The Exploration and Identification of Mobile Phone Apps to Assist Students with Specific Learning Difficulties in their Learning

The term 'Specific Learning Difficulty (SpLD)' can be defined as a difference that people have with particular aspects of their learning. Examples include dyslexia, dyspraxia, attention deficit hyperactivity disorder (ADHD), attention deficit disorder (ADD), dysgraphia and dyscalculia.

Working as a Specific Learning Difficulties Lecturer at Wirral Metropolitan College enables one to identify particular areas of student difficulty and to provide relevant support strategies. Much emphasis has been placed on the benefits of using 'tablet' technology to improve learning. The focus of this research is to identify mobile phone Apps from the plethora of learner-assistive technology that can assist students with Specific Learning Difficulties in their learning. It is: mobile phone technology at their finger tips!

Created by: Sara Purslow - Lead Researcher

"Technology can enrich the student learning experience providing opportunities for more participatory and active learning and assessment, both online and in informal and formal physical learning environments"

(UCL E-Learning Strategy 2012–2015)

Aims & Objectives

Providing SpLD students with a range of multisensory strategies to support them in their learning improves confidence, self-belief and helps to develop autonomy. This can also lead to greater achievement (QIA, 2008).

This research project aims to identify mobile phone Apps that can be integrated into the curriculum and used by SpLD students as beneficial learning resources. The process is inclusive, learner-centred and beneficial to both teaching and learning (IBID).

(QIA, 2008) "Effective Teaching and Learning: Multisensory Learning".

(JISC, 2011) "Sunderland College: Using Mobile Phones for Dyslexic Learners".

METHODOLOGY

At the initial assessment stage, details of student mobile phone ownership and the make of phone are recorded. It is soon evident that every student referred for SpLD support owns or has access to an iPhone, Android or Windows mobile phone device. Nine Apps are identified that could assist SpLD students in the following areas: planning and organisation, spelling; dictionaries for learning and consolidation of learning. These reflect the areas of difficulty.

Ten SpLD students from different subject areas agree to participate in this research project. Participants are aged from sixteen to twenty four years, with course levels ranging from level 1 to level 4. Their SpLD Lecturer guides them through a 'Student Participation Information sheet'. The document explains the research aims and why students have been asked to take part. Each student receives a copy of this form once completed. Both the student and SpLD Lecturer sign and date a 'Student Participation Consent Form'.

The completion of a 'Pre-Research Questionnaire' is then undertaken by students. This ascertains if and when they use technology. Students are also asked if they use mobile phone technology in their studies at this stage. Communication between participants and lecturers is imperative throughout the research process.

"Dyslexic learners often don't realise they can use their mobile phones to help them with learning. Many functions which are already available on their mobile phone can help them with remembering information or help them to organise their life".
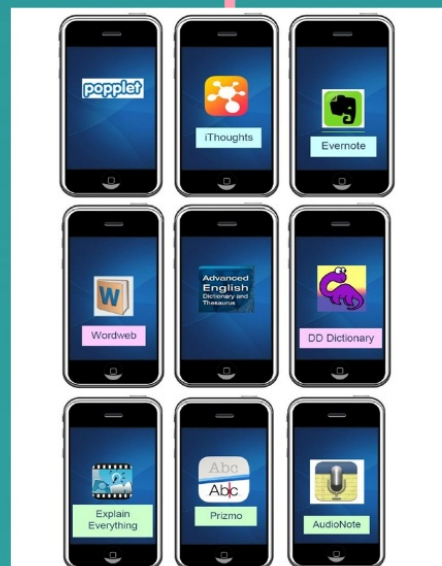
(JISC, 2011)

What is Action Research?

Student Focus Group Feedback 7th April 2015

Student Feedback

The Nine Mobile Apps

Mobile Phone Data Questionnaire 1

Student Favourites

popplet — Planning and Organisation

Advanced English Dictionary & Thesaurus

Consolidation of Learning

Frequency of Mobile Phone App Popularity

Related Link: http://www.callscotland.org.uk/Common-Assets/ckfinder/userfiles/files/Wheel_Of_Apps_V1_0.pdf

Related Link: http://www.coetail.com/vzimmer/files/2013/02/iPadagogy-Wheel.001.jpg
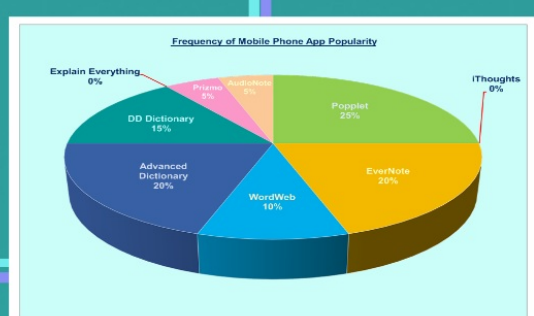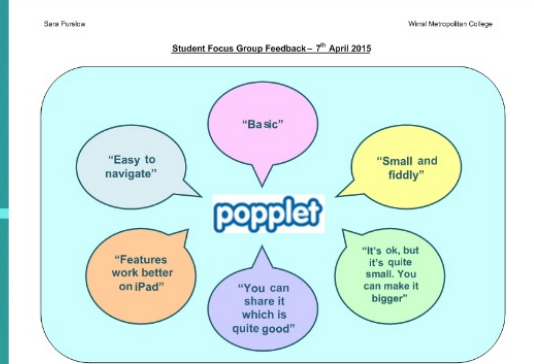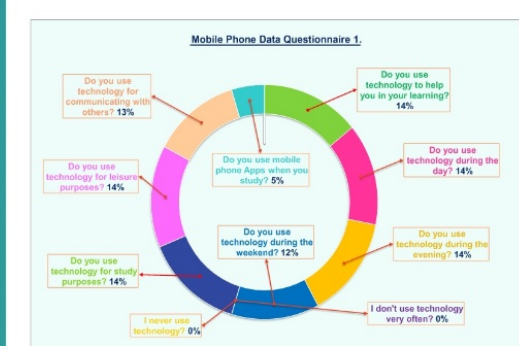
Tutor Feedback:

Students responded to an online invite via 'Edmodo' (www.edmodo.com), a collaborative learning environment. This proved invaluable arranging the 'Student Focus Group Feedback' meeting on 7th April 2015. It also provided an opportunity to meet, question and share research experiences. Students also provided feedback during 1:1 support sessions. This was a preferred method by certain members of the student group not wishing to attend a focus meeting. The 'AudioNote' program (https://itunes.apple.com/us/app/audionote-notepad-voice-recorder) was a useful way of recording dialogue. Examples will be included in the action research report to follow. A selection of iPhone, Windows and Android phone Apps were provided.

What's Changed?

➔ Students have been introduced to the mobile phone Apps for learning at the initial assessment stage.

➔ Students have independently downloaded the mobile phone Apps to help them in their studies.

➔ SpLD Lecturer at Wirral Metropolitan College, Twelve Quays Campus has approached childcare staff member undertaking classroom technology research via Edge Hill University to pilot mobile phone Apps use by SpLD students in the classroom during 2015-16. Curriculum tutors will set guidelines on mobile use and its effectiveness will be monitored.

Conclusion

One can conclude that this research data provides evidence that 'one size does not fit all' and that it is critical that students are given a 'choice' of mobile phone Apps. The existence of co-morbidities or 'cross-over difficulties' means that students with Specific Learning Difficulties have different needs relating to their learning preferences.

Even though all of the participants confirmed that they used technology at the beginning of the research project, very few used mobile phone Apps to assist them in their learning. Free and lite versions of phone Apps were recommended at the beginning of the project. Certain iPhone Apps incurred costs by the end of the project based on an increase in popularity. Participants now consider mobile phone technology as a beneficial aid to assist them in their learning.

Future Possibilities:

■ Providing an App framework for Additional Learning Support colleagues (MLD, ADHD, ASD) to use with their students.

■ Sharing findings with research participants, future students and Wirral Metropolitan College professionals to encourage further research possibilities.

■ Sharing research findings on 'Linked-in' 'Padlet' (https://padlet.com) and 'Prezi' (https://prezi.com).

■ Providing mobile phone App key fobs at SpLD student point of contact: initial assessment and WMC Learning Fair.

■ Sharing findings and updates on WMC 'Staff Bulletin' e-magazine pages.

■ Undertaking follow-on research to show the impact that mobile phone Apps have on SpLD learning.

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