2015

A holistic approach to defining digital literacy needs across the education spectrum

Witt, N

Teaching Fellowship Award Scheme: Final Report

The final report should consist of a two-page summary of the project and its findings (using the fields below as a guide).

Along with this form, please also send (where relevant):

- Ethical approval forms
- Conference papers and/or articles for publication
- (If your initial TFAS application was 'approved with conditions) Evidence that these conditions have been met (in 'Other')

Send all forms to: adam.fisher@plymouth.ac.uk

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Title of project: A holistic approach to defining digital literacy needs across the education spectrum

Type of project Research and Survey

Keywords: Digital skills; Computing in Schools; Technology ownership

1. Aims of project:

The aim of this project was to increase the University's ability to forward plan the technologies and support necessary to meet evolving institutional needs and learner expectations. To achieve this it was proposed to develop an instrument and methodology based on the Biennial Student Technology Survey (BSTS) that will investigate new uses and practices with technologies by pre and post 16 learners, as well as update our current questionnaire to be relevant for 2015.

2. Background/context to project:

In 2010 a consortia of post-92 institutions (N=5) developed and ran a survey of students' personal ownership and use of mobile devices, laptops, services and software. Two years later the instrument was refined and updated to include questions about respondents' digital literacies and their technology enhanced learning practices. It was made available to all undergraduate and postgraduate students at Plymouth University and its partner further education colleges and generated 1149 responses. Analysis of the results helped to shape the University's current Digital Strategy and Digital Learning Environment; the BSTS is now a Key Performance Indicator in the Teaching and Learning Strategy 2013-2020.

3. Methods used:

A review of literature and sector best practice in relation to developments in the field of digital literacy and computing education at school, FE and HE levels and also use and practices outside of education.

Discussions took place with academic and support staff concerning the scope and content of areas of interest.

Findings from the review and discussions were used to develop BSTS versions suitable for use with School Key Stages 2 and 4, and further education colleges (FECs). The Plymouth University BSTS was updated. Feedback on content and clarity was sought on pilot versions of each questionnaire. The HE version of the BSTS was released to all Plymouth University undergraduate and postgraduate students and was completed by 1149 university and partner institution students.

4. Results:

***Literature Review*:** A review of reports, papers, best practice and other evidence (e.g. government committees) showed that this is a time of particularly rapid and fundamental changes in strategic priorities, statutory requirements, funding models and expectations relating to the digital agendas of schools, FECs and universities.

It was found that there were no significant developments in the conceptualisation of digital literacy, therefore it was not necessary to revise our working model of digital skills and practices.

Findings, particularly those related to the 2014 computing curriculum changes for schools with their potential to quantitatively alter expectations of transactional and transformational experiences at university, have been fed in to the PGCAP770 module and are informing the changes to the ASTI portfolio of training opportunities. This issue, and its potential impact on the University, is also being highlighted in the report of Students' Technology Use, to be presented to TLQC in September 2015

Survey of Students' Technology Use

Survey was completed by 1147 Plymouth University students, the survey ran from 13th April to 22nd May 2015, data is currently undergoing analysis. Preliminary results have been presented at the Vice Chancellor's Teaching and Learning conference 2015. A report will be submitted to Plymouth's Teaching and Learning Quality Committee on 14 September 2015.

Student Survey in other formats

the survey has been adapted in to formats suitable for piloting for use with Key Stage 2 (ages 7-11 years), Key Stage 4 (ages 14-16 years) and FEC students.

Plymouth University's Open Learning Platform

This work contributed to the business case for an open learning platform. Amongst other things this will enable a shared curriculum between institutions at different levels i.e. schools and FEIs.

Overlapping Curricula

Schools are currently driven by the 2014 changes in their computing curriculum. FECs face much the same challenges as HEIs. There is potential for running a modified version(s) of the ***Plymouth Plus Module*** (a digital skills module in development and part of the University's Curriculum Enrichment Project) through the Open Learning Platform with the specific aim of engaging with local schools and colleges.

5. Associated publications:

1. Project website and blog at http://technologyenhancedlearning.net/diglit/ .
2. Witt, N., and McDermott, A. (2015) Student Attitudes to Technology: the potential future impact on the HE sector. *Vice Chancellor's Teaching and Learning Conference*. Plymouth University. 26 June.
3. Witt, N. (2015), Developments in the Digital Learning Environment and Technology Enhanced Learning, Vice Chancellor's Teaching and Learning Conference, Plymouth University, 26 June.
4. Witt, N.A.J. (2015), Does digital technology enhance the student experience?, *Solihull College HE Conference* 22nd June, Warwick
5. Witt, N.A.J., (2015), TEL at Plymouth University, *Heads of eLearning Forum*, Birmingham, 3 June.
6. Witt, N. and McDermott, A., (2015) The 2020 digital learner: A qualitative change? *Pedagogic Research Institute and Observatory Annual Conference 2015.* Plymouth University, 17 April.
7. Contribution to Jisc Case Study on the digital Student http://digitalstudent.jiscinvolve.org/wp/files/2015/01/DS14-A-seamless-digital-learning-environment-at-Plymouth-University.pdf.
8. Findings cited by Prof N Witt, invited speaker at Inside Government event - Enhancing the Student Experience Through Digital Technology, *Enhancing the Quality of the Student Experience: Increasing Engagement and Satisfaction*, Inside Government, 19 November 2014, London.
9. Findings cited by Prof N Witt, invited speaker at Leadership foundation event - Enhancing the Student Experience Through Technology, *Student Experience in a new age: Employability and Technology*, Leadership Foundation for Higher Education 18 March 2015, London.
10. Findings cited by Prof N Witt, invited contributor to New Media Consortium's Higher Education Expert Panel discussions which drew up the 2015 Horizons report, an international assessment of new technology trends.
11. Paper submitted to ALT-C 2015 conference, awaiting decision

6. Other: