strong evidence to suggest that Chromebooks have increased equity, specifically - access to a device for learning at home. 25% of S1 pupils reported that, had they not been provided with a Chromebook, they would not have had a device at home to use for homework & study. Over 80% of pupils reported that they

If you had not been given a Chromebook, would you have had a device at home (laptop/computer etc.) which yo...ould use for studying and homework?
79 responses
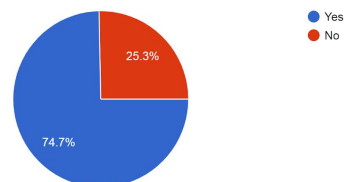
use their Chromebook either several times a week or daily for homework and study outside of school. Numerous parent/carer comments indicated previous issues with pupils being unable to access a shared home computer had been removed, particularly in multiple-child households.

Parent: *"Having been given a chromebook has been a major turning point for us. We don't have a laptop or desktop in the household as feeling the financial pressure to have one was concerning for us. We have work laptops but due to restrictions our son was unable to use them for personal use. We are very grateful for the chromebook and since our son has had increased difficulties at school due to a medical issue I feel the chromebook has been a lifeline. My son can work quicker/efficiently/effectively and he is very responsible with his chromebook which is good to see. Thank you!!"*

Raising Attainment Across the Curriculum

While there is no broad dataset which could yet be used to reliably draw a causal relationship between the Chromebook introduction and attainment across the curriculum for S1s, the perception from pupils, parents/carers and teachers is that Chromebooks have improved the learning experience. Particular advantages reported were; more efficient provision of formative feedback, collaborative learning through Google Drive, rapid access to the internet for research, better options for differentiation and ease of sharing resources without the cost and time implications of photocopying. The potential for improved tracking and monitoring through Google Classroom has also been identified.

Teacher on Advantages: *"The ability to use digital questioning and formative assessment strategies. It has been great for student evaluations as Google Forms pulls all the information into one convenient screen for me to view."*

Do you believe that the Chromebook issued to your S1 child has been beneficial to their learning?
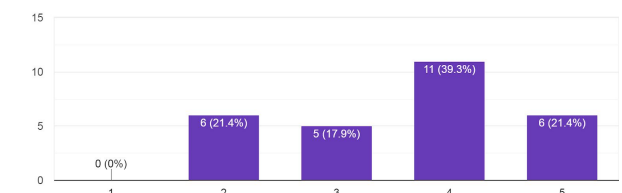57 responses

- Yes
- No
- Not Sure

89.5% / 7%
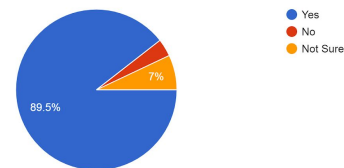
How useful do you feel your Chromebook has been in helping you to learn this year?
80 responses

	1	2	3	4	5
	2 (2.5%)	4 (5%)	10 (12.5%)	33 (41.3%)	31 (38.8%)
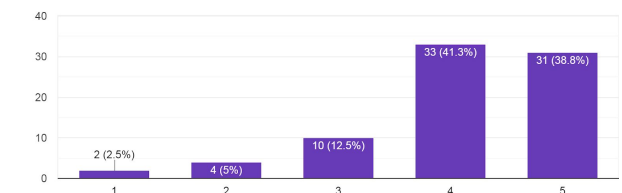
Chromebooks have improved the range of information/resources available to my pupils during lessons.
28 responses

	1	2	3	4	5
	0 (0%)	3 (10.7%)	3 (10.7%)	10 (35.7%)	12 (42.9%)
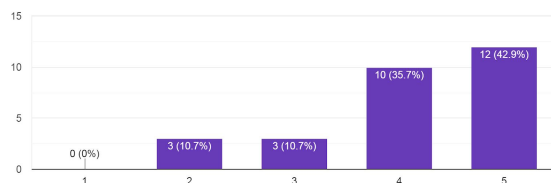
Chromebooks have improved pupils' learning experience in my classes.
28 responses

|	1	2	3	4	5
	0 (0%)	6 (21.4%)	5 (17.9%)	11 (39.3%)	6 (21.4%)

Responses given on a scale from 1: Strongly Disagree to 5: Strongly Agree

Family Learning & Parental Engagement

59% of parents/carers believed that the Chromebook provided further opportunities for them to engage with their child's learning, suggesting a positive impact overall. Positive comments tended to centre around issues such as; being able to check homework tasks & assignment grades, better access to SMH and increased engagement with independent learning at home. However, one parent did comment on

Has the Chromebook provided any further opportunities for you to engage with their learning as a parent/carer?
57 responses

- Yes
- No
- Not Sure

26.3% — 14% — 59.6%

being less able to see homework as it required the pupil to provide access to the parent. There were also some reservations about devices being used at home for web browsing, Youtube etc.
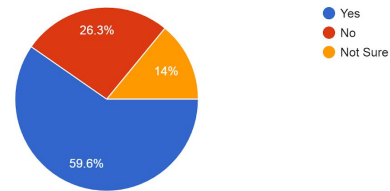
Parent: "They have their own resource for researching topics instead of having to compete for time with the rest of the family. They refer to SMHW all the time. They are much more computer literate and typing speeds have improved immeasurably"

Parent: "I feel like name is better equipped to manage her homework as she can do some much of it on her chromebook and submit it via her chromebook and not need to feel like she needs to ask to go on the family computer. I feel it helps foster responsibility as she is in charge of maintenance and charging. I feel like it helps name with her writing - she feels confident writing more on her chromebook than by hand."

Issues to be Considered

While feedback was, on the whole, very positive across a range of themes, there are some issues which were raised quite frequently and should be considered while moving forward.
When asked about any drawbacks, both pupils and teachers frequently responded that unreliable WiFi connections had caused significant disruption in some lessons and this is evidently impacting on teachers' willingness to commit to digitising courses.
While some teachers agreed there was a potential to reduce workload long term, responses re. workload implications were very mixed this year, likely due to the time required to modify and digitise courses.
Some pupils & parents expressed concerns about the extra weight added to school bags when other jotters were still being issued.
Some parents expressed concerns about pupils having less practise of handwriting and potential implications for SQA exams, which are still, largely, hand-written.