Online and Connected: Two years on

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It is now nearly two years since the decisions were taken to make Design and Technology Education: An international journal open access and take it online. The reasons for taking these decisions were outlined in the Editorial and a Statement from the Design and Technology Association Executive in Issue 13.1 and this Editorial provides an update on progress. For UK academics at least, the impact of their research outputs is becoming an important measure in the assessment of their work and this is therefore a matter of more than passing significance. Google Analytics has been used since July 2008 in order to gather some data as shown in Figure 1. For the last few months the journal has had something over 700 visitors per month, and a good proportion of them have stayed to view aspects of the journal. The 46% 'Bounce Rate' indicates those who did not progress past the Home Page and consequently there would appear to be currently around 400 serious visitors per month, and they are downloading many papers. Of course, this is in addition to the circulation of conventional printed copies to University Libraries and individuals who choose to pay for a printed copy as this distribution route was not altered by the decision to go online.

Figure 2 shows an overview of the countries from which the visitors have come. The darker colour indicates greater usage and Figure 3 indicates the top 10 countries. Clearly most of the visitors are from the UK, but there are also a significant number of international visitors to the online journal. So there is evidence of some success as a result of taking the journal online, but just how 'connected' are we?

Most of the traffic comes to the online journal via search engines (58%, of which Google comprises 55.4%). Then 11.4% of the traffic is direct from personal bookmarks and 10% are referrals from the online hub (www.dater.org.uk). There is also some referred traffic from the Design and Technology Association website (3.2%). Referrals from more general sources ie The Directory of Open Access Journals (5.2%) and the Public Knowledge Project (the authors of the open journal systems software, 2.3%) are growing, but yet to become really significant. So there is marketing work still to be done in broadening awareness of the journal and this work will be on-going, but it is apparent that Google remains the strategy of choice for many people. This was the assumption when the decision to take the journal online was made (see Editorial Issue 13.1) and it is in many ways fortunate that the evidence gathered supports this position, because open access journals have yet to gain equivalent visibility to traditional publications through academic publishing routes. Google, and Google Scholar, provide a route to open access research publications for an increasing proportion of the world's population.

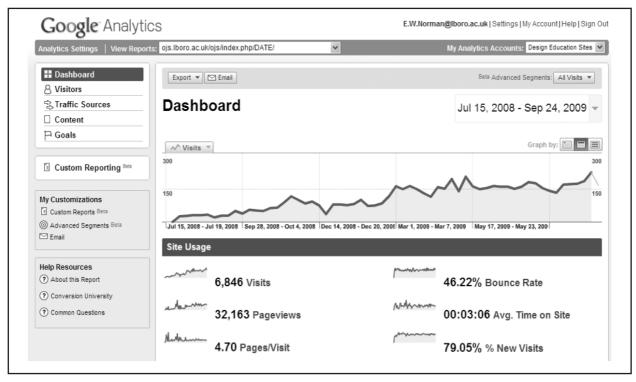


Figure 1. Visitors to the DATEij website from 15 July 2008 – 24 September 2009

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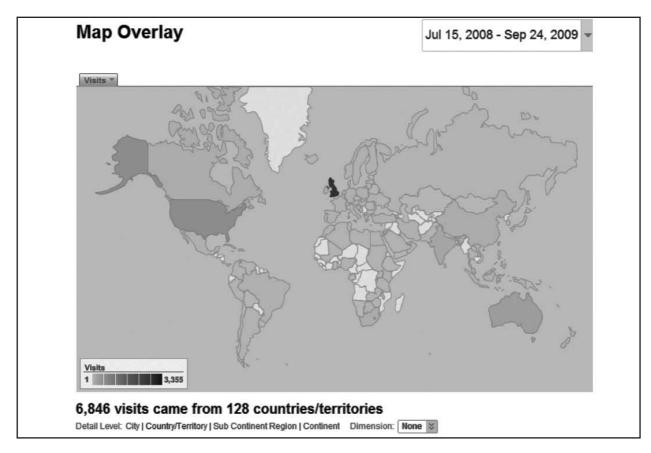


Figure 2. An overview of the countries from which the online visitors have come

	Detail Level: Country/Territory 💝	Visits ↓	Pages/Visit	Avg. Time on Site	% New Visits	Bounce Rate
1.	United Kingdom	3,355	4.76	00:02:56	73.35%	45,48%
2.	United States	691	4.04	00:02:13	91.03%	54.85%
3.	Australia	323	4.90	00:03:39	85.14%	40.87%
4.	Singapore	210	6.10	00:05:00	78.57%	35.71%
5.	India	187	5.70	00:04:25	77.54%	39.04%
6.	Malaysia	117	6.68	00:05:29	85.47%	47.01%
7.	Canada	110	3.11	00:01:55	96.36%	50.91%
8.	Hong Kong	108	3.46	00:01:53	31.48%	76.85%
9.	New Zealand	107	5.52	00:05:11	82.24%	28.97%
10.	South Africa	106	3.71	00:03:08	93.40%	37.749
Filte	r Country/Territory: containing 🗸	Go	Go to: 1	Show rows:	10 🗸 1-1	0 of 128 4

Figure 3. The top 10 countries for visitors to the online journal

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An argument, which still seems to carry some weight, is that because a journal is open access, then it must be difficult to ensure quality control, so that the reliability of the research which is located by Google is brought into question. This is certainly an argument of convenience, but not one of any substance. The Editorial Board for this journal works diligently, and voluntarily, both to ensure appropriate procedures are in place and to implement them. There is no doubt in my mind that this journal is going from strength to strength, both in terms of its distribution and content. This issue contains 5 research papers dealing with topics which are important both to the teaching and research communities, and there are, of course, many teacher-researchers that straddle this 'divide'. There is also a challenging 'Reflection' piece by Professor Richard Kimbell concerning 'Knowing where we are', Reviews and a Call to contribute to the next Special Issue concerning research in Primary Education. Long may Google find them, if that is the most effective route to accessing research outcomes made freely available to those who might make use of them.

The first research paper is the published version of the John Eggleston Memorial Keynote Lecture, which was given at the Design and Technology Association's Education and International Research Conference in the summer by Professor Stephanie Atkinson: 'Are Design and Technology Teachers Able to Meet the Challenges Inherent in the Theme of the Conference 'D&T – A Platform for Success'?' Stephanie draws on her long and distinguished career, both as a teacher, teacher trainer and researcher, to draw attention to the difficulties inherent in sustaining high quality teaching and learning in design and technology, particular in relation to designing. She draws on the results of her own research and that of others in order to expose some of the more challenging issues.

The second research paper is the published version of a Keynote Lecture given by Bill Nicholl at the D&T Association in the summer of 2008. Bill draws on his extensive experience as a teacher, and now a teacher trainer, as well as the results of a major research project concerning creativity and design and technology, which he led, in order to explain not only his personal journey, but also the importance of research for teachers in support of innovation and the development of good practice. These are of course key areas of this journal's interests, and this papers contribution lies both in its support for these positions, as well as the research outcomes it reveals.

The third research paper has been written by Steve Keirl, an equally distinguished teacher and teacher trainer from the University of South Australia. The issues of

technological literacy, or Technology Education (with a capital 'T'), remain at the forefront of much international debate amongst researchers and policy-makers alike. It is generally recognised that Technology Education in this sense is a whole curriculum matter, and equally that Design and Technology has a major contribution to make. This paper proposes a framework within which these difficult issues can be discussed and draws on Steve's extensive experience as an advocate for the role that Design and Technology can play in helping to educate technologically literate future citizens.

The fourth research paper was written by Farhat Ara, Chitra Natarajan and Sugra Chunawala and concerns the strategies employed by Indian Middle-School students in identifying unfamiliar artefacts. The students were asked to identify the intended functions of the artefacts and the strategies they employed were recorded. 'Product analysis' is a common starting point for many design activities, and design museums have been established in many countries to facilitate the study of prior designs. As Bill Nicholl's research has identified there are potential risks associated with such approaches (eg fixation), so there is much to understand. The students working in groups used a number of cognitive strategies such as critiquing, and handling strategies that involved observing and manipulating artefacts and checking predictions.

The fifth research paper was written by Donna Trebell and concerns the features of classroom interaction that support pupils' design activities. It reports the analysis of video data gathered during a design-without-make assignment and in particular looks at interaction analysis relating to design decisions, learning conversations and scaffolding and mediation. There are also a number of emergent categories, including existing products and visual stimulus, that add to the complexity of defining the context of the designing. The research provides a 'rich picture of the social setting in which designerly activity is taking place'.

Fascinating and important research contributions.

This issue also contains reviews by Jennifer Bain of Learning Cultures in Online Education which was edited by Robin Goodfellow and Marie-Noëlle Lamy, and Nigel Zanker of Succeeding with your Master's Dissertation: A step-by-step handbook by John Biggam.

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