

Dr. Robert O'Toole NTF

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<http://www.inspireslearning.com/journal/interactive-cv/>

Awards: Fellow of the Warwick International Higher Education Academy, 2016.
Higher Education Academy National Teaching Fellowship, 2008.
Warwick Award for Teaching Excellence, 2008.
Fellow of the Higher Education Academy, 2008.

Current post: Senior Academic Technologist, Service Development Group, IT Services, University of Warwick (similar posts at Warwick, different titles, since 2002). **Salary: £49,000.**

Warwick International Higher Education Academy (WIHEA) student champions facilitator.

Warwick HEA Senior Fellowship awards examiner.

Higher Education Academy National Teaching Fellowship Reviewer.

Previous posts: Software development consultant, Arthur Andersen, London, 2001-2002.

E-learning technology development and research, TALL, Oxford University (establishing the online learning, authoring and support platform for one of the UK's most successful online distance learning departments), 1999-2001.

ICT teacher, Thomas Aveling Secondary School, Rochester, Kent, 1997-1999.

Education:

PhD "Fit, Stick, Spread and Grow: Transdisciplinary Studies of Design Thinking for the [Re]making of Higher Education", University of Warwick, 2015.

PGCE ICT with Qualified Teacher Status, University of Warwick 1997.

MSc Knowledge Based Systems (AI, expert systems and evolutionary-adaptive systems), School of Computing and Cognitive Science, University of Sussex 1996.

BA (hons) *first class*, Philosophy, University of Warwick 1994.

HEA Senior Fellowship mentor, examiner & HEA National Teaching Fellowship reviewer:

Warwick is accredited by the HEA to award HEA fellowships, aligned to the UK Professional Standards Framework for Higher Education. I sit as an examiner on the panel for awarding Senior Fellowships. This involves reviewing submission documentation and conducting a *viva voce* examination with applicants, so as to assess applications against the UK Professional Standards Framework for Higher Education. I also act as a mentor for applicants from across the University. In 2016 I reviewed four applications for the HEA National Teaching Fellowship (applicants from other universities).

Recent teaching development projects (including):

Designing assessment for video projects using visual stack models, matrices, patterns and a rich palette of examples.

Understanding and shaping student engagement with PRS is an effective teaching strategy, and yet the practice is not spreading fast. Why?

Create engaging lectures & student activities with ResponseWare – online self-study course.

Academic film making masterclass – online self-study course.

H5P interactive learning content – online self-study course.

Virtual reality in learning, teaching and the student experience – online self-study course.

Kick start the use of VR at Warwick (£2,500 from the Santander Digital Innovations fund) – “Our aim is to demystify this emerging technology as it hits the mainstream, give lots of people experience of VR headsets, and to give some people experience of creating VR videos through google cardboard and/or 360 cameras.”

Warwick International Higher Education Academy (WIHEA) Digichamps (approx. £35,000) – building upon my HEA project I am supporting staff and students on 19 funded design innovation and enhancement projects.

Designing a framework for student co-designers and change agents in LTSE enhancement projects (£10,000 from the HEA), now being implemented with pilot projects in Classics and Life Sciences, and the development of online courses (in Moodle).

The Extended Classroom initiative: creating an engagement strategy for widening the adoption of core learning technology tools and services; creating printed and online communications adapted for the Warwick audience including the Extended Classroom postcards; running (with LDC and AV Services) a fortnight of events including workshops, showcases and online drop-in meetings.

Online scaffolded recording and reflection portfolios for the Undergraduate Research Support Scheme (250+ students from all disciplines doing research projects, 100% portfolio completion rate). In 2014 I worked as a URSS student mentor so as to gain an inside perspective of using the system and to identify further design innovations.

French Studies year abroad dossiers (online scaffolded portfolios for students based all over France).

History first year scaffolded e-portfolios (300+ students completing recording and reflection tasks throughout their first year).

History first year audio podcast and video making (270 students, each making an audio of video critical review of the representation of historical events in film or literature).

Open-space Learning in Real World Contexts (HEA NTF funded for £200,000, co-applicant).

Arts Faculty E-Squad (total funding approximately £25,000)

Publications:

O'Toole, Robert (2016) "A competency framework, process model and developmental approach for engaging students in the enhancement of learning, teaching and the student experience in Higher Education". Higher Education Academy.

Leary, R., Bilton, C., Grainger Clemson, H., Jung, N., O'Toole, R. & Ranford, S. (2014) "Creative Research Methods - a reflective online discussion" in *Exchanges*, vol.1, no.2.

O'Toole, Robert (2013) "Flipping the classroom : a design study of the adoption and adaption of new pedagogy in a higher education context". Working Paper. University of Warwick.

O'Toole, Robert (2013) "Innovation and design change strategies for learning technologies at Warwick : towards a 'design capabilities' heuristic for guiding practice and evaluating change". Working Paper. University of Warwick.

O'Toole, Robert (2013) "A report on e-portfolios : design features, uses, benefits, examples & emerging trends". Working Paper. University of Warwick.

O'Toole, Robert (2013) "Pedagogical strategies and technologies for peer assessment in Massively Open Online Courses (MOOCs)". Discussion Paper. University of Warwick.

O'Toole, R. (2011). "Failure and learning amongst Arts and Humanities students". HEA History Subject Centre.

Mizza, D. & O'Toole, R. (2007). "La tecnologia al servizio di una nuova didattica della scrittura: un percorso interattivo in italiano come lingua straniera" in *Je-LKS Journal of E-learning and Knowledge Society*, vol.3 no.3, September 2007.

O'Toole, R. (2003). "Providing Integrated and Tailored E-learning Services" in *Interactions*, no.19, Spring 2003.

O'Toole, R. (1996). "Contagium Vivum Philosophia: Schizophrenic Philosophy, Viral Empiricism and Deleuze" [chapter] in *Deleuze and Philosophy*, Ansell-Pearson (ed.), Routledge.

Recent conferences and special presentations:

"Design Thinking: an Introduction", Window on Warwick, November 2016.

"Extending the Classroom Together" with Amber Thomas, ALT-C, September 2016.

"Learning Analytics and the Academic's Mental Model of Student Engagement", Warwick Technology in Learning Research Group, March 2016.

"The Arts E-Squad: a Creative Industries Approach to Widening Participation", at the Warwick Widening Participation Forum.

"The Extended Classroom: Responding to the Changes and Challenges", at a seminar involving Berman Guedes Stretton (architects), the Warwick Students' Union, Audio Visual Services, Estates, Institute for Advanced Teaching and Learning, The Teaching Grid (Library), Academic Technology and the Learning and Development Centre. <http://tinyurl.com/my6rmgk>

"Ubiquitous Learning and the Pedagogy of the iPad", Window on Teaching, University of Warwick, 2014. <http://tinyurl.com/nfxkvr8>

"Flipping classrooms: How you can get your students to do more of the work", Window on Teaching, University of Warwick, 2013. <http://tinyurl.com/okmvlmg>

"Facilitating the co-evolution of HE people, practice, tools and services through participatory design thinking with staff, students, service providers and employers", HEA Annual Conference, 2013.

"Using online portfolios to reflect on the learning process during a URSS project", with Nathalie Dalton-King (Student Careers and Skills), Institutional Teaching & Learning Showcase Conference, 2013.

"Warwick Academic Technology Surveys", Window on Teaching, University of Warwick, November 2012. <http://tinyurl.com/oh3c4ez>

About my role in Academic Technology at Warwick:

The University of Warwick is a large and diverse institution, in which learning design and curriculum design decisions are the responsibility of many individuals and small groups, with relatively light overarching coordination. IT Services at Warwick provides centrally supported systems. However, technology-use decisions are made at a departmental or often individual level. Over the last ten years we have moved towards a more strategic, less *ad hoc* approach, developing skills and methods for interfacing between academic practice on-the-ground and strategic direction. In response to this, there are two key aspects of my role:

1. Promoting more consistent and more effective technology adoption and application, to get the most out of the available tools and to distribute good practice evenly across the institution - this means working

with individuals in a one-to-one mentoring process, providing workshops and working with our partners in the Learning and Development (aligned with the UKPSF).

2. Guiding the development of core services and strategies to meet the university's ambitions and to adapt to the diverse requirements and practices represented across the whole university.

I research and report upon the impact of academic technologies at Warwick. I am especially concerned with evidence based service and technology design. I write case studies and design studies using a systematic framework for evaluating impact upon the operational and dynamic capabilities of students and staff. I present my work to committees and open sessions within Warwick, at national and international conferences, and as open-access working papers (my paper on e-portfolios has been the second most popular paper in the Warwick system, peaking at 1,200 downloads per month).

I collaborate with the Institute for Advanced Teaching and Learning (IATL) and the Learning and Development (LDC) on **implementing the UK Professional Standards Framework for HE**. I have been a **panellist for Warwick's internal HEA Senior Fellowship accreditation process** (Warwick has been granted the power to accredit candidates internally). I work with IATL and LDC to promote and implement Warwick's commitments to student as researcher/producer, interdisciplinarity, widening participation, innovative teaching spaces, and student participation in module and curriculum development.

I work with groups of academics and students to develop, prototype, implement and evaluate new pedagogic designs. I have the pedagogic and technical capabilities required for the full lifecycle of an academic technology project.

About my PhD research:

The full title of my thesis is "Fit, Stick, Spread and Grow: A Transdisciplinary Study of Design Thinking for Remaking the University in the Age of Supercomplexity". Design Thinking is a strategy and methodology for enhancing a whole organisation's capability for design and innovation, with design capability spread broadly across all participants. It builds upon empathetic, participatory and agile design approaches. I have augmented this with transdisciplinary research methods, especially the emergent field of *design anthropology*. This synthesis creates a more rigorous and grounded approach to collective design and innovation, and the multi-dimensional interface between strategy, practice and the development of dynamic capabilities. The aim is to create and critically evaluate an approach suited to the present and future needs of higher education.

My design values:

Simplicity, flow, enjoyable interfaces, respect for and empathy with all participants, designing for diversity, eliminating negative cognitive bias, appropriate cognitive load, achieving fit to needs and capabilities, durable and sustainable design, designing for diffusion, harnessing collateral learning and emergent opportunities, devolving design agency to domain experts.

Teaching experience:

In 2016-2017 I have taught a series of workshops as part of the Learning and Development Centre's academic staff development programme.

In 2014 I was an **Undergraduate Research Student Support mentor**, guiding undergraduate students through the process of completing individual research projects beyond the standard curriculum. The URSS funds about 250 students each year, and is a key part of Warwick's undergraduate research strategy.

In 2013, 2014 and 2016 I led workshops for the Warwick Medical School's masters level course on Learning Technologies for Health Education. I introduced a range of medical professionals to methods for choosing, adopting and adapting learning technologies.

In 2008 I received a National Teaching Fellowship and a Warwick Award for Teaching Excellence. This was in recognition of my work developing academic practice in the Arts Faculty. My team of undergraduates, the E-Squad, added an important dimension to this, with students supporting the development of academics.

I have devised and delivered many lectures, workshops and student activities, principally in support of technology-intensive activities in Arts and Humanities undergraduate courses, and as part of staff development programmes for all departments at Warwick, in all faculties. I have covered topics including: academic blogging; concept mapping for researchers; creative academic film making; documentary film making; maintaining an e-portfolio; interaction design for learning; creativity; design methods.

Between 2005 and 2011 I designed and taught a programme of lectures and workshops for the MA in International Design and Communication Management (course convenor Dr. Jonathan Vickery). The students came from diverse backgrounds, including a broad range of nationalities. Learning objectives included: understanding the role and affordances of digital media technologies (including video making); creative processes with digital technologies; working as a production team; design methods; cultural and social implications of new media; blogs and e-portfolios; writing and presentation for the web; critical appreciation of design.

Before working in Higher Education, I had been a secondary school teacher. This included teaching A-Level Computing and Advanced GNVQ Information Technology.

Technical capabilities:

I am an experienced software architect and trainer, with a deep understanding of technology issues and systems, including servers, networks, desktop architectures and mobile systems. I program in Java, SQL, C++, Javascript and Actionscript. I am especially skilled at adapting existing web platforms to better meet the needs of teachers and learners. I use Moodle, Mahara and other learning technologies.