Forging new pathways of research and innovation in open and distance learning:
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HEAD START ONLINE: A MOOC FOR THOSE THINKING ABOUT, OR PREPARING FOR, FLEXIBLE STUDY

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Summary

Head Start Online is a five week, free, online course (MOOC) that is designed to support prospective and/or new flexible learners' transitions into higher education. Enhancing retention and completion rates of this group of learners, in order to facilitate successful widening of access, is a significant global challenge. Head Start Online is focused on the initial stages of the study-lifecycle, as the foundations for student success are laid early. Head Start Online has emerged out of the Student Success Toolbox project, a nationally funded research and technology development project that developed a toolbox of eight digital readiness/preparation tools that were shared with the sector as OERs, along with a guide for their customisation and use. Head Start Online brings together a number of these tools together in a cohesive pre-induction socialization course that aids new/prospective learners in, for example: calculating how much time they have available in their lives to study, relative to how much time they spend in the other existing parts of their lives; examining what supports they have in their lives, and how those supports may help them overcome common problems experienced by flexible learners; learning about the computer skills needed in higher education; and also about the study skills required to study successfully in higher education. A pilot of the MOOC went live on the week beginning Monday 15th August 2016 and enrolled its first cohort of prospective learners who are currently progressing through the course.

Introduction

Head Start Online was developed as part of the Student Success Toolbox (SST – http://studentsuccess.ie/toolbox/tool4/#/technology-you-will-need/) project, funded by the (Irish) National Forum for the Enhancement of Teaching and Learning in Higher Education (http://www.teachingandlearning.ie) Building Digital Capacity fund. The SST project produced a suite of digital readiness tools for the higher education sector. Head Start Online harnessed a number of these tools to create a cohesive resource for new/prospective learners. The MOOC is designed to assist flexible learners in the early stages of the study lifecycle by tackling the prominent issues of effective transitions and the foundations for student success. Although flexible learning is somewhat difficult to define; we refer to definition proposed by the Irish Department of Education and Science (2000) "mature adult participation [in higher

education] through flexible options which can be combined with family and work responsibilities" (Flannery & McGarr, 2014; p.424). Head Start Online utilised an inclusive definition of a flexible learner, portraying such a learner as an adult engaged in part-time or online/distance learning.

The creation of Head Start Online was vital as flexible learners have significantly lower completion rates than their on-campus counterparts; this emphasises the need to enhance the retention rates of this vulnerable student population. This represents overriding issues both on national and international levels. Ireland's undergraduate students are comprised of 17% flexible learners, which is lower than the majority of other countries (HEA, 2012), and there is increasing concern about this significant subset of students' ability to complete higher education remains.

Head Start Online holds the primary aim of providing a supportive resource for flexible learners during the key transitions in the earliest stages of the study lifecycle. These initial stages are represented by thinking about study, making choices, registration and the first few weeks of the course. This MOOC fills a void as the stages prior to flexible learners formally beginning their undergraduate studies have been largely ignored both within institutions and in empirical research. The specially designed digital readiness tools along with the additional specific content (e.g., videos, text) within the MOOC are readily available and provide these flexible learners with much needed support at a crucial stage.

Method

As part of the Student Success Toolbox project Head Start Online was developed using a design based methodological approach. Such a process is iterative in its nature; it does not only evaluate an innovative intervention, but also systematically enhances the innovation while also producing guiding design principles for subsequent associated research and development endeavours (Wang & Hannafin, 2005). Vitally, especially in the context of this MOOC, design-based research strives toward establishing a link between educational research and real-world environments. Firstly, a comprehensive analysis of existing empirical work was conducted in order to establish what tools work? relevant to offering support to flexible learner success during the initial stages of the study lifecycle. The aforementioned principal question could only be appropriately answered after addressing the related sub-questions: (a) Who are flexible learners? (b) What do we know about learner success? (c) How does what we know about supporting transitions relate to the above? Once answers were obtained for these queries the approach then scrutinised; (d) What connection exists between the literature and what institutions are providing to flexible learners? (e) What tools could usefully be developed in this project? (Brunton et al., 2016).

Numerous tools emerged from the literature analysis. In a comparison study, Nichols (2011) discussed the utility of support measures, for example compulsory support survey, orientation course, general messages of support, and personal contact with students. Also established as effective tools for encouraging student satisfaction, and increasing their likelihood to

successfully progress, were discussion forum platforms, active emails, and time-limited lecture postings (Gallie, 2005). Murphy, Politis, and Slowery (2015) emphasised the importance of assisting mature learners in those early stages by highlighting the benefits of offering the relevant information to help course choice, early access to timetables, and activity based learning to improve academic ability. Additionally the researchers reiterated the benefit of providing entrants with a digital environment on which new learners can interact with each other and existing adult learners. Undoubtedly the analysis revealed some interesting insights; however the amount of relevant tools identified was restricted.

Accordingly, a database of existing readiness tools was developed in order to support the literature analysis. Preparing such a database involved analysing 22 websites of worldwide universities to identify the readiness tools they offer to prospective learners or those thinking about study. The next step involved the thematic coding of these tools according to their main function; the following themes emerged: (a) Course match; (b) Preparation for higher education; (c) Orientation; (d) Addressing personal circumstances; (e) Community; and (f) Satisfactory student experience. Conspicuously, the above themes agree with Jones' (2008) principle factors that, when there is an evident shortage, lead to student dropout, thus preventing progression. Associated empirical work was then paired with these thematic clusters, allowing for the clarification of points of convergence between the relevant research and the tools in use internationally.

The aforementioned process lead to the creation of the relevant digital readiness tools, and established the foundations from which Head Start Online was developed. However, when it came time to build up from those foundations we were on less firm ground with regard to having a specific, identifiable methodology for building a MOOC. The final presentation of Head Start Online was influenced by a number of factors such as: pre-existing knowledge of how to create larger credit-bearing online courses; MOOCs that team members had taken on different platforms; review of other pre-induction socialisation MOOCs specifically; advice from our MOOC platform (see below) contact; an intensive MOOC design workshop with Yishay Mor; and trial and error while developing the MOOC on the platform. While this approach fits with the spirit of a design based research approach reflection is needed on what the best methodological approach is for developing a MOOC. The decision to have the first run of the MOOC be a pilot with a small number of participants (approximately 150) allowed that pilot to itself be part of the MOOC development process, and this is something that the development team found valuable.

The Structure of Head Start Online

The Head Start Online course is developed on a new Moodle-based platform, DCU Academy. The MOOC runs over a total of five weeks. Before Week One is officially launched, a welcome area is provided. This area contains a brief course overview and instructions relating to setting up a course profile. The total time commitment for participants is two hours per week; this may vary as there are additional optional activities at the end of each week. At the beginning of each week, a new section of the course is released and made available to participants. Even

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though the sections of the course are released on a weekly basis, participants are not expected to complete the course so stringently. Participants are free to complete the course at their own pace, or begin the course later than the initial launch.

There are five sections to the course:

- 1. A good beginning What is this course about? Who else is here?
- 2. What to expect What should you expect of part-time/online learning?
- 3. Time is precious How much time do you have for study? What supports do you have in your life?
- 4. Skills for success What computer skills do you need? What is required to produce a successful assignment in your first semester of study?
- 5. Next steps Where next? Is online learning for you? What will you decide to do?

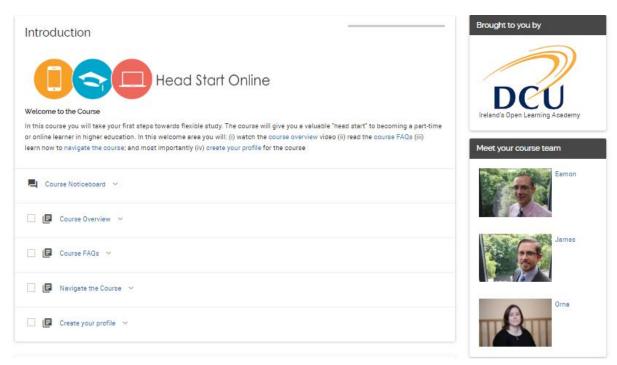


Figure 1.

Student Success Toolbox Activities

Am I Ready for Study?

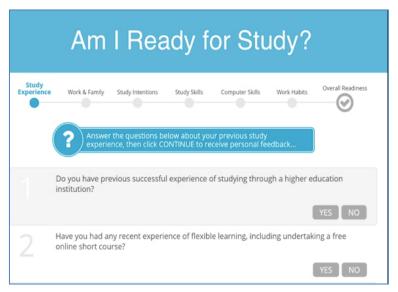


Figure 2.

Contained within Week Two of Head Start Online, this activity enables course participants an opportunity to self-assess whether they are ready to commence part-time online/distance study. A quiz consisting of six sections addressing relevant issues is presented: (a) Previous Study, (b) Work and Family, (c) Study Intentions, (d) Study Skills, (e) Computer Skills and (f) Work Habits. Upon finishing each of the aforementioned quiz sections and the quiz in its entirety, personalised feedback is delivered to participants (e.g., "you probably need to talk with your close family and friends. It's really important that they understand why you're thinking about undertaking further study..."). Essentially feedback is provided from two distinct standpoints: (a) the educational institution and (b) former/current flexible learner.

Do I Have Enough Time?



Figure 3.

Week Three offers a self-reflective *life calculator*, helping the course participants to assess the amount of the time they spend on various activities during a typical week. This helps them to gain a realistic perspective on whether they have enough spare time for study whilst balancing their current life, work and family commitments. Having calculated how users spend their time currently under six sections (a) Work, (b) Family, (c) Household, (d) Hobbies, (e) Leisure and (f) Sleep, feedback is then provided as to whether they have adequate time for flexible study (e.g., You can probably go ahead and register for your course but don't forget to talk with the staff and check the requirements for the particular programme of study you wish to undertake).

Who Can I Ask?



Figure 4.

Also within Week Three participants interact with a tool designed to get them thinking about their support network and how they might garner support in order to assist them in their progression through their studies. Information slides detail methods of finding support from Friends, Family, Employers, Universities and Other Students. Examples of students in both supported and unsupported scenarios are displayed, and advice for those lacking in support is also provided. Lastly, a series of typical student support problems coupled with information on how various support outlets may be of assistance are demonstrated (e.g., Problem: I am struggling with the technology on this course, Other Students Solution: Other students may be a good source of help with technology problems as they may have experienced similar problems themselves. However be careful not to share your user name and password with anyone.)

My Computer Skills: Am I Computer Ready to Learn?



Figure 5.

Week Four grants course participants the opportunity to hear from a student narrator regarding the vital computer skills required for higher education. The guidance is personalised, in that the user indicates their level of computer skills at the beginning of the tool. Both the technology services offered by higher education institutions and the necessary technology flexible learners typically use are communicated. Prior to starting the computer skills quiz itself, participants can access four student stories detailing first encounters with email services, online reading materials, Microsoft Word, and Microsoft PowerPoint. The first section of the quiz itself contains three fundamental questions, if a participant answers no to any of these questions; they are directed to online resources that can help learners improve their computer skills. Those who answer yes to all three of the fundamental question are directed down an alternative pathway with questions relating to word processing, file management, and using the internet.

My First Assignment

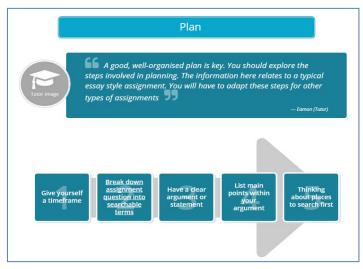


Figure 6.

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Also within Week Four, participants are guided by a student narrator in relation to what it is like to tackle a first assignment in higher education. Four different navigation pathways through the tool are provided for users depending on their previous experience with higher level assignments. Helpful information on developing and planning an assignment is communicated. Other students' perspectives are also given throughout the tool through quotes in order to heighten participants' sense of what it is like to be faced with an assignment in higher education for the first time.

Other Features

Graduate Voices



Figure 7.

During the development stage of Head Start Online, members of the research team observed similar MOOCs (e.g., Australian Government funded *What's Uni Like?* and Future Learn's *Get Started with Online-Learning*) in order to gain insight into what elements were necessary to include. Continually, from the team's own perspective and also from that of course participants' view displayed on various forums, Vox Pops detailing the stories of real university students were extremely beneficial. With this in mind, the *Graduate Voices* videos were developed to establish a comparable advantageous element to Head Start Online. Here, via YouTube videos embedded in the platform, course participants can access advice from flexible course graduates and learn how their managed to navigate their progression through online study. The videos are situated appropriately in the course so that they complement the respective week's theme. For instance, in Week Two: What to Expect, a graduate details her online study story from the beginning when she did not know what she was facing into, and in Week Three: Finding the Time another graduate discusses how she had to become more organised in order to be able to study, and gives some advice on time management.

Live Discussions

It was decided that a live discussion, whereby three of the course facilitators would interact with course participants, would be conducted every Friday at 14:00 for the duration of the five week course. The chat sessions last 30 minutes and provide a platform for the participants to raise any queries they have and get an immediate response. Equally it grants course facilitators

the opportunity to access immediate feedback about various elements of the course (e.g., What aspects of the course are you enjoying? What could be improved about the course?). The chat sessions prove to be an appropriate way to round off each week of the MOOC and they also motivate participants to complete the week's previous activities and fully interact with its content, as they will more fully benefit from the chat sessions having done so. Notably, the chat sessions saw high levels of engagement from course participants, with large proportions of the total number enrolled tuning in each week.

Recap Videos



Figure 8.

At the start of each new week, before the participant explores that week's content, they encounter a recap video. The video is a reminder of what was covered in the prior week and allows users to reflect on their previous completed activities and what they have learned. The recap video also aims to ease participants into the new week as opposed to immediately presenting them with new content. Within the video, a course facilitator summarises: the amount of activities completed, what these activities entailed, the messages communicated in videos and interesting content contributed by participants. This element of the course was also used as an opportunity to remind participants to use the Share with Others box should they have any queries for the course facilitators or their fellow prospective learners.

Next Steps

This pilot phase testing of Head Start Online is crucial for the continual enhancement of the platform. A data collection and analysis strategy has been prepared in order to elucidate salient questions related to the course (e.g., What activities did people complete vs. not complete? What type of participant was more likely to progress fully through the course?). All of the above findings will inform the first full running of Head Start Online in early 2017. Disseminating MOOC information and results related to the pilot testing has also been established as a top priority by the research team. National and international conferences have been attended in order to garner interest in the MOOC over the past year and a similar strategy will continue to be employed over the coming months. What's more, Head Start Online and the associated findings will produce a considerable amount of published empirical

work. This is an important contribution of the MOOC as there is an evident gap to be filled in the literature in relation to the use of digital tools to facilitate flexible learner transition into Higher education

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