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VitalSource eTextbooks research | UK students' learning outcomes

## **Background and methodology**

VitalSource commissioned Shift Learning to conduct research with current students to explore the perceived impact of eTextbooks on student learning outcomes and confidence. The research sought to understand usage of eTextbooks, in addition to the benefits and challenges for different groups of students.

VitalSource were looking for some independent work which explored perceived impact on the following areas:

Academic outcomes

Confidence

Ease of learning

- An eSurvey was sent out to current undergraduate and postgraduate students using a number of different methods including via university contacts provided by VitalSource, CINT panel, Shift Learning opt-ins and Facebook. We were interested in speaking to both users and non-users of eTextbooks.
- The eSurvey was live from early October until early December 2017. The total of completed responses was 1018, resulting in an end total of 979 after data cleaning (removal of duplicates or poor quality responses). In total, 184 universities took part in the research.
- Overall, 92% of respondents reported that they had used an eTextbook and 66% indicated that their university had provided them with an eTextbook. Students from 148 universities were represented within the latter figure totalling 80% of the teaching institutions who were included within this research.



### **Key findings**

### Students report that eTextbooks...

- Raise their confidence: Two thirds of students (66%) indicate that eTextbooks have made them feel more confident of what they've learnt. Additionally, students report high levels of agreement with statements relating to academic confidence. This includes allowing effective independent study (83%), feeling knowledgeable in a subject (78%) and feeling well-prepared for a lecture (73%).
- Raise their grade: 57% of all eTextbook users suggest that eTextbooks have contributed to raising their grade. Half of these students report that eTextbooks have contributed to their grade overall, whereas 40% indicate these resources have supported grades relating to essay questions. This suggests eTextbooks have had a positive impact on these students' academic outcomes.
- Increase their likelihood of course completion: 50% of respondents said it made them more likely to complete their course.

### Students report that eTextbooks have a positive impact on their learning:

- 89% of users indicate that the functionality of eTextbooks has had a positive impact on their learning. Most notably, students report that search functions (95%), the citation tool (89%) and note making (86%) has had a positive impact.
- 84% of student users report that the interactivity of eTextbooks has had a positive impact on their learning.
- 96% of users report that the convenience of eTextbooks in regards to being able to download or access resources whenever has had a positive impact on their learning. 91% of users also suggest that the portability of eTextbooks in that they could be accessed on a digital device and removed the need to carry heavy books has had a positive impact on their learning.
- 94% of users report that eTextbooks which are free or more affordable than print resources have a positive impact on their learning.
- Students who have been provided with eTextbooks by their universities are more likely to suggest that eTextbook features such as convenience, affordability, portability, functionality and interactivity have had a high positive impact on their learning than the remaining sample. This suggests that integrated eTextbook programmes have a positive impact on student learning outcomes as these students are more likely to experience the benefits of eTextbooks. This finding was more pronounced\* when looking at VitalSource respondents in particular, suggesting additional benefits within universities who are committed to implementing and supporting students through eTextbooks programmes.

### Findings suggest that eTextbooks help to meet the requirements of the Teaching Excellence Framework (TEF):

Students reported that eTextbooks have positively impacted their learning in relation to attainment, engagement, flexibility, access and digital literacy, as well as increasing their confidence in relation to independent study, academic achievement and employability. These results suggest that by integrating eTextbooks widely into course materials, universities may be able to make significant strides forward in meeting the teaching quality, learning environments and student outcomes and learning requirements of the TEF.



### eTextbooks support all categories of students

### Widening participation

- Students who received free school meals or pupil premium, carers and those with competing work responsibilities are more likely to agree with statements relating to increased academic (72%) and employability (54%) confidence compared to their peers (64% and 39%, respectively). This suggests eTextbooks provide valuable support and confidence for those with additional needs.
- Without the provision of eTextbooks by universities, students who received FSM or pupil premium are less likely to believe they would have bought new print (41%) or digital (33%) copies compared to their peers, and more likely to have delayed purchasing or reading the content (73%). This suggests that institutionally provided eTextbooks ensure additional support and access to economically disadvantaged students.

#### EU and International students

eTextbook functionality was found to be particularly beneficial for EU and international students – they are more likely to report functions have had a <u>high</u> positive impact on their learning experience, compared to UK students. This includes search functions (69% vs. 63%) and citation tools (58% vs. 48%). It is likely that this functionality provides additional support to students with English as an additional language.

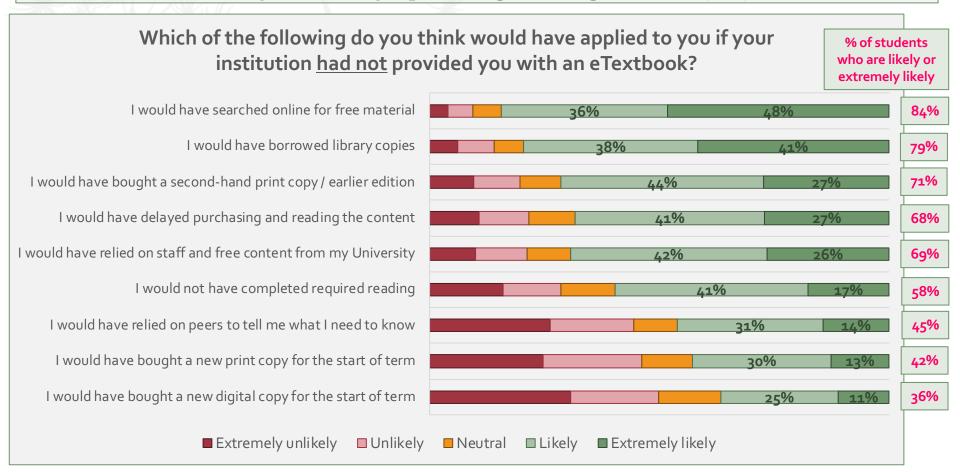
### Students with disabilities and special educational needs

- Interactivity appears to be an important consideration to overcoming specific challenges, with a higher proportion of disabled students reporting a positive impact on interactive features. For example, students with a visual, hearing or other cognitive disability were more likely to report that some features have had a positive impact on their learning compared to their peers such as text magnify (94% vs. 87%) and the ability to listen to text (79% vs. 77%).
- Likewise, students with a learning difficulty or social/communication impairment were more likely to suggest some features have had a positive impact on their learning compared to their peers. This includes the ability to use keyboard navigation (94% vs. 77%), use of the ink function (90% vs. 85%), subtitles in videos (90% vs. 81%), the ability to change the colour or contrast of text or background (86% vs. 77%) and the ability to listen to text (95% vs. 87%).
- The benefits of eTextbooks around convenience and access appear to be particularly impactful for disabled students. Students with a disability are more likely to report that the portability (68%) and convenience (74%) of eTextbooks has had a <u>high</u> positive impact on their learning, than those without a disability (60% and 70% respectively).
- All users (100%) who have a physical or mobility issue, a social/communication impairment, or dyslexia, dyspraxia or other learning difficulty report that links to eTextbooks in the course module saving time and hassle have had a positive impact on their learning experience. It is likely this benefit provides additional access.



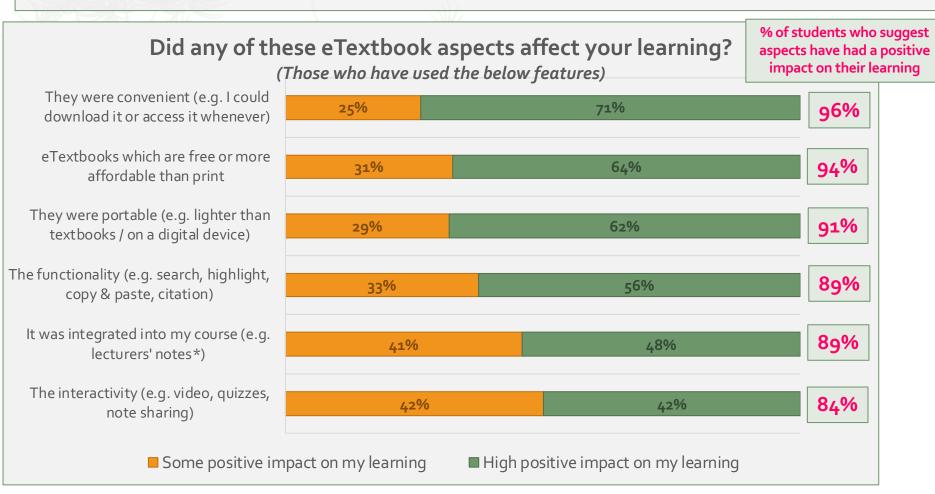
# Students would be most likely to search online for free material without institutional eTextbook provision

Over half of students (58%) suggest they may not have completed the required reading without institutional provision of eTextbooks. Students who received FSM or pupil premium are less likely to report they would have bought new print (41%) or digital (33%) copies compared to their peers, and more likely to have delayed purchasing or reading the content (73%).



# Students indicate that convenience, affordability and portability of eTextbooks have the greatest positive impact on learning

The convenience of eTextbooks is thought to have the greatest positive impact on students' learning, with a staggering 96% of users who had made use of this benefit reporting that it has had a positive impact on their learning.

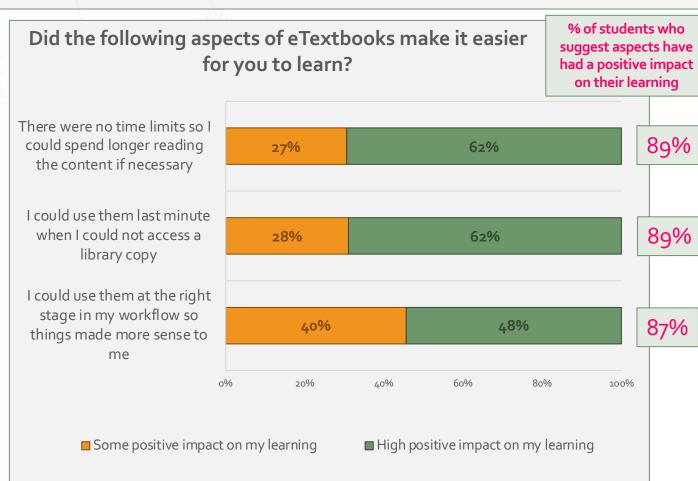




# Students report the flexibility and availability of eTextbooks has had a positive impact on their learning

Approximately 9 out of 10 students report that the lack of time limits on their use of eTexbooks, eTextbook availability and the ability to use eTextbooks at any time within workflow has had a positive impact on their learning.

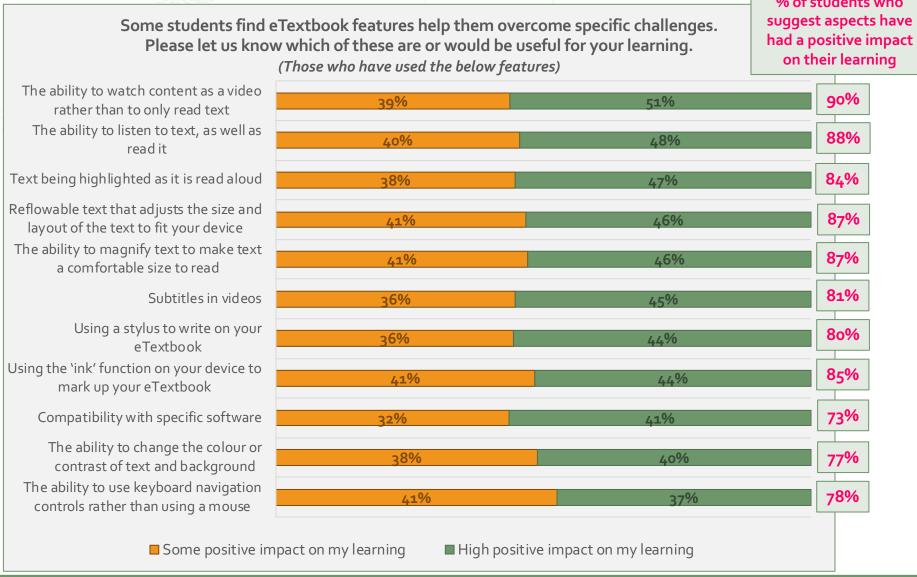
- Students who use eTextbooks at least 3 or more times per month are significantly more likely to report a high positive impact with these aspects, compared to infrequent users\*.
- Students who download their eTextbooks are significantly more likely to report a high positive impact on their learning, compared to those who did not download their resources.
- Those who have been institutionally provided with an eTextbook are also significantly more likely to report a high positive impact across all aspects, compared to those using library or personal copies.





Video and audio features are thought to be most helpful in overcoming specific challenges

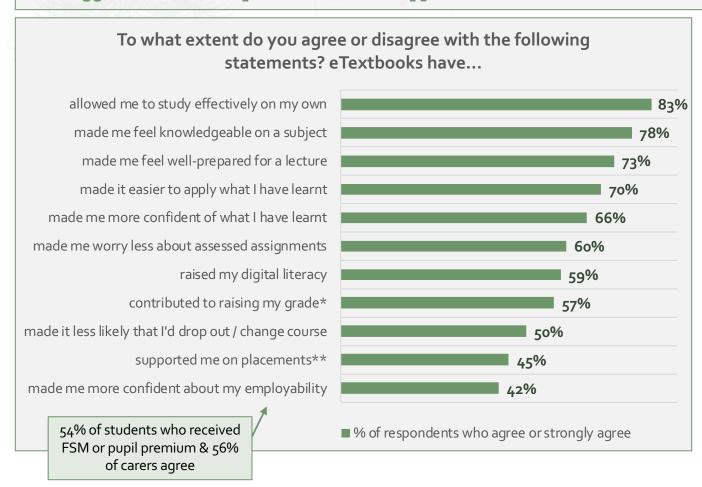
% of students who





## A high proportion of students report that eTextbooks have raised their academic confidence

Students who received free school meals or pupil premium, carers, and those with competing work responsibilities are more likely to agree with all of the below statements compared to their peers. This suggests eTextbooks provide valuable support and confidence for those with additional needs.



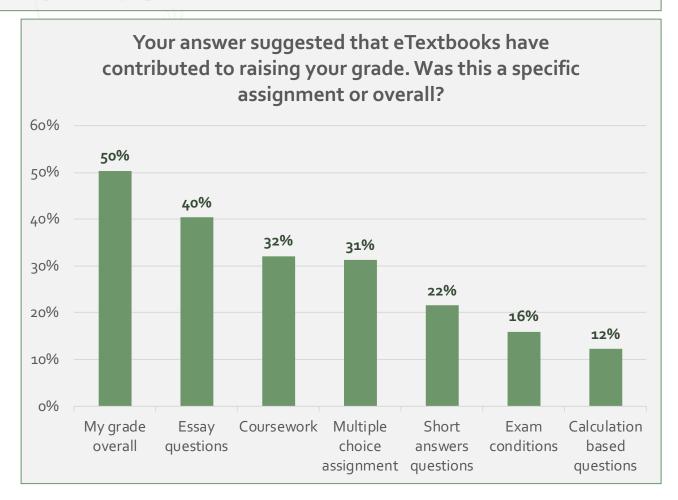
- Two thirds of students indicate that eTextbooks have made them feel more confident of what they've learnt. In order to further explore the impact eTextbooks have had on students' academic confidence, we included additional measures developed by <u>Sander</u> & Sanders.
- Students report high levels of agreement with these statements suggesting that eTextbooks have positively impacted students' academic confidence. This includes allowing effective independent study (83%), feeling knowledgeable in a subject (78%) and feeling well-prepared for a lecture (73%).



# 57% of all eTextbook users suggest that eTextbooks have contributed to raising their grade

Half of these students report that eTextbooks have contributed to their grade overall, whereas 40% indicate these resources have supported grades relating to essay questions. This suggests eTextbooks have had a positive impact on these students academic outcomes.

Frequent users are more likely to suggest eTextbooks have contributed to raising their grade overall – 54% of students who use eTextbooks 6+ times a month reported this, compared to 27% of students who use eTextbooks less than once a month.





## Students recognise a wide variety of benefits of using eTextbooks

Finally, we asked respondents what they thought was the best thing about using eTextbooks. Nearly half of students cited ease of access (42%), in which they could use eTextbooks anywhere, at any time. This was followed by portability (19%), ease of use (14%), affordability (13%) and convenience (11%).

"eBooks and online library books make University much more manageable."

Second year, undergraduate, Business & Admin Carer of a child

"Free [e]textbooks are golden, and they're easier to access than going to the library which can be hard when anxiety is high."

Final year, undergraduate, Subjects Allied to Medicine
Student with mental health condition

"eTextbooks allow me to follow up on lecture content so I have a more in depth understanding. One of the reasons I chose to do Psychology at [this university] was that they offered free eTextbooks."

Second year, undergraduate, Psychology

"That they are available whenever and wherever required therefore can be used at any time. This prevents procrastination or falling behind work."

Second year, undergraduate, Subjects Allied to Medicine

"...A digital book works better for my learning strategies, especially being able to access the source at any time for as long as I need to."

Send year, undergraduate, Archaeology

"They're free, a lot of lecturers design their lectures around them, they're easy to use and they're comprehensive. I don't need to go through the library to get them."

Final year, undergraduate, Social Studies

"When they're supplied by the university they're free and you can keep them for as long as you want."

Final year, undergraduate, Computer Sciences

"If you are not [sure] about a specific concept or theory, you are easily able to look it up using the search function. This saves me a lot of time and makes me less stressed."

Second year, undergraduate, Psychology

"The best thing about eTextbooks, is the ability to search the topic you want to read and find the relevant page within seconds."

Final year, undergraduate, Humanities

"They make me more confident."

Second year, undergraduate, Law



### Conclusion

• The below findings are based on students' own perceptions of the positive impact eTextbooks have had on their learning:

### Students indicate that eTextbooks have had a positive impact on ease of learning

- A high proportion of students report that eTextbook convenience (96%), affordability (94%), portability (91%), functionality (89%), course integration (89%) and interactivity (84%) has had a positive impact on their learning.
- Functionality and interactivity were thought to be particularly useful in relation to overcoming challenges, with a higher proportion of disabled students reporting a positive impact than non-disabled students.
- Findings also suggest that eTextbook benefits may have contributed to widening participation of disadvantaged groups by providing additional support and access.

### Students suggest that eTextbooks increase their confidence

- Two thirds of students indicate that eTextbooks have made them feel more confident of what they've learnt.
- Students who received free school meals or pupil premium, carers and those with competing work responsibilities are more likely to agree with statements relating to increased academic and employability confidence compared to their peers. This suggests eTextbooks provide valuable support and confidence for those with additional needs.

#### Users indicate that eTextbooks have had a positive impact on their academic outcomes

 57% of all eTextbook users suggest that eTextbooks have contributed to raising their grade. Half of these students report that eTextbooks have contributed to their grade overall, whereas 40% indicate these resources have supported grades relating to essay questions. This suggests eTextbooks have had a positive impact on these students academic outcomes.

### A number of factors positively correlate with reported impact of eTextbooks on learning outcomes

 Students who: download their eTextbooks, use their eTextbooks frequently, access eTextbooks on multiple devices and attend universities which provide free eTextbooks report higher levels of positive impact, compared to the remaining sample.

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