# Research-publishing.net

10 years of the LLAS elearning symposium: case studies in good practice
Edited by Kate Borthwick, Erika Corradini, & Alison Dickens

# 9 Reflections on a personal journey in learning design

## Julie Watson[1]

## 1. How did you become interested in using technology in your professional life?

My personal and professional interest in technology dates back to Rome and the 1980s. I was working as an English teacher at the *lstituto Britannico* in Via Quattro Fontane, nearby to our English language teaching competitor, the British Council. Both schools were confusingly known as *il British* and I was a regular visitor to the Council's lending library and its rather ancient book collection. During that time the library became the proud owners of several brand new, imposing BBC Micros developed by Acorn Computers (see Figure 1). Accompanied by a seriously off-putting set of user manuals and some very floppy disks, nobody quite knew what to do with them. I began exploring in an attempt to learn something about what computers could do. One day I was approached by the Chief Librarian. The librarian on the main desk had informed him that I was a computer 'expert'. I was sole claimant for this title as no-one else had got beyond locating the on/off switch! He offered me a financial incentive to create an introductory program for library visitors using the Acorn Basic programming language, an opportunity which I seized. And thus was launched a new direction in my career, setting me firmly on the path towards elearning. Later, in the early 1990s, I wrote my Masters dissertation in the area of 'email literacy', becoming further immersed in the field, and then, in 2001, was appointed to lead a team of EAP teacher-developers from a six-university consortium in the now generally-forgotten UK E-Universities (UKEU) project. Our mission was to create and deliver an online EAP course as part of an initiative to put UK university degree

1. University of Southampton, Southampton, United Kingdom; J.Watson@soton.ac.uk.

programmes online for students across the world, a slightly surreal experience to look back on, given where we are now! Ten years ago, I presented this project and my first tentative thoughts about learning design at the very first LLAS elearning symposium.

Figure 1.   A BBC micro computer[1]
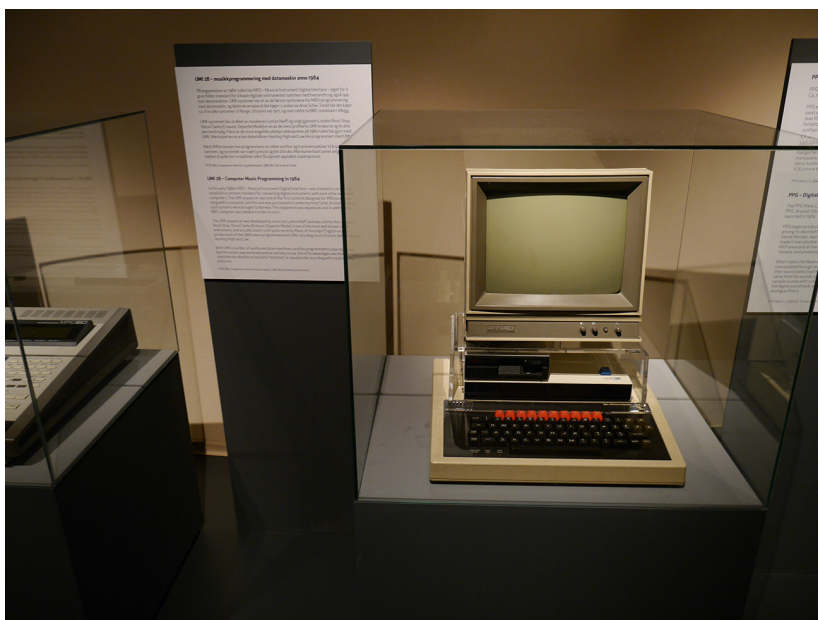


## 2.    How has your use and knowledge of technology in language learning and teaching developed over time?

In 2001, I began using learning object technology for elearning. Any creative technology available tended to cost a lot or be designed for other purposes, and there were no free web 2.0 tools. *DreamWeaver*, a commercial software

---

1. Sdource: Magnus Lien, Norsk Teknisk Museum/commons wikimedia.org

program designed for creating web pages, became my first learning object 'authoring' tool, with a bit of customisation. Designing for online learning was a blank canvas, so I based my first learning design for learning objects on a blend of, what seemed to me, pertinent aspects (for the online environment) of good practice in Communicative Language Teaching (CLT), and design features distilled from emerging research findings about how users interacted with the internet and its content. Though I felt lost, in retrospect I think I was in some ways in a fortunate position. I couldn't be distracted by a huge array of technologies with unexplored potential for educational purposes. I wasn't in danger of being in love with technology for its own sake. In fact, I was usually in a state of disappointment because of what I couldn't achieve with what I did have! That was a long time ago and things are different now.

In my professional life today as an online course and resource designer and developer I frequently feel I need to catch up. I try to experiment creatively with new web technologies, many of which are not designed for education but reflect creative and exciting possibilities for engaging students and aiding effective learning online. Although learning objects are, surprisingly, still around, the elearning scene now feels a bit like Christmas, a sort of technology gift season. By mixing and matching other technologies in my elearning development work, I think I have been able to meet students' needs more effectively. The research and expanding literature in the field also means it's much easier to know what other work is being done, even though I sometimes feel that I have now exchanged an elearning desert for a jungle!

## 3. How has contact with colleagues impacted on the way you use technology in language learning and teaching?

The commercial online language learning products that I have designed and developed (e.g. EAP Toolkit, a free-standing online resource set to help international students develop their English for Academic Purposes and study skills) and open resources (e.g. Prepare for Success –a website of learning

resources for international students coming to study in the UK; and more recently, the Digital Literacies Toolkit) were all piloted with teaching colleagues and students before being launched. Their role cannot be understated. Contact with colleagues has always helped shape the way the design of technologies evolves or how they are implemented in teaching and learning. I regularly survey licencing institutions and teachers using our toolkits to inform the technology refreshment phases that we carry out periodically. Similarly, student and teacher feedback on the Prepare for Success website has been vital in making important decisions such as when to change from Flash-based activities to HTML5 due to increased access from non-Flash supporting mobile technologies. This website will have surpassed an unimaginable one million visits when you read this! Another recent site enhancement arising from student feedback is the introduction of a blog combined with a 'question wall' to provide an interactive channel of communication with international student users of the website. Contact with colleagues at conferences has also been useful in keeping the ideas flowing and seeding new experiments.

## 4. How do you use technology in your professional practice now?

I frequently use technology in my professional practice when teaching face-to-face or online. Drawing from an ever-changing range, I use technologies experimentally and rather eclectically. In designing an online course, for example, I try to choose technologies according to the functionalities I need for the learning design to create the best opportunities for learning. The technology doesn't work in isolation but as an aid to the learning task. Perhaps this is a rather obvious statement but it is still easy to make the mistake of choosing the technology before the pedagogy. I have no favourite technology but factors such as simplicity of use, capacity to engage users, and accessibility are important in making the final choice. If the technology is being chosen to facilitate online communication activity, it's important that it is also accessible to an international audience anywhere. This limits the use of some western social media networks such as Facebook and YouTube.

## 5. How does your knowledge and experience in social media and web 2.0 technologies impact on your professional and teaching life?

### 5.1. Starting out on the learning design journey: the learning object

Learning design for me began with the internal design of a learning object. In 2002, while leading a team of teachers developing learning objects –the building blocks of the online courses we were creating–, I needed to ensure consistency of the team's output. This entailed recognising and sharing –at the micro level of the learning resource itself– a set of pedagogic features that could be used to package topics and facilitate learning by students using them independently online and interacting with learning object content in different ways. From those learning objects in aspects of EAP and language skill development that I began creating with *DreamWeaver*, a number of common features emerged, reflecting CLT approaches as well as concerns highlighted in the literature of the time by early leaders in the field. The explicit pedagogic features that came to be integral to the design of my learning objects were:

- having a clearly identified learning objective or learning point, reflecting self-containedness (referred to by Koper, Pannekeet, Hendriks, & Hummel, 2004 as 'encapsulation');

- centred on learning activities so that users 'actively' exploit the resources ('learning by doing' Race, 2005);

- personalised learning activities to ensure familiar/meaningful contexts for the student user;

- engaging the user in reflection as well as activity;

- incorporating 2-3 activities that build on each other and unpack more complex learning into discrete learning steps;

- enhancement with useful feedback (explanation as well as answers) and independent resources (e.g. transcript);

- combining multi-media, e.g. text, audio/video links, web links, images to provide variety and accommodate different learning approaches.

Certain technical attributes were being widely recognised as desirable for learning objects especially for enabling their reuse. Much attention was focussed on these technical aspects initially but fortunately, practitioners such as Wiley (2001) highlighted the need for pedagogic attributes as well.

Reusable Learning Objects (RLOs), as they came to be known, were considered more useful if they reflected consistency in size (granularity) and this could be approached through the pedagogic route of estimating learner time needed for activities. The learning object came to be seen as a small unit of learning with generic possibilities rather than a module or course-sized unit. Accessibility and later tagging of learning objects with metadata to allow their discoverability were also seen as desirable. Such concerns and the technological developments they gave rise to paved the way for Open Educational Resources (OER) and searchable teaching and learning repositories. The aggregation of smaller sized learning objects could facilitate online course or module creation, and conversely, the disaggregation of component parts of learning objects –at the simplest level of the media-packaged resource base for an activity– could provide the starting point for a new or repurposed learning object. As my own bank of learning objects grew, it became apparent to me how other elements of a Learning Object could offer scope for repurposing, for example, instructional scaffolding and generic activity types. Sustaining a high level of reuse was (and still is) essential in justifying the significant cost and resource dedication needed to initiate development of online learning resources and courses.

## 5.2. Learning design for an authoring tool for teachers: LOC

The need for an 'explicit learning design' (Watson, 2010) that could be easily recognised and explained also became central in the development of two

commercial products: the EAP and Study Skills Toolkits. In particular, the EAP Toolkit for international students was being licenced by a growing number of UK higher education institutions[1]. Increasingly, institutions licencing these products and teachers integrating them on taught courses were providing feedback on their use and asking if additional learning resources were available. Concurrent with this, in a 2006 joint initiative with the LLAS (Languages Linguistics and Areas Studies) Subject Centre, I had begun to design and develop a learning object authoring tool for teachers (Watson, Dickens, & Gilchrist, 2008). Incorporating the learning design that I created for learning objects, the online LOC tool, as it came to be known, has continued to be adopted by a growing community of teachers to plan, build and publish their own online learning resources supported by a tried and tested pedagogy[2]. Among toolkit-licencing institutions, there are several in which teams of teachers create their own desired toolkit add-ons using the LOC Tool. Perhaps uniquely among authoring tools, the free LOC tool is accompanied by a training workshop in which teachers, new to creating online resources, are not only familiarised with the technical affordances of the LOC tool but, more importantly, through planning, peer engagement and revision, are introduced to good practice in creating effective online resources for their own teaching and learning contexts. To my mind, having an explicit learning design reflected in learning resources (or in an authoring tool for teachers) can help ensure that the learning aim remains the driver in the pedagogy-technology partnership.

## 5.3.    Design at the macro level
of the online course

At the macro level of the online course I was also preoccupied with learning design. How could learning objects, used as course building blocks, work effectively with conventional tools such as VLE discussion forums and in the dynamic context of a student learning community and an online teacher? I began developing a model showing how these elements might be integrated to work

---

1. EAP Toolkit for international students www.elanguages.ac.uk/eap_toolkit.php

2. The LOC Tool https://www.llas.ac.uk/projects/2770

together, drawing on the core components (discussion, adaptation, interaction and reflection) and interrelationships of Laurillard's (2002) Conversational Framework for teaching and learning in higher education. This dialogic model also sought to take into account the increasing role of new technologies in the teaching and learning process. I had earlier tried to include some of Laurillard's principles in the internal design of learning objects. I later argued that at the macro level of a course with an online learning community, the inclusion of VLE communication tools and an online tutor with the learning objects could help realise all aspects of the iterative process described in Laurillard's dialogic framework, including the 'reflection' initiated through 'interaction' with the learning objects and continued through a process of ongoing 'adaptation' in learner conceptual understanding, facilitated through peer and teacher 'interaction' in 'discussion' tasks which focus on concepts overarching the topics of the learning objects (Watson, 2010).

From a simple four part model involving the student learning community, learning objects, discussion forum and online tutor, other more complex learning designs took shape. The learning design for the University of Southampton's online MA programme in English Language Teaching is based in a dialogic-based framework in which the discussion forums are "a means to building up and maintaining an e-learning community" (Baker & Watson, 2014, p. 4). Figure 2 (below) shows how learning objects (LOs) link to other elements in a course with similar design, an online pre-sessional course.

Over time, other online courses evolved and gave rise to permutations of the learning design as the repertoire of tools and technologies expanded and their roles and interrelationships changed. For example, when free-standing podcasts (Salmon, Nie, & Edirisingha, 2007) first entered the online learning arena as an educational resource, I experimented with them in various roles (e.g. delivering teacher scaffolding and online 'presence'; or student-created learning resources). More recently, a range of emerging web 2.0 technologies (e.g. video capture tools; virtual curation tools) have filled specific niches within increasingly complex macro learning designs. For example, I have found virtual pinboards or social walls (e.g. Linoit; Padlet) to be more effective

tools than discussion forums for ice-breaking or the initial socialisation of students in a range of online courses.

Figure 2.   Learning design of an online pre-sessional course
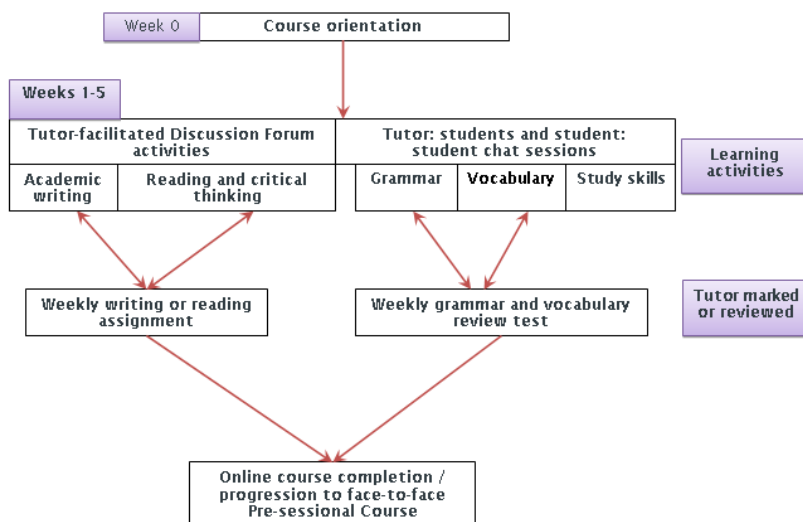


A course I created, which has grown in size and subsequently changed in learning design is 'Get Ready for Southampton'. In the summer of 2014, it was delivered to an online community of 2500 prospective University of Southampton international students[1]. This pre-arrival online distance learning course focuses on English language development and transition to UK academic culture and started in 2005 with a few tutored groups of 25 students, growing by 2013 into a single open student-driven course with over 2500 participants. The connectivist dynamic is now the focal point of the course as evidenced this year by 460 student messages on the Social Wall, 16750 posts across 240 student-created topic threads in the discussion forum, and an incalculable number of student interactions off-course facilitated though in-course exchange of their social media contact details. The online tutor's

1. www.elanguages.ac.uk/get_ready_for_southampton.php

role has become a marginal one and, interestingly, the course reflects a number of the emerging aspects of MOOC pedagogy as identified by Bayne and Ross (2014) and in Watson (2014). The evolution of this online course between 2005 and the present has demonstrated for me not only how a learning design impacts on the course dynamic but also how the course dynamic can impact on the learning design. The older technology of learning objects still has a role in these courses albeit this role has changed and is changing in relation to each course's learning design.

Interestingly, Anderson and Dron (2011) investigating different 'generations' of distance education pedagogy (cognitive-behaviourist, social constructivist and connectivist), found that the learning designs of high quality distance education reflect features of all three past and present generations, and in this way provide "a well-rounded educational experience" (p. 8). This view is further supported by Bayne and Ross (2014), who recently noted that MOOCs are increasingly complex, reflecting "multiple pedagogic forms and intentions" with the cMOOC/xMOOC binary "no longer representative or particularly useful" for understanding the learning design of online courses (p. 8).

My personal journey in learning design has been one with many twists and turns along the way in response to both technological change and awareness of a need to adapt for the individual circumstances of each course, but I hope it has also been one that has always had the aim of enhancing the student learning experience at the heart of it.

# References

Anderson T., & Dron, J. (2011). Three generations of distance learning education pedagogy. *International Review of Research in Open and Distance Learning, 12*(3). Retrieved from http://www.irrodl.org/index.php/irrodl/article/view/890/1663

Baker, W., & Watson, J. (2014). Mastering the online master's: Developing and delivering an online MA in English language teaching through a dialogic-based framework. *Innovations in Education and Teaching International, 51*(5), 483-496. doi:10.1080/14703297.2013.796712

Bayne, S., & Ross, J. (2014). *The pedagogy of the massive open online course (MOOC): The UK view*. Edinburgh: THE Higher Education Academy. Retrieved from https://www.heacademy.ac.uk/sites/default/files/HEA_Edinburgh_MOOC_WEB_240314_1.pdf

Koper, R., Pannekeet, K., Hendriks, M., & Hummel, H. (2004). Building communities for the exchange of learning objects: theoretical foundations and requirements. *ALT-J, Research in Learning Technology, 12*(1), 21-35. doi:10.1080/0968776042000211502

Laurillard, D. (2002). *Rethinking university teaching: A framework for the effective use of learning technologies* (2nd ed.). London: Routledge Falmer.

Race, P. (2005). 500 tips for open and online learning (2nd ed). London: RoutledgeFalmer.

Salmon, G. K., Nie, M., & Edirisingha, P. (2007). Podcasting for learning. A*LISS Quarterly, 2*(4), 11-17.

Watson, J. (2010). A case study: Developing learning objects with an explicit learning design. *Electronic Journal of e-Learning, 8*(1), 41-50. Retrieved from http://www.ejel.org/volume8/issue1/p41

Watson, J. (2014). 'Sizing up' the online course: Adapting learning design to meet growing participant numbers. In S. Jager, L. Bradley, E. J. Meima, & S. Thouësny (Eds), *CALL Design: Principles and Practice; Proceedings of the 2014 EUROCALL Conference, Groningen, The Netherlands* (pp. 408-412). Dublin: Research publishing.net. doi:10.14705/rpnet.2014.000254

Watson, J., Dickens, A., & Gilchrist, G. (2008). The LOC tool: Creating a learning object authoring tool for teachers. *Proceedings of the World Conference on Educational Multimedia, Hypermedia and Telecommunications 2008, Association for the Advancement of Computing in Education, Vienna, Austria* (pp. 4626-4632). Retrieved from http://www.editlib.org/p/29030

Wiley, D. A. (2001). Connecting learning objects to instructional design theory: A definition, a metaphor, and a taxonomy. In D. Wiley (Ed.), *The instructional use of learning objects*. Agency for Instructional Technology. Retrieved from http://www.reusability.org/read/chapters/wiley.doc