

Tablets for visually impaired students: early findings from a UK study

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Plan

The session will

1. Introduce the project and background
2. Student and teacher views on tablets for learning
3. Conclusions

Previous research

- Very little which examines how young people of school age with impairments uses of digital technologies including for learning (Passey 2013; Söderström 2009)
- Practitioners with huge expertise in this field.

Pilot project 1



- Small-scale pilot study about how young people with visual impairments in mainstream schools use digital technologies - such as computers and the internet - for learning.
- Why is it important?
 - Access to same online opportunities as their peers for learning, leisure and work
 - Digital skills and competences; strategies to cope with online risk and safety.

Pilot project 2

- Sample
 - 7 young people (secondary); and 1 (primary school)
 - 3 qualified teachers specialising in supporting VI
 - 4 teaching assistants
 - 4 classroom teachers
- Interviews with students, teachers and the support team.
Observations in the classroom.
- Report here on secondary students only (ages 11 – 18);
mainly on what's happening in schools only – not outside of
school

Tablets: HP Envy, iPad, iPod Touch



Uses of tablets for learning 1

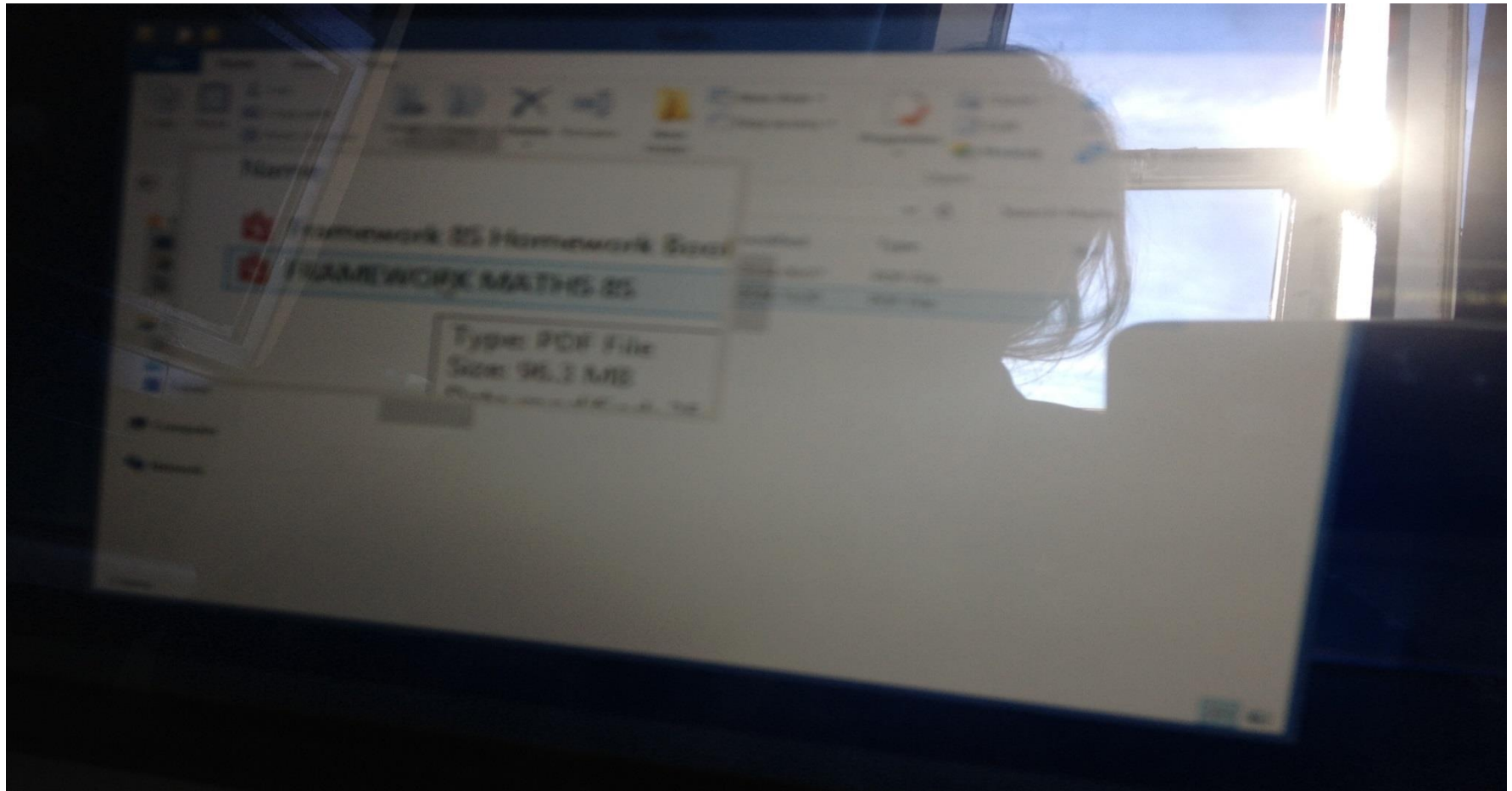
iPad/iPhone/iPod touch	HP Envy
Documents & presentations emailed before lessons (PowerPoint, Keynote, webpages, Pages)	Documents installed before lessons
iBooks for textbooks or downloaded through load2learn	Access to the school VLE (homework, resources)
Watching videos on YouTube	Textbooks downloaded through load2learn
Apps to create short films	
Apps to compose music	
Collaborative project on dropbox sharing presentations	

Benefits of tablets. Student views 1



iPad/iPhone/iPod touch	HP Envy
Can zoom/bring closer to eyes	Like how it is set up before the lesson
Avoids carrying large textbooks	Like magnification window
More reliable than laptop with magnification	Likes to take a photo with the detachable tablet to see what's on the board
Lighter than carrying laptop	
Quicker to start	
Internet more fun than textbook-more interactive	
Likes touchscreen – easier to use than mouse	
Can take photos/zoom in/change colours	
Connects home and school for some students	
Can see what's written on screen through enlarging letters	

HP Envy – magnification window



Benefits of tablets. Student views 2



Independence/self-directed – being able to access content and take notes autonomously

Reduces stigma

“I feel like just an ordinary person when I'm using it. I like to be a tiny bit different but I don't like to be so much different that everyone treats me differently. I like to be just like a normal girl sort of thing, in the mix, which I quite like. And having an iPad, and my friends have iPads as well, it just makes me feel like one of them basically.”

Issues with tablets. Student views 1



On the spot technical issues:

- Technical problems e.g. websites not loading (German lesson, flash?) The problem was overcome with help from the teaching assistant.
- HP Envy – one student said she still felt different using it (stigma)
- Issues with extended pieces of writing (iPad), better with external keyboard (detachable or HP Envy)
- Some documents too large to email, difficulty getting onto iPad

Issues with tablets. Student views 2



Occasional issues with teacher practices

- Some teachers prefer to continue to prepare and to enlarge worksheets
- Some teachers are not happy to email PowerPoint presentations in advance
- One teacher preferred to provide material on a memory stick rather than emailing beforehand. This means that students then need to carry both laptop and iPad to school.

Benefits of tablets for students.

Teacher views 1



Laptop with magnification can do what tablets can but tablets are:

- Quicker
- Lighter
- Easier for manipulating and modifying documents
- Have “street cred” (especially iPads)
- Just as cost effective (compared with laptop plus magnification or £200 large key calculators).

Benefits of tablets. Language teacher of Nigel (13)



School has had iPads for this class for 3 months

- Tablets useful for any students who resist traditional methods
- Readily integrated into 'collaborative learning' (group, team work etc)
- All activities designed by the teacher to be inclusive for the student with VI/ tablets support this easily
- Previous use of laptop with magnification was 'nightmare' (difficult to transfer files, student frustrated)
- Also mentioned the benefits of iPad recording apps for student with severe dyslexia

Uses of tablets for learning 2

- French lesson, 12-13-year-olds writing phrases in French for sock puppets



Issues with tablets for students.

Teacher views 1



- Not everything is available electronically, some textbooks still an issue
- Not everything is of adequate quality
- Teachers do not always anticipate well what a student can access or have time to prepare what's needed.
- Qualified teacher for vi said that sometimes subject teacher think it's not part of their role

Conclusions 1

- Students and teachers very positive about use of tablets for teaching and learning particularly to
 - Enable young people with visual impairments to participate in mainstream classrooms
 - Nurture independence/self-directed learning
 - Reduce stigma
- Barriers remain: both technical and relating to teacher practices, time and skill

Thank you

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