



The Development and Design of an Interactive Digital Training Resource for Personal Tutors

Kathryn Woods*

Goldsmiths College, University of London, London, United Kingdom

This chapter details the development and design of an interactive digital training resource for personal tutors in the Arts Faculty at the University of Warwick in 2018. The Arts Faculty Personal Tutor Training Resource aimed to enhance staff and student experiences of personal tutoring. The training was designed and delivered through the open-source learning design tool H5P within the University of Warwick's Virtual Learning Environment, Moodle. The training resource content is delivered through a mixture of text, images, videos and links to further resources which introduce learners to personal tutoring policies, structures, processes, support, and best practice. The resource also contains interactive activities that enable learners to condense their learning, reflect on their personal tutoring knowledge and practice, and see their progress as they move through the different stages of the training. The resource was designed to be interactive to make the content as engaging as possible for learners and to promote the retention of knowledge. It was also designed with different learners' levels of digital literacy and accessibility needs in mind. This chapter outlines the context of the training's development, and the pedagogic approaches, methods and principles that informed the learning design. It also provides an account of the design process and a description of the training content. This case study demonstrates the value of online training and resources for supporting personal tutors by showing the positive impact that the Arts Faculty Personal Tutoring Training Resource has on staff and student experiences of personal tutoring at the University of Warwick. It also shows that personal tutors welcome online training and resources, and that online training is often preferred to face-to-face training because it can be used and accessed according to the requirement of users at any time.

OPEN ACCESS

Edited by:

Wendy Gates Troxel, Kansas State University, United States

Reviewed by:

Samantha Jane Ahern, University College London, United Kingdom Brian Anderson Peters, North Carolina State University, United States

*Correspondence:

Kathryn Woods k.woods@gold.ac.uk

Specialty section:

This article was submitted to Leadership in Education, a section of the journal Frontiers in Education

Received: 24 January 2020 Accepted: 03 June 2020 Published: 10 July 2020

Citation:

Woods K (2020) The Development and Design of an Interactive Digital Training Resource for Personal Tutors. Front. Educ. 5:100. doi: 10.3389/feduc.2020.00100 Keywords: personal tutor, training, online, H5P, interactive

1

INTRODUCTION

This chapter details the development and design of the Arts Faculty Personal Tutor Training Resource for staff in the Arts Faculty at the University of Warwick in 2018. This training resource aimed to enhance staff and student experiences of personal tutoring, support the introduction of a new personal tutoring policy, and improve awareness of personal tutoring structures, processes, support, and student services. The resource was designed, and the content identified, in response

to staff and student experiences of personal tutoring as detailed in the pedagogic literature and Warwick University's Personal Tutoring Review 2017. The personal tutor training was developed in Moodle, Warwick's Virtual Learning Environment. Within Moodle, most of the training content was designed in the opensource learning design tool H5P and delivered through a mixture of text, images, videos, and links to further resources. The learning resource also contains interactive formative assessment activities like quizzes and drag-and-drop question sets. These activities were designed to enable personal tutors to condense their learning, reflect on their knowledge and practice, identify areas for improvement, and track their progress as they move through the different stages of the training. The resource was designed with different learners' levels of digital literacy and accessibility needs in mind, and awareness of different degrees of familiarity with Warwick's personal tutoring system among users.

This chapter explores the context for the development of the Arts Faculty Personal Tutor Training Resource in relation to changes in the Higher Education sector and the particular arrangements, cultures and practices of personal tutoring at the University of Warwick. It considers a range of pedagogic literature relating to personal tutoring and Technology Enhanced Learning (TEL). The paper also details the pedagogic approaches, principals and methods that informed the design of the Arts Faculty Personal Tutor Training Resource, the content of the learning, and how it was implemented. The final part of the article provides an evaluation of the training resource and its impact on staff and student personal tutoring experiences. The article shows the positive influence that the resource has had on staff and student experiences of personal tutoring during its first year of implementation.

This case study demonstrates that interactive, multi-media online training that is designed with the needs of users in mind and developed through engagement with academic and professional service stakeholders, can have a positive influence on staff and student experiences of personal tutoring. It also shows that both staff and students welcome the development of digital and online personal tutor training and resources, and that in many cases well-designed and engaging digital provision is preferred to face-to-face training. This is because such training can be accessed whenever users require; whether they are about to undertake personal tutoring responsibilities for the first time, or they are experienced personal tutors looking for specific guidance on a particular personal tutoring related issue.

BACKGROUND CONTEXT

A personal tutor is an advisor assigned to every student when they start University who provides academic and pastoral support during students course of study. In some institutions personal tutors are known as academic advisors. Personal tutor systems, common in many Higher Education institutions, aim to create a sense of student belonging and community, and support academic induction and individual student learning experiences (Wootton, 2006, p. 118). Generally speaking, personal tutors

are expected to provide guidance on University governance, systems and processes, and support students in their academic, personal and professional development (Yale, 2019, p. 534-535). In practice, approaches to personal tutoring vary across and within institutions. Thomas has identified three different models of personal tutoring currently in operation: pastoral, professional and integrated (Thomas and Hixenbaugh, 2006, p. 21-31). In the pastoral model, academic staff provide personal and academic support, while in the professional model, personal tutoring is delivered by dedicated trained staff who are often based in professional services. In the integrated model, personal tutoring is timetabled as part of the curriculum and delivered by academics. Whatever the model, Stevenson suggests that personal tutoring is important part of University learning because it enables "students to make connections between the different elements of the learning experience" (Stevenson, 2009, p. 121).

Recent years have seen increased attention on personal tutoring delivery and experience in the UK Higher Education sector. Several universities, including Bath Spa University, Exeter University, Warwick University and Kings College London, have conducted significant reviews of personal tutoring in the last 10 years. These reviews have chiefly been concerned with improving personal tutoring within institutional contexts. There has also been growing pedagogic research interest in personal tutoring, especially since the establishment of UK Advising and Tutoring in 2015. In the collected editions Personal Tutoring in Higher Education (2006) and Effective Personal Tutoring in Higher Education (2018), pedagogic researchers have explored the purpose and effectiveness of personal tutoring in modern HE, showcased examples of good practice, and identified future trends. This research has revealed that the personal tutor is a "frequently hidden yet potentially significant figure in many students" learning experiences (Watts, 2011, p. 214). Recent interest in personal tutoring has been driven by an increasing focus on the results of the National Student Survey, the forthcoming subject-level Teaching Excellence Framework, expanding student numbers, and a growing focus on the student experience. At the same time, fee paying students have come to demand better personal tutor support and provision (Luck, 2010, p. 274). This has created a context where universities are seeking to enhance their personal tutoring provision for the improvement of the student experience (Personal Tutoring Review, 2017, p. 1).

Research has shown that there is often a gap between students' expectations of personal tutoring and their actual experiences. It has been suggested that this caused by lack of clarity around the nature and boundaries of the personal tutor-tutee relationship, and different staff ideologies about personal tutoring (Smith, 2008; Stephen et al., 2008; Watts, 2011). One Head of Department from the Arts Faculty at the University of Warwick suggests that there is:

'potential ambiguity between supporting students on the one hand but encouraging them to develop their own resilience and independence on the other [...] this can lead to essentially a proactive stance on the part of tutors or a responsive one.

I think some colleagues might feel that they shouldn't be too proactive in discovering whether students have problems' (*Personal Tutoring Review*, 2017, p. 15).

Lack of training for personal tutors has been identified as a key cause of confusion around the personal tutoring role and the maintenance of boundaries in personal tutoring relationships (McFarlane, 2016).

Multiple studies have shown that lack of specific personal tutor training is a widespread concern among personal tutors, with many reporting feeling unequipped and unsupported in relation to their personal tutoring related responsibilities (Owen, 2002; Gardner and Lane, 2010; McFarlane, 2016). Reflecting the views of many, in 2002 one personal tutor interviewed in research by Owen reported: "I think we do need some training. Sometimes, before you look round, students are into something really deep. I don't want to do counseling but I'd like to know how to receive their worries and when to stop them and refer on" (Owen, 2002, p. 15). As detailed in Gardner and Lane's autoethnography of their personal tutee-tutor relationship, students often come to personal tutors looking for support with complex, complicated and distressing issues, and tutors can feel out of depth in terms of knowing how to support appropriately, and where and how to draw boundaries (Gardner and Lane, 2010). Lack of training is widely reported to contribute to these feelings among academics. These feelings are also heighted by the added challenge academics face of balancing their personal tutoring responsibilities alongside teaching, research and administration (Barlow and Antoniou, 2007; Myers, 2008). A lack of investment in the development of personal tutor training can also lead staff to feel that their personal tutoring work is not properly valued by their institutions.

At the same time, students increasingly expect personal tutors to be required to undertake training before undertaking personal tutoring work (Owen, 2002, p. 19). This is revealed by comments from students who were part of a focus group on personal tutoring at the University of Warwick in 2017. One student noted: "Tutors need to be more aware or have some kind of training about the fact that students face all kinds of problems of their own, in particular with regards to mental health and personal difficulties." Another student plainly stated: "Personal tutors need some specific training!" (*Personal Tutoring Review*, 2017, p. 21).

On the basis of such evidence, many universities have begun to design and deliver personal tutor training and resources in recent years. The vast majority of these support resources are provided through online advice webpages or "toolkits." Many Universities, such as Aston University, Bath University, Bristol University and Loughborough University, have also started to provide personal tutor training sessions as part of the induction programmes for new staff (*Personal Tutoring Review*, 2017, Appendix 3). For the most part, this training is delivered through face-to-face in presentations or workshops. Some universities, such as the University of Sheffield, University of Surrey, Leeds Metropolitan University and Greenwich University, also offer face-to-face training as part of ongoing professional development training (*Personal Tutoring Review*, 2017, Appendix 3).

Yet, information about what these toolkit resources and face-to-face training sessions cover (and their effectiveness) is largely unclear due to lack of published information and evaluation of such interventions. It is likely that approaches vary considerably between institutions, and that their effectiveness differs accordingly. Indeed, at the UKAT conference in 2018, colleagues from across the sector showcased their different methods of personal tutor training revealing a variety of approaches. For example, in a workshop session Alison Braddock and Michael Draper from the University of Swansea Academy of Inclusivity and Learner Success (SAILS) invited attendees to participate in a sample of their new personal tutor training programme which aims to enhance practical personal tutoring skills through discussion of "what you would do" in relation to examples of real life wellbeing related scenarios that have previously been encountered by personal tutors. At the end of the session, several colleagues noted how different this was from the didactic presentation approach to personal tutor training employed in their own universities.

Furthermore, even in cases where the design and development of training has been documented, as in the case of Elaine Fisher's article on the e-learning module that she developed for personal tutors at the University of Westminster (Fisher, 2017), what is missing is evaluation of the training's pedagogic effectiveness, and the extent to which it enhanced staff and student experiences of personal tutoring. Therefore, although the Higher Education sector has recently begun to come to a consensus that personal tutor training is desirable and will likely lead to the improvement of personal tutoring experiences for staff and students, at present there is little evaluated evidence about "what works" and the impact that personal tutoring related professional development or training has on personal tutoring experiences. By providing an evaluated case study of the methods used in design and identification of content for an online personal tutor training resource at the University of Warwick, this chapter seeks to address this hole in the existing literature.

RESEARCH METHODOLOGY: AIMS

This chapter will examine the development, design, and impact of online personal tutor training through a case study of a digital training resource for personal tutors that was developed for staff in the Arts Faculty at the University of Warwick in 2018. In the first instance, a case study is considered the best means of analysis because personal tutoring arrangements, purposes, and practices vary between institutions. Secondly, the case study approach is a useful means of identifying "what works" in practice because it enables in-depth analysis of the situational context and underlying principles which enabled a particular intervention to "work." Consequently, the case study analysis of the development and design of the online Arts Faculty Personal Tutor training provided in this chapter will enable identification of some general methods, principles and insights which may be useful for the development of similar resources in other contexts.

Personal tutoring has been a key teaching and learning support structure at the University of Warwick since it was

established in 1965. At Warwick, personal tutoring is delivered through a pastoral model and sits within a broader institutional framework of centralized, well-resourced, and professional student support and development services. These services include wellbeing Support, Student Opportunity, Residential Life, and the Library. Although Warwick has set minimum expectations for personal tutoring delivery since 2012, personal tutoring is organized locally by departments. This organization creates variations in personal tutoring approaches, practices, and experiences, but is considered important to allow for disciplinary appropriate personal tutoring arrangements. In recent years there has been a significant increase in student numbers at Warwick, with the total number of undergraduate students growing 14% between 2012/12 and 2016/17, which has put pressures on the personal tutor system. In 2018, there were 2929 undergraduate students in the Faculty of Arts who were enrolled on courses across 9 departments (Classics and Ancient History, Global and Sustainable Development, English and Comparative Literary Studies, Film and Television Studies, History, History of Art, Liberal Arts, School of Modern Languages and Cultures, and School of Theatre and Performance Studies). In terms of staff, in 2018 there were 250 staff on contracts which made them eligible for undertaking personal tutoring responsibilities (although a portion of this number would not be expected to undertake personal tutoring due to research leave or fulfilling other senior administrative positions). The personal tutor to tutee ratio in the Arts departments at Warwick, taken over a 3-year average between 2014/15 and 2016/17, ranged between 3.6 to 17.8 (Personal Tutoring Review, 2017, Appendix 5).

The identification of clear learning aims for the resource was of vital importance in ensuring a focus for the project during the design process. In designing the training module by starting with learning aims and outcomes, I followed Biggs' educational design theory of constructive alignment (Biggs, 2011, p. 279–365).

Firstly, the learning aims for the resource were identified in response to evidence from staff and students about their experiences of personal tutoring. A major source of evidence was Warwick's Personal Tutoring Review, undertaken in 2017 by the Personal Tutoring Review Group, led by the Dean of Students, Professor Louise Gracia. Lack of training was identified as a key issue by the report. It was noted:

'providing clear guidance and training about the roles, responsibilities and boundaries of personal tutoring is essential for those managing and resourcing personal tutoring as well as those undertaking personal tutoring work. Such awareness raising permits not only shared good practice but also an institutional opportunity to begin to recognize the skill required in doing this well and the resource and reward that could/should be attached to it' (*Personal Tutoring Review*, 2017, p. 8).

A core recommendation of the review was the development of face-to-face Personal Tutor Basic Training and Personal Tutor Refresh Training. It was proposed that Personal Tutor Basic Training should be made compulsory for all new members of staff who had personal tutor responsibilities within the first

year of their appointment. It was also proposed that Personal Tutor Refresh Training should made compulsory for all existing members of staff with personal tutoring responsibilities once every 3 years. The requirements for undertaking training were written into the new Personal Tutor role descriptor agreed by the Universities Senate and Council in 2018. Subsequently, the implementation of face-to-face Personal Tutor Refresh Training began at the beginning of the 2018/19 academic year, with the development of Personal Tutor Basic Training being identified as a key work-stream for the Dean of Students' Office in the same year.

The design and development of the Arts Faculty Personal Tutor Online Training Resource aimed to support the implementation of the changes to the personal tutor role, the face-to-face training designed and delivered by the Dean of Students' Office, and the broader recommendations of the Personal Tutoring Review (for the full set of recommendations see the University of Warwick's Personal Tutor Review, 2017). Indeed, most of the content for the Arts Faculty Personal Tutor Training Resource was developed from the Dean of Students' Office in-person training and materials, such as the Personal Tutor Meeting Checklist. These materials and their content were developed out of information gathered from staff and students during the Personal Tutoring Review. The Arts Faculty Personal Tutor Online Training aimed to support this in-person training by providing a form of personal tutor training that could be accessed at any time and was tailored to the specific needs and concerns of personal tutors from the Arts Faculty.

The particular needs of Arts Faculty personal tutors were identified from the Arts Faculty 2017 Institutional Review of Teaching and Learning (ITLR). This report noted that more effective integration of pastoral support and academic support should be a key area of work for the Faculty in advance of the next institutional review. Within the Faculty, the ITLR revealed wide variations in approaches to personal tutoring amongst staff. The Faculty ITLR recommended that the Faculty should agree a set of practice-based principles that the personal tutor should work to, the establishment of a clear set of boundaries for the role, and the better management of students' expectations of personal tutoring.

As the Arts Faculty Director of Student Experience, I was charged with addressing these issues and enhancing staff and student experiences of personal tutoring in line with the recommendations of the University's Personal Tutoring Review and the ITLR. Working with this remit, in May and June 2018 I conducted interviews with Senior Tutors, Heads of Department, and Directors of Student Experience in the Faculty of Arts to identify areas of good practice and identify a shared set of working principles for personal tutoring activities. These interviews, which were conducted informally to uncover candid responses, revealed that there were quite different approaches to personal tutoring in theory, practice and administration across and within the Faculty's departments, and a desire for greater consistency. They also revealed mixed awareness of the services offered by the University to support students. This evidence revealed the need to develop specific personal tutor training for Arts Faculty staff to create greater consistency in approaches to personal tutoring and its administration across the Arts. In this sense, the Arts Faculty Personal Tutor Training went beyond the scope of the Dean of Students' training, which largely focused on general good practice, communicating policy changes, and made allowances for variations in personal tutoring between departments.

Accordingly, the aims of the design and development of the Arts Faculty Personal Tutoring Resource were to:

- Provide training and resource materials for personal tutors that supported the implementation of the Personal Tutoring Review and training provided by the Dean of Students' Office;
- Create greater consistency in understandings of the expectations, boundaries and requirements of the personal tutor and the personal tutor-tutee relationship;
- Create a better understanding the administrative responsibly inferred on personal tutors and the principles of common regulatory policies;
- Create a better understanding of when and how to signpost students looking for specialist support, and how personal tutors could obtain personal tutoring guidance and support.

DESIGN PRINCIPLES

From late June 2018, I started to develop a project to design an online personal tutor training for the Faculty of Arts. I decided to design the module as a digital resource to compliment the more general scenario and discussion based face-to-face training offered by the Dean of Students' Office. It was also decided to provide the training materials online so they could be accessed by personal tutors as and when they needed, thereby offering ongoing support. The decision to deliver the training online was also stimulated by the growing use of Technology Enhanced Learning (TEL) in HE, and a desire to promote it within the Faculty subsequent to the establishment of the Digital Arts Lab in early 2018.

There were six key design principles that underpinned the development of the Personal Tutor Training Resource that were identified early in the project's development. These design principles were used to shape the design of all aspects of the training and the individual learning objects, as well as the approaches to their creation. These design principles stipulated that the training should be:

- 1. Learner-centered and designed as a learning activity
- 2. Engaging, multimedia, and interactive
- 3. Designed with input from stakeholders from across the University
- 4. Accessible
- 5. Clearly structured and navigable
- 6. Developed in a flexible learning environment

The following section will outline how and why these design principles were considered important, and how they shaped the creation of the training resource. To design the resource, I firstly considered various aspects of Technology Enhanced Learning Design theory. To aid this, in April 2018 I enrolled on a postgraduate award in technology enhanced learning delivered by the Academic Development Centre. Technology Enhanced Learning, or E-learning, has a range of definitions, from those which narrowly focus on web technologies, to broader definitions which encompass any use of technology to support learning. It is this broader definition, outlined by Daly and Pachler, that is employed a here. They write that Technology Enhanced Learning is:

'A set of practices which enhance the potential of people to learn with others via technology-aided interaction, in contexts which can be "free" of barriers of time and place. It involves the utilization of a range of digital resources – visual, auditory, and text-based – which enable learners to access, create and publish material which services educational purposes... this material can be shared electronically with fellow learners and teachers both within and beyond the bounds of formal educational contexts' (Pachler and Daly, 2011, p. 217).

Using this definition, at the start of the project several core design principles were established. Design principles are the guidelines which inform design decision making and were of vital importance in the development of digital materials for this project.

The first design principle was that the training resource should be conceived as a learning activity, rather than didactic training, with learners (personal tutors) needs as the principal priority. It was accordingly decided that the training should be "user" focused rather than "delivery" focused in its design. In this sense, the resource was designed using the principles of learner-centered education. Learner-centered education is defined as:

'the perspective that couples a focus on individual learners - their heredity, experiences, perspectives, backgrounds, talents, interests, capacities, and needs - with a focus on learning - the best available knowledge about learning and how it occurs and about teaching practices that are most effective in promoting the highest levels of motivation, learning, and achievement for all learners' (McCombs and Whisler, 1997, p. 9).

Learner-centered education requires students to be active and responsible in their own learning. Wagner and McCombs suggest that "distance education provides a unique context in which to infuse learner-centered principles" (Wagner and McCombs, 1995, p. 32). Adoption of a learner-centered approach made sense for this project given the absence of a named "teacher" in the online training delivery model, and since the learners in this case were experienced educators with ample ability to be active and responsible for their learning.

The second design principle was that the training resource should be engaging and include a mixture of multimedia content and interactive activities. Research has shown that interactive online activities promote motivation and increase learning (Wilkinson and Lancaster, 2014; Khamparia and Pandey, 2017). Aldrich has also illustrated that interactive digital activities which enable "learning by doing" promote knowledge retention (Aldrich, 2005). This design principle was also connected to the learner-centered design principle in that learner-centered education emphasizes the value

of constructive learning activities through which learners achieve understanding through discovery (Beetham and Sharpe, 2007, p. 29). In addition, it was decided that the activities should be as authentic as possible because Smart and Cappel's study of students' perceptions of online learning showed that authentic learning scenarios proved the most engaging for individual learners (Smart and Cappel, 2006, p. 201–19).

The third design principle was that the design and development of the training resource should involve stakeholders from across the University, drawing upon academic and professional expertise as appropriate. In her account of developing an E-learning module for personal tutors, Fisher identified engagement and management of stakeholders as key to the successful development of the resource (Fisher, 2017, p. 14-15). This project had many stakeholders who played different roles in the design and delivery of the learning activity, both in terms of technical support and the development of content. Key stakeholders in the design of the resource included the Dean of Students' Office, Arts Faculty Education Team, IT Services, Wellbeing Support, and Student Careers and Skills. I engaged these stakeholders through regular meetings, interviews and email correspondence during the design process. Stakeholders provided core content for the resource, including text, images, diagrams, videos, and links to further resources. At later stages of the learning resource's development, Senior Tutors, Departmental Administrators, Heads of Department, Directors of Student Experience and Student Representatives played a key role in promoting the training to staff. They also offered important feedback on the resource upon its initial release which enhanced the usefulness and approachability of the training. I gathered this feedback via email, interviews and a questionnaire embedded on the training Moodle page.

The fourth design principle was that the training should be accessible to users with different levels of digital literacy and differing accessibility requirements. Martin and Grudxiecki have defined digital literacy is defined as:

'Awareness, attitude and ability of individuals to appropriately use digital tools and facilities to identify, access, manage, integrate, evaluate, analyze and synthesize digital resources, construct new knowledge, create media expressions, and communicate with others, in the context of specific life situations, in order to enable constructive social action; and to reflect upon this process' (Martin and Grudziecki, 2006, p. 255).

Accordingly, at an early stage in the design process it was decided that the training needed to be easy to use and simple in its design to ensure its optimal usefulness to staff. Connected to this, it was decided that the resource should be developed within a system that the staff were already familiar with and that was institutionally supported. In terms of accessibility, all the content was designed with reference to Accessibility Regulations relating to websites and mobile applications that were introduced in 2018. This involved ensuring that all of the materials were made printer

enabled, and guaranteed to be visible on computer screens, phones and tablets. Text included in the resource was also written in plain, jargon free language, in line with recent advice on promoting virtual inclusivity by JISC and the UK government (Inclusive Teaching Learning in Higher Education as a Route to Excellence, 2017; Accessible Virtual Learning Environments, 2018; JISC, 2018).

The fifth design principle was that the resource should be clearly structured and navigable. This included ensuring that it was possible for learners to complete the training in one session, or dip in-and-out of relevant sections as required. Partly this was to support user's learning as they engaged with the online resource. Oliver notes that "scaffolding"where teachers provide assistance and support through the structuring and clear communication of instructions and peer examples—is vital for the success of online learning activities (Hannafin et al., 1999, p. 250-51). This design principle was also identified as best practice in terms of promoting inclusion and accessibility (Inclusive Teaching Learning in Higher Education as a Route to Excellence, 2017; Accessible Virtual Learning Environments, 2018; JISC, 2018). At the same time, this design principle was put in place to guarantee that personal tutors could easily engage with the resource to find the information they needed while students were present or in emergency situations.

The sixth design principle was that the training resource should be developed within a flexible learning environment to support the resource's learning aims and enable adherence to the other design principles. Oliver suggests that "Flexible and online learning environments need learning supports to be designed as integral parts of the learning process" (Hannafin et al., 1999, p. 249). In this case, it was decided to design and deliver the resource within the University of Warwick's supported Virtual Learning Environment (Moodle). This decision was made for several other reasons. Firstly, as the University's Virtual Learning Environment staff, learners would already be familiar with Moodle and not require extra training to engage with it. Secondly, as the University's VLE, Moodle is well-resourced and supported by colleagues in IT who can ensure that the system is working, secure and up-to-date. Thirdly, the knowledge expertise and support of colleagues in IT was considered essential for maximizing quality in learning design, and for providing support learners engaging with the training after it was launched. Fourthly, Moodle allows for the development of interactive content and the integration of text, images, and videos into learning resources. It also facilitates the use and integration of other free, open learning tools, such as H5P. Fifthly, through Moodle it is possible to embed a feedback form into the resource page and track the numbers of people accessing different parts of the training. This was considered key in enabling the project's evaluation. Finally, Moodle automatically enrolls all members of staff from the central HR system. In turn, using a Faculty web group, it was easy for me to enroll colleagues and stakeholders to training resource Moodle page. As the module leader, I could also easily manage module enrolments.

DESIGN PROCESS

In July 2018, I asked IT services to set up permanent space for developing the training in Moodle. Around this time, I also storyboarded the structure of the training module (detailed below). Subsequently, I began to populate the Moodle space with content which took about 80 h of work in total to complete. The main Moodle page provides an overview of the training, including a summary of content, links to the parts of the training developed within the H5P presentation tool, and information about how to access the links. Here it is explained that the training should take between 45 and 90 min to complete. The top of the page includes a link to the feedback form and some images to make it more visually appealing to users. The main Moodle page also provides a summary of the main learning objectives for the training resource. These aims were developed out of the aims for the training design, discussed above, which were identified through interviews with key personal tutor stakeholders. The main learning objectives for the training were as follows:

- To understand the expectations, boundaries and requirements of the personal tutor and the personal tutor-tutee relationship;
- To understand the administrative responsibly inferred on personal tutors and the principles of common regulatory policies;
- To understand when and how to signpost students looking for specialist support;
- To understand how personal tutors can obtain personal tutoring help, guidance and support.

Early in the design process I decided to divide the training into 4 sections to make it easily navigable and possible to complete in sections. I also decided to divide the training into sections so new training sections could be added, as and when needed, at a later date. The 4 core sections of the training and the content they cover are:

- 1. Introduction to Personal Tutoring at Warwick
 - a. Role of Personal Tutor
 - b. Expectations of Personal Tutors
 - c. Expectations of Personal Tutees
 - d. Role of Senior Tutor
 - e. Boundaries
 - f. Institutional Arrangements
 - g. Confidentiality
 - h. Storing Student Information
 - i. Support and Resources
- 2. Personal Tutor Meetings
 - a. Organizing Meetings
 - b. The First Meeting
 - c. Personal Tutor Agreement
 - d. Equality, Diversity, and Inclusion
 - e. Recording Meetings
 - f. Personal Progress and Development Forms
 - g. Listening to Students
 - h. Common Issues

3. Administration

- a. Attendance
- b. Mitigating Circumstances
- c. Reasonable Adjustments
- d. Writing References
- e. Appeals
- f. Complaints and Disciplinary Procedures
- 4. Signposting to Pastoral Support and University Services
 - a. Signposting and Referral
 - b. Wellbeing Support
 - c. Skills and Personal Development
 - d. Student Opportunities (Careers)
 - e. Careers Advisors
 - f. Students' Union
 - g. Other Support Services

These 4 sections were selected to mirror the expectations of the role as agreed by the University of Warwick Senate and Council in 2018, and the learning objectives of the training. The content of each section was identified from existing materials provided in detailed form on the Dean of Students' website, Student Opportunities website, and Wellbeing Support website. These materials had been developed over several years in response to enquiries from staff to the Dean of Students' Office and professional services. The resource attempted to repackage this often quite dense material into bite-size and engaging pieces of information, providing links to the more detailed information on relevant cases that tutors might need in particular instances.

The core sections of the training described were developed in the free, open source learning design tool H5P. H5P, specifically the course presentation tool, was selected to create the learning objects within the training page for several reasons. Firstly, this tool enables you to develop slides with text, multimedia and different sorts of learner-based interactions, including multiple choice questions, true or false questions, interactive videos, interactive summaries, and drag and drop questions. Secondly, H5P enables the user to track their progression through the learning through a progress bar. Users can also access particular sections of the training using the navigation bar, and exit and rejoin the H5P content at the same place. Thirdly, materials hosted in the H5P presentation tool can be downloaded and printed. Fourthly, by using the H5P tool for the training it was hoped that staff would becoming more familiar with the learning tool and interested in using it within their own teaching.

Each section of the training begins with a slide which outlines what issues/topics that part of the training will cover. The issues covered in the training and slide content were identified and developed from personal tutor resources provided by the Dean of Students Office, Teaching Quality, and information given by central service departments including Wellbeing Support and Student opportunity. The decision to draw upon existing materials was deliberate to avoid confusion of messages, and to also enable signposting to toolkits and other materials to support the Moodle training. Efforts were made to make the text clear to read and engaging in tone. The text on the slides

was also kept to a minimum with a focus on clear messages. Links to more detailed information about different issues and topics was provided on almost every slide of the presentation(s). The slides also featured a range of different images, including some of students which were provided by marketing and that complied with GDPR. Other images and symbols relating to teaching and learning that featured in the training were identified using the Creative Commons website. Where specific documents were being discussed, especially in section 2 on Personal Tutor Meetings, I included screen images of the documents to make them recognizable to staff. Section 4 on signposting to pastoral support and university support services also featured images and diagrams which were developed by student opportunity and wellbeing support. This section also includes direct contact information for central support services. No single presentation was longer than 20 slides to not overload the learners. As the learner moves through the training, they can see how far they have progressed via a track bar which runs along the bottom of the slides. There is also a navigation bar which can be used to jump slides, and at the end of each section there is an interactive summary of the learner's quiz responses is produced so they can see their progression.

Interactive learning activities were peppered throughout the presentation slides, with one appearing about every 6 slides. These were designed to help learners condense their learning, reflect on what they had learnt, and to maintain engagement. These assessments also allowed tutors to identify holes of understanding and encouraged further focus on prior areas of the training that may have been not fully understood. Examples from the resource include a multiple-choice question where users are asked to identify the correct personal tutor role descriptor and expectations of a personal tutor, and true or false questions about the number of expected personal tutor meetings. Again, in section 4 there is a set of drag and drop question sets which ask tutors "what they would do" when encountering various student reported personal or academic issues. As with these examples, the assessment activities focused on questions that were "core" to personal tutoring practice, or where there were known to be common misconceptions among tutors as identified through discussions with the Dean of Students' Office and interviews with academic staff. After completing each of these questions sets, users are shown which questions they answered correctly or incorrectly, and given further information about why answers are correct or incorrect.

The project was soft launched to key stakeholders in late August 2018. These stakeholders were encouraged to give feedback via a questionnaire hosted on the main Moodle page, email (my email address was listed on the site page and sent alongside the email invite) and individually scheduled interviews. Overall the response was positive and welcoming of the resource's development. There was particular praise for the interactive activities which stakeholders reported were engaging and helpful in the retention of knowledge. However, early user testing revealed some flaws with the interactive activities which were found to be overly complicated or broken in some cases. Subsequently, these were fixed or made simpler. This feedback also revealed some confusion about how to access the H5P

content. To remedy this, I created clearer signposting about how to access the different parts of the training on the main page. Most of the negative feedback related to the content and tone of the training which some felt was too didactic, patronizing or "dry." In response, I went through the training and tried to make the tone of the text warmer and more approachable to create a more positive learning environment for users.

With the revisions made, the training was formally launched to the Faculty of Arts in September 2018, 4 weeks in advance of the 2018/19 academic year. This was timed to give staff returning from summer leave time to complete it. The training was promoted to staff through Heads of Department, Directors of Student Experience, the Arts Faculty Education Committee and Departmental Administrators in departmental meetings and through email communications. I also sent out regular weekly emails advertising the resource to all Arts Faculty staff using the group mass mail resource. This lengthy launch process ensured that all staff who needed to had access to the resource and safeguarded against issues relating to incomplete staffing and mailing lists which can often be an issue with changes in staffing at the start of the new academic year. It is important to note that the training was designed as a support resource rather than a mandatory training, and participation was completely voluntary.

EVALUATION

The evaluation of the project began early in the stages of its development and is ongoing. The project's evaluation plan was developed from Butcher, Davies and Highton's model of learning design evaluation. This plan was selected because it encourages the project designer to identify their own measures of success and value judgement. It also uses four key steps of ongoing evaluation: measurement, value judgement, action, and monitoring (Butcher et al., 2006, p. 189). This method of ongoing evaluation was considered useful for this project because the training was designed to be flexible to enable it to evolve over time. The project's evaluation aims sought to establish:

- Levels of engagement (including ongoing engagement) with the training resource;
- The pedagogical effectiveness of the Moodle training as a learning resource;
- The impact of personal tutor Moodle on staff experiences of delivering personal tutoring;
- The impact of personal tutor Moodle on student experiences of personal tutoring.

Measurements of the learning resource's success were gathered through analysis of learner analytics (using standard Moodle reports that detail user engagement both across the Moodle resource as a whole, and in relation to specific H5P learning objects) interviews with key stakeholders, stakeholder feedback, a self-completed questionnaire on the resource page, and analysis of data relating to student support from the NSS. Measures of success, or value judgements, were identified as: more than 80 members of staff accessing the learning resource; good numbers of returning users; positive responses from stakeholders and

learners on the design and content of the learning resource; and improvement in student responses to personal tutoring and student support questions in the NSS.

Evaluation of the project began with interviews with key stakeholders. This allowed for actions to be taken to enhance or improve parts of the training as it was developed. After the soft-launch of the project, key stakeholders were invited to give detailed feedback on the resource through questionnaires and interviews. This was important to the enhancement of the resource before its full launch. Heads of Department and the Arts Faculty Education Committee were also invited to provide feedback on the resource after its full release. Regular monitoring was facilitated through keeping the feedback questionnaire on the learning resource page open throughout the year, through continuing analysis of user analytics, and regular check-ins with key stakeholders like the Dean of Students' Office.

To make it easy for people to access and promote awareness of the training, users were automatically enrolled on the module via an Arts Faculty staff webgroup. In 2018, there were $\sim\!250$ academic staff eligible to act as personal tutors in the Arts Faculty (although a portion of this figure would have been exempt due to research leave, personal leave, individual circumstances, or because they had a senior administrative role). As of April 2019, the training had been viewed by at least 143 users. This is seen as evidence of success, especially given that the training was optional, many staff had undertaken face-to-face personal tutor training delivered by the Dean of Students' Office in the same period, and that 80 staff completing the training had been identified as a measure of success in the evaluation strategy.

Users were not required to undertake all of the learning sections and instead were free to access the parts they might find useful. Data analytics which demonstrate staff engagement with the different sections are therefore revealing of what areas and issues personal tutors want the most support with. Part 1 (Introduction to Personal Tutoring) and part 2 (Personal Tutor Meetings) have proved the most popular parts of the training. Since September 2018, part 1 of the training has been viewed 341 by 143 users, and part 2 has been viewed 289 times by 121 users. That said, usage of the final two sections of the training has also been relatively good. Part 3 (Administration) has been accessed 206 times by 107 users, and part 4 (Signposting) has been accessed 230 times by 109 users. This data suggests that most staff were interested in using the resource to find out about the role of personal tutor (encompassing expectations, boundaries and institutional arrangements), followed by personal tutor meetings. It is probable that personal tutor meetings received significant attention from staff in the Faculty of Arts due to the introduction of new administrative practices across the Arts departments in the 2018 academic year but also early lack of clarity around best practice in personal tutor meetings. The high number of returning users in all sections (sometimes more than a 1:2 ratio) has been viewed as positive evidence that staff who have engaged with the training have found it useful, and that the resource has been successful in its design as an ongoing, dip-in-and-out, support resource.

Users could provide feedback on the resource via a questionnaire on the Moodle page. This optional feedback questionnaire was kept short (4 questions) to encourage responses. These questions were:

- How useful did you find this Arts Faculty Personal Tutor Training Module? (Extremely Useful; Very Useful; Useful; Not Very Useful; No Use at all)
- How likely are you to refer back to this training? (Extremely likely; Very likely; Likely; Possibly; Unlikely)
- What did you like about the training? (open comment box)
- How could the training be improved? (open comment box)

Unfortunately, responses were quite low (9 in total by April 2018). Responses were generally very positive. A total of 44% of respondents said they found the resource extremely useful, with most other respondents recording that they found it very useful or useful. A total of 66% respondents reported they were likely to recommend the resource to a friend. Positive comments included: "very clear, accessible and practical"; "All the information is in one place"; "Detailed information and guidance. Excellent clarifications on how to advise students suffering from stress/anxiety and requesting potential mitigation"; "good prediction of possible misconceptions"; "Clear and complete. A lot of useful information. Links to relevant documents and webpages"; "Minimal time needed for the knowledge gain facilitated"; "simple and easy to navigate"; "Easy to understand and follow. All topics covered. Loads of useful and printable documents." In response to the question of "how the training could be improved" most answers focused on the content of the training, with respondents highlighting spelling errors, broken links, and issues with terminology. Issues with spelling and links were rectified as identified as and when I received feedback.

Feedback on the resource from personal tutors and senior management has been highly positive. The resource has received praise from the Arts Faculty Education Committee and Heads of Departments, as well as Senior Tutors and Personal Tutors. At the Arts Faculty Education Committee and Heads of Department Forum, several academics reported that they found the online training more useful than the face-to-face training offered by the Dean of Students Office because it provided more practical information, and because they could work through it at their own leisure and return to it when needed. The resource has also attracted interest from around the University, with several departments getting in touch to consult on how to develop similar resources for their departments (Warwick Manufacturing Group and Sociology). The Dean of Students' Office have also decided to use this resource as the model for their Personal Tutor Basic Training as an online training resource. This training resource is due to be launched in the 2020/21 academic year.

In the year after the introduction of the training resource there was also a substantive improvement in student satisfaction concerning "academic support." This demonstrated in shifts in the Arts Faculty's NSS scores. In 2018, the Faculty's departments averaged a 73.2% average student satisfaction

score for "academic support." In 2019, the Faculty average for "academic support" in the NSS rose to 82%. This constituted 8.8% improvement in the Faculty's average for academic support scores, with the introduction of the personal tutor training resource representing the consistent change or enhancement in personal tutoring across all of the Faculty's departments. In some of the Faculty's departments, especially those that were particularly proactive in promoting the training, there was an even larger improvement significant swing, with Theatre and Performance Studies improving their academic support score 30.5% and Classics 11.3%. There is thus a correlation between the introduction of the training and improved NSS support scores around academic support.

Feedback from an interview with the Arts Faculty Student Union Representative also suggests that students welcome the development of the training as a way of enhancing personal tutor training provision. Indeed, after reviewing the training resource the Arts Faculty Student Union Representative reported their support for staff being required to undertake the training at the Arts Faculty Education Committee. The student representative also requested the development of a similar sort of online resource for personal tutees to help them get the most out of personal tutoring. Future developments will focus on developing content for supporting specific groups of students (BAME, widening participation students and international students) through personal tutoring.

CONCLUSION: FINDINGS AND IMPLICATIONS FOR FURTHER PRACTICE

This case study has shown the value in developing interactive digital resources to support personal tutoring. It illustrates that both staff and students welcome the delivery of personal tutor training and resources online, and that in many cases online provision is seen as preferable to face-to-face training because it can be accessed when personal tutors require and can provide a single hub of information relating to personal tutoring.

The case study illustrates that staff engagement with institutional training is likely to be more successful if delivered through digital systems which staff are already familiar with and easy to access. Moreover, it evidences that staff appreciate interactive training that includes a range of engaging mixed media and that is designed as a learning activity, rather than a didactic informational resource. In terms of content, it seems that staff prefer to be provided with a limited amount of text which communicates key messages in a clear, engaging and warm tone, with further detail being provided in links to resources. The integration of navigational aids and the division of the training into sections also seems to have been essential to the success of the resource because of the way

it easily allows staff to access to the specific information as and when they require. Additionally, in interviews staff have signaled that they welcome the option of training materials being downloadable and printable. Furthermore, this case study has shown that engagement with existing pedagogic literature on personal tutoring and technology enhanced learning, and a deep understanding and consideration of the institutional context is essential to the successful design of personal tutor online training. Engagement with key stakeholders and developing content out of materials provided by trusted sources of authority (in this case, the Dean of Students Office, Wellbeing Support, and Teaching Quality) has also been illustrated to be key in developing authentic and useful personal tutor guidance, and in promoting staff engagement with optional training.

More broadly, feedback on the resource from staff and students reveals that university communities increasingly expect enhanced forms of online training and digital teaching and learning support. At the same time, in its demonstration of the interest that senior university management at the University of Warwick have shown in developing similar online training resources for staff, this case study illustrates a trend where digital solutions are increasingly being looked to by institutions to achieve strategic goals and implement institutional changes in practice and process. Yet, this case study reveals the key importance of having staff who teach, and who have expertise in educational design, in developing educational training materials and taking the lead on such projects to ensure that training always has a primary focus on learning and the needs of learners. Although this case study has focused on the context at the University of Warwick, it includes insights and perspectives that can be used to support the design of similar learning resources in other Higher Education Institutions and internationally.

DATA AVAILABILITY STATEMENT

The raw data supporting the conclusions of this article will be made available by the authors, without undue reservation, to any qualified researcher.

ETHICS STATEMENT

Ethical review and approval was not required for the study on human participants in accordance with the local legislation and institutional requirements. Written informed consent for participation was not required for this study in accordance with the national legislation and the institutional requirements.

AUTHOR CONTRIBUTIONS

The author confirms being the sole contributor of this work and has approved it for publication.

REFERENCES

- Accessible Virtual Learning Environments (2018). All-Party Parliamentary Group for Assistive Technology and Policy Connect UK. Available online at: https://www.policyconnect.org.uk/appgat/sites/site_appgat/files/report/436/fieldreportdownload/appgatreport09-18finalweb.pdf (accessed June 26, 2020).
- Aldrich, C. (2005). Learning by Doing: A Comprehensive Guide to Simulations, Computer Games, and Pedagogy in E-Learning and Other Educational Experiences. San Francisco, CA: Pfeiffer, Wiley and Sons.
- Barlow, J., and Antoniou, M. (2007). Room for improvement: the experiences of new lecturers in higher education. *Innov. Educ. Teach. Int.* 44, 67–77. doi:10.1080/14703290601081365
- Beetham, H., and Sharpe, R. (2007). *Rethinking Pedagogy for A Digital Age.* London; New York, NY: Routledge.
- Biggs, J. (2011). *Teaching for Quality Learning at University*, 4th Edn. Maidenhead; New York, NY: Open University Press.
- Butcher, C., Davis, C., and Highton, M. (2006). *Designing Learning: From Module Outline to Effective Teaching*. London; New York, NY: Routledge.
- Fisher, E. (2017). Developing an e-learning module for personal tutors. Educ. Dev. 18, 11–14. Available online at: https://www.seda.ac.uk/resources/files/publications_214_Educational%20Developments%2018.2.pdf
- Gardner, L. D., and Lane, H. (2010). Exploring the personal tutor-student relationship: an autoethnographic approach. J. Psychiatr. Ment. Health Nurs. 17, 342–7. doi: 10.1111/j.1365-2850.2009.01527.x
- Hannafin, M. J., Land, S., and Oliver, K. M. (1999). "Open learning environments: foundations, methods, and models," in *Instructional-Design Theories and Models: Volume II*, ed C. Reigeluth (Mahwah, NJ: Lawrence Erlbaum), 115–140.
- Inclusive Teaching and Learning in Higher Education as a Route to Excellence.

 Department for Education, UK. (2017). Ref: DFE-00044-2017. Available online at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/587221/Inclusive_Teaching_and_

 Learning_in_Higher_Education_as_a_route_to-excellence.pdf
- JISC (2018). Quick Guide to Getting Started With Accessibility, and Inclusion. Available online at: https://www.jisc.ac.uk/guides/getting-started-with-accessibility-and-inclusion (accessed Sep 13, 2019).
- Khamparia, A., and Pandey, B. (2017). Impact of Interactive Multimedia in E-Learning Technologies. Researchgate.
- Luck, C. (2010). Challenges faced by tutors in higher education. Psychodyn. Pract. Individ. Groups Organ. 16, 273–287. doi: 10.1080/14753634.2010. 489386
- Martin, A., and Grudziecki, J. (2006). DigEuLit: concepts and tools for digital literacy development. *Innov. Teach. Learn. Inform. Comput. Sci.* 5, 249–267. doi: 10.11120/ital.2006.05040249
- McCombs, B. L., and Whisler, J. S. (1997). The Learner-Centered Classroom and School: Strategies for Increasing Student Motivation and Achievement. San Francisco, CA: Jossey-Bass.
- McFarlane, K. J. (2016). Tutoring the tutors: supporting effective personal tutoring. Act. Learn. High. Educ. 17, 77–88. doi: 10.1177/1469787415616720

- Myers, J. (2008). Is personal tutoring sustainable? Comparing the trajectory of the personal tutor with that of the residential warden. *Teach. High. Educ.* 13, 607–611. doi: 10.1080/13562510802334988
- Owen, M. (2002). Sometimes you feel you're in niche time. The personal tutor system, a case study. Act. Learn. High. Educ. 3, 7–23. doi: 10.1177/1469787402003001002
- Pachler, N., and Daly, C. (2011). Key Issues in E-Learning: Research and Practice. London; New York, NY: Continuum International Publishing Group.
- Smart, K. L., and Cappel, J. J. (2006). Students perceptions of online learning: a comparative study. J. Inform. Technol. 5, 201–219. doi: 10.28945/243
- Smith, E. (2008). Personal Tutoring. An Engineering Subject Centre Guide. Higher Education Academy. Available online at: https://www.heacademy.ac.uk/system/files/personal-tutoring.pdf
- Stephen, D., O'Connell, P., and Hall, M. (2008). 'Going the extra mile', 'fire-fighting', or laissez-faire? Re-evaluating personal tutoring relationships within mass higher education. *Teach. High. Educ.* 13, 449–60. doi: 10.1080/13562510802169749
- Stevenson, N. (2009). Enhancing the student experience by embedding personal tutoring in the curriculum. J. Hosp. Leis. Sport Tour. Educ. 8, 117–22. doi: 10.3794/johlste.82.218
- Thomas, L., and Hixenbaugh, P. (2006). Personal Tutoring in Higher Education.

 Stoke-on-Trent: Trentham Books.
- Wagner, E., and McCombs, B. (1995). Learner-centered psychological principles in practice: designs for distance education. *Educ. Technol.* 35, 32–35.
- Watts, T. E. (2011). Supporting undergraduate nursing students through structured personal tutoring: some reflections. *Nurse Educ. Today* 31, 214–218. doi: 10.1016/j.nedt.2010.06.005
- Wilkinson, R., and Lancaster, T. (2014). Improving Student Motivation Using Technology Within the STEM Disciplines. The Higher Education Academy. Available online at: https://www.heacademy.ac.uk/system/files/GEN-047-P. pdf
- Wootton, S. (2006) "Changing practice in tutorial provision within post-compulsory education," in Personal Tutoring in Higher Education, eds L. Thomas and P. Hixenbaugh (Stoke on Trent: Trentham Books), 115–25.
- Yale, A. T. (2019). The personal tutor-student relationship: student expectations and experiences of personal tutoring in higher education. J. Furth. High. Educ. 43, 533–544. doi: 10.1080/0309877X.2017.13 77164

Conflict of Interest: The author declares that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

Copyright © 2020 Woods. This is an open-access article distributed under the terms of the Creative Commons Attribution License (CC BY). The use, distribution or reproduction in other forums is permitted, provided the original author(s) and the copyright owner(s) are credited and that the original publication in this journal is cited, in accordance with accepted academic practice. No use, distribution or reproduction is permitted which does not comply with these terms.