University of Northampton

Overcoming barriers to student engagement with Active Blended Learning

Interim Report

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Hello Waterside

Introduction:

Student feedback shows that the most valuable learning activities are those with clear instructions, delivered in a dynamic and engaging way, which give students the opportunity to do things and experiment. The University of Northampton's new pedagogical model emphasises the development of just that - active blended learning (ABL). Effective pedagogical design of blended learning and online activities is critical to the success of this model. This interim research report is intended to inform and support the process of pedagogical change and includes recommendations to overcome barriers to student engagement.

Based on feedback direct from our students, this document provides you with good practice approaches to ABL and online activity design. It also recommends ways to enhance student engagement in online activities, as your teaching practices transition into ABL. The recommendations outlined in this paper are based on the views of University of Northampton students from two qualitative studies: one small scale pilot completed in academic year 2015-16 and one larger ongoing study currently being undertaken across academic year 2016-2017.

The pilot study and initial analysis of the larger scale project indicates that student engagement in the online components of ABL depends on good design of online activities and an appropriate 'blend' that gives priority to face to face sessions. It also depends on factors relating to students' learning behaviour and beliefs about teaching and learning. A number of factors that impact student engagement relate specifically to staff knowledge, attitudes, beliefs and behaviours such as: problems with communication between staff and students, instructor attitudes and competences, support mechanisms and the relationship between staff and students. A full analysis will be published at the end of the project.

This report focuses on ways to address each of the factors impacting engagement. The suggestions and recommendations are based on both student responses in the study and good practice from literature. Even if all the suggestions outlined in this report are fully and consistently implemented, full student engagement cannot be guaranteed. This is because students' learning behaviours and beliefs about teaching and learning will continue to play a major role in their engagement and these factors are not fully within staff control. However, the approaches suggested in the first factor can go some way to reconciling student and institutional beliefs and expectations.

Additional Information and Support for ABL:

For more info on Waterside & the Teaching & Learning Plan:

- https://www.northampton.ac.uk/ilt/current-projects/waterside-readiness/
- https://www.northampton.ac.uk/ilt/lt-plan/

For access to an evidence base for ABL please see:

- http://bit.ly/ABL_ReadingList

For case studies of UON active, blended learning in practice please see:

- http://blogs.northampton.ac.uk/learntech/category/un-case-studies/
- http://bit.ly/SHED-NILE

*See Glossary at the end of the document for definitions.

Factors that affect student engagement:

1. Conceptions of learning & knowledge.

Students' beliefs about what constitutes 'proper teaching', the nature of knowledge and the process of learning directly impact engagement. The outdated concept of 'learning styles' is particularly pervasive, which limits the types of learning material and activity students feel they are able to engage in. Online tasks can be dismissed as not suiting a preferred learning style, which from the student perspective justifies their own disengagement.

Recommendations:

- Start discussions about what they think knowledge is, and how it is acquired and developed. Include the role of online learning. Deal directly with student perceptions of the value of ABL and its educational purpose - make clear the positive benefits of blended learning, without minimizing students' real concerns.
- Directly communicate about the differences and similarities in approaches to past educational experiences, acknowledging diversity.
- Students may respond to ABL as not conforming to their perceived 'learning style' (now considered an educational 'myth'*). Help them see the value of learning to learn in multiple modes, styles and contexts. Reframe concepts of fixed learning styles as developing repertoires.
- Support and encourage an experimental approach to learning and technology. Acknowledge this is sometimes difficult (including for staff). Model and encourage resilience in the face of failure. Build in opportunities for low-cost failure (e.g. through formative or peer assessments as trial runs prior to summative submission).
- There is not necessarily a direct correlation between students' learning behaviours and their conceptions of learning and teaching: students don't always apply what they know are the best approaches to learning. Support the development of effective practices by discussing what they are doing as well as what they are thinking.

* For information regarding the myth of 'learning styles' please see:

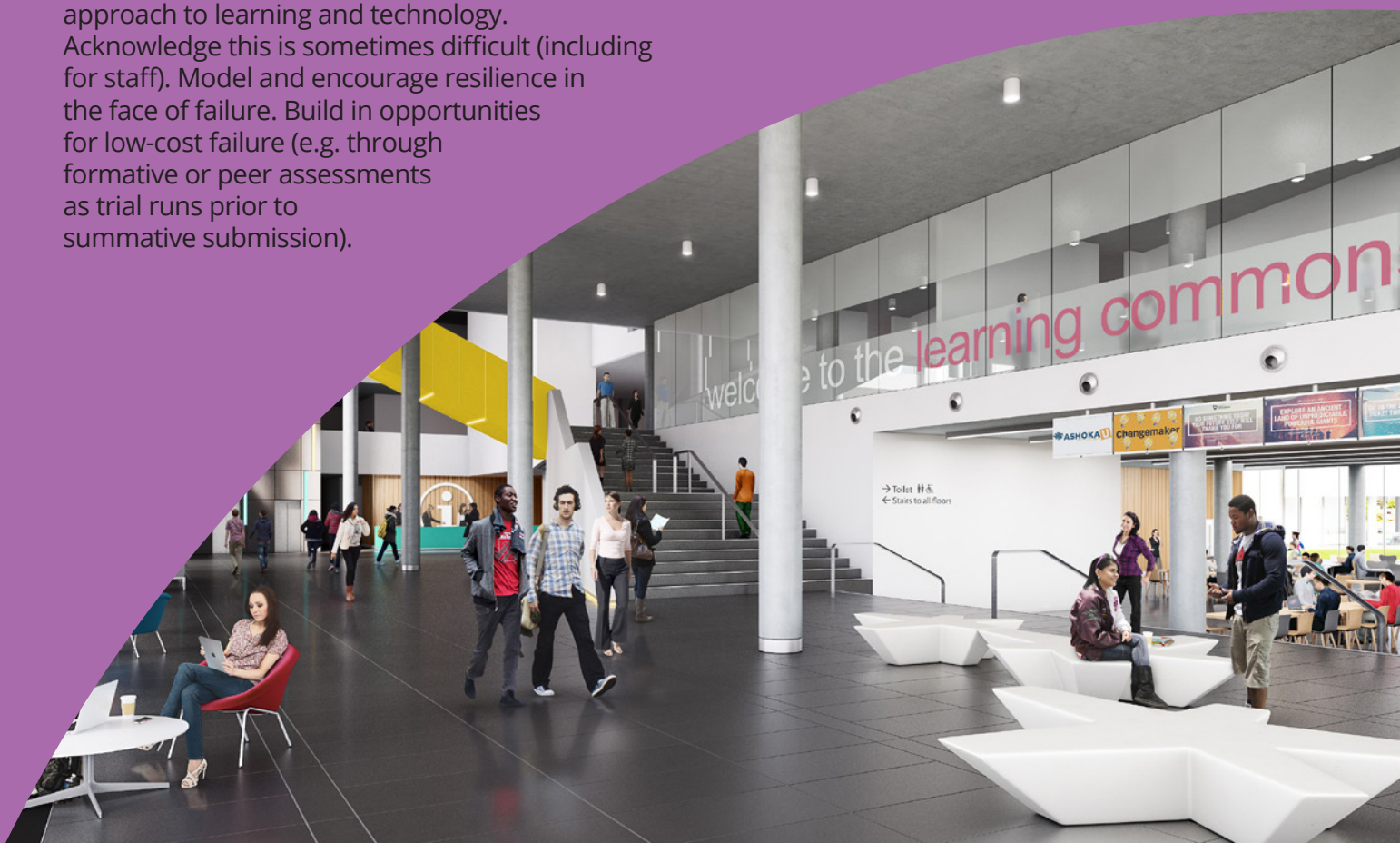
  http://blogs.northampton.ac.uk/learntech/2016/06/16/question-whats-your-preferred-learning-style/

For support:

- If you want to discuss this further contact Learning Design: LD@northampton.ac.uk
- For some ideas on how conceptions of teaching and learning can be articulated with reference to online learning, see: https://onlineteachingmanifesto.wordpress.com/the-text/

Other studies that confirm this finding:

Akerlind and Trevitt, 1999; Buckley, et al., 2010; Donnelly, 2010; George-Walker and Keefe, 2010; Lim et al., 2006; Orton-Johnson, 2009; Porter et al., 2016; Salmon, 2013; Sheffield et al., 2015; Singleton, 2013.



2. Pedagogical design across module and programme.

Respondents were clear that blended learning works best when there is a really obvious, explicit relationship between online components of a course and face to face [F2F] sessions. Where online tasks had previously been set and not followed up or made use of, students were less likely to engage in future. They raised a number of obstacles to effective engagement which relate to module and programme design. These ranged from pragmatic concerns, such as timetabling, to broader pedagogical issues such as a perceived lack of staged development of required knowledge and skills. They also raised concerns with respect to staff competences with technology and management of ABL.

Recommendations:

- Connect face to face [F2F] & online components together so that F2F sessions use the outputs of the online components or vice versa. Ensure that staff are regularly visible online. Even a sense that staff know who has done what will help sustain engagement. Avoid repetition of content in the classroom that has already appeared online and vice versa. For support go to the 'Recipes for Waterside' session.
- Design approaches to ABL at programme level. Consider:
  - Slowly increasing digital, learning and cognitive skill requirements year on year. Map requirements across years and modules. Make the value of these skills explicit.
  - Timetabling major online components as a programme to avoid multiple deadlines or conflicting approaches (e.g. 1 F2F session in an otherwise online week).
  - Varying the tools and types of activity. Be creative – mix up options. Consider picking a selection of tools & tasks to use in a term and rotating them so that students gain familiarity. Strike a balance between always doing the same thing and overloading different tools.
  - Students' cognitive load on programme level. Incorporating multiple new online tools and tasks may cause overload when combined with challenging content. The tool, the task or the knowledge can be new and challenging but avoid all three at the same time.
- Build instructor competences by:
  - Accessing and engaging in the developmental programmes and support available within the institution (e.g. C@N-DO) and beyond (e.g. HEA).
  - Fostering a positive, experimental attitude towards technology for learning through exposure to its uses and purposes and through creative experimentation. Engage in incremental development to increase staff competence with technology.
  - Seeking support and creating independent support mechanisms for development. Work as a teaching or programme team to develop and experiment together. Use peer observation to check approaches.

For support:

- Contact LD@northampton.ac.uk & learntech@northampton.ac.uk
- Read about the CAIeRO process for module and programme design here: http://blogs.northampton.ac.uk/learntech/2014/12/24/demystifying-the-caiero/
- For the 'Recipes for Waterside' session head here: https://www.northampton.ac.uk/ilt/workshops/recipes-for-waterside/
- For peer observation including COOL (Collaborative Observations of Online Learning) https://www.northampton.ac.uk/ilt/academic-development/peer-observation/ & https://www.northampton.ac.uk/ilt/workshops/peer-observation-for-development/

Other studies that confirm this finding:

McLoughlin and Lee, 2010; Mayes and de Freitas, 2004; Powell et al., 2015; Rovai and Jorden, 2004; Salmon, 2013; Sun et al., 2008; Swan, 2001; Wong et al., 2014.

3. Relationships, socialisation and collaboration.

The students heavily emphasised the importance of relationships to the success of active blended learning. This took a number of forms. Firstly, the relationship between staff and students mattered. Students said they were more likely to engage when they felt that staff valued them, were reliable and consistent in their engagement with online work, and had set up effective support measures. Secondly, they emphasised the importance of socialisation and collaboration with respect both to classroom and online work. Students remarked on the benefits of feeling connected. Perceiving online work as solitary, isolated and unsupported constituted a major barrier to engagement.

Recommendations:

- Establish relationships with and between students through frequent and constructive online, as well as offline, interaction.
- Embed support mechanisms. Provide opportunities for students to clarify, receive feedback or ask questions as well as opportunities to work in pairs and small groups. If there is a reason not to do so, tell them why.
- Build trust by explicitly telling students about the rationale behind ALL learning activities and module design. Show them that their learning and success is a matter of care and concern.
- Do not assume that online social interaction happens 'naturally'. Embed it, expect it, and facilitate it. For more help, go to C@N-DO workshop CLEO.
- Establish groups in F2F for online tasks. Use these groups to foster the links between online and offline tasks as mentioned above.
- Peer-to-peer work needs to be well structured, scaffolded and justified. Pair students in the F2F to agree processes. Provide a model or a rubric.

For support:

- Contact LD@northampton.ac.uk
- For the CLEO (Collaborative Learning Experiences Online) session go here: https://www.northampton.ac.uk/ilt/workshops/collaborative-learning-experiences-online-cleo/

Other studies that confirm this finding:

Dabbagh and Kitsantas, 2012; Donnelly, 2010; McLoughlin and Lee, 2010; Morley, 2012; Rovai and Jorden, 2004; Salmon, 2013; Sims et al, 2002; Shea and Bidjerano, 2010; Singleton, 2013; Sheffield et al., 2015; Swan, 2001; University of Leicester, n.d.

4. Interaction.

Students told us they valued activities with clear instructions that gave them a chance to do things and experiment. Multimedia approaches also proved popular as a more dynamic means of engaging with content. Classrooms should extend rather than repeat the online preparation work. Online tasks which were primarily passive (particularly reading PowerPoint slides) offered limited incentives to engage. Interactive tasks which scaffold knowledge and offer the chance to test, contribute and develop understanding were valued highly by students.

Recommendations:

- Encourage interaction with content through concrete doing or producing activities. Embed small passive tasks (reading, watching or listening) into active tasks. In other words, give students a purpose for reading X or watching Y.
- Make use of quizzes, blogs, wikis, discussions, collaborative projects and documents, etc.
- Work towards 'knowledge creation', i.e. students creating content themselves.
- Encourage peer-to-peer and tutor interaction (see above on social contact and collaboration).
- Use online tasks to structure interaction in F2F. Set students a concrete activity prior to the session. Use the outcomes of this to form a basis of the tasks within the session. This increases engagement by enhancing the flow between online and F2F components of the module. It also fosters engagement with subsequent online components.
- Use approaches to task design that engage the emotions, allowing for personal and visceral responses where relevant. Emotional engagement can increase motivation.
- Set yourself the task of not using a single PowerPoint slide throughout the module. Make use of student-generated content as "your presentation".

For support:

- Contact LD@northampton.ac.uk & learntech@northampton.ac.uk
- Read about the CAIeRO process for module and programme design here: http://blogs.northampton.ac.uk/learntech/2014/12/24/demystifying-the-caiero/
- For the 'Recipes for Waterside' session head here: https://www.northampton.ac.uk/ilt/workshops/recipes-for-waterside/

Other studies that confirm this finding:

Donnelly, 2010; Race, 2015; Salmon, 2013; Shea and Bidjerano, 2010; Singleton, 2013; University of Leicester, n.d.; Wong et al., 2014; Wu et al., 2010.

5. Accessibility and perceived ease of use.

Some students indicated that finding the online activities they were meant to undertake was not always straightforward. In addition, once found they said they did not always have the requisite digital skills to complete the task. Concerns about suitability for students with additional learning needs were also raised on a number of occasions.

Recommendations:

- Make sure course material does not require too much scrolling or too many clicks. Make sure it is mobile friendly where possible or be explicit with students about which platforms to use to complete the task.
- Develop a clear structure, use bullet points and avoid dense text.
- Identify and incrementally develop the prerequisite skills (digital, cognitive, academic and subject-specific) required to complete the task. Explicitly signpost skills students already have to build confidence.
- Ensure that everything created or used is designed for ease of use by anyone with additional learning needs or a disability.
- Technical skills, experience and attitudes to technology vary widely. Find out what students know and build up skills gradually. There are no 'digital natives' (see glossary) so developing digital literacy is integral.

For support:

- ASSIST: disability@northampton.ac.uk
- Learning Technology: learntech@northampton.ac.uk

Other studies that confirm this finding:

Henrie et al., 2015; Lim et al., 2006; Rovai and Jorden, 2004; Salmon, 2013; Sun et al., 2008; Wong et al., 2014; Wu et al., 2010.

6. Clarity of purpose and approach to task.

Students identified a number of problems with communication between staff and students, which created barriers to engagement. Students reported often being unclear about the rationale behind particular approaches and tasks. They also reported confusion about task requirements and how to complete the activities which suggests there are problems with the design of online activities. Some wanted more online communication from tutors while others felt overwhelmed by repetitive announcements.

Recommendations:

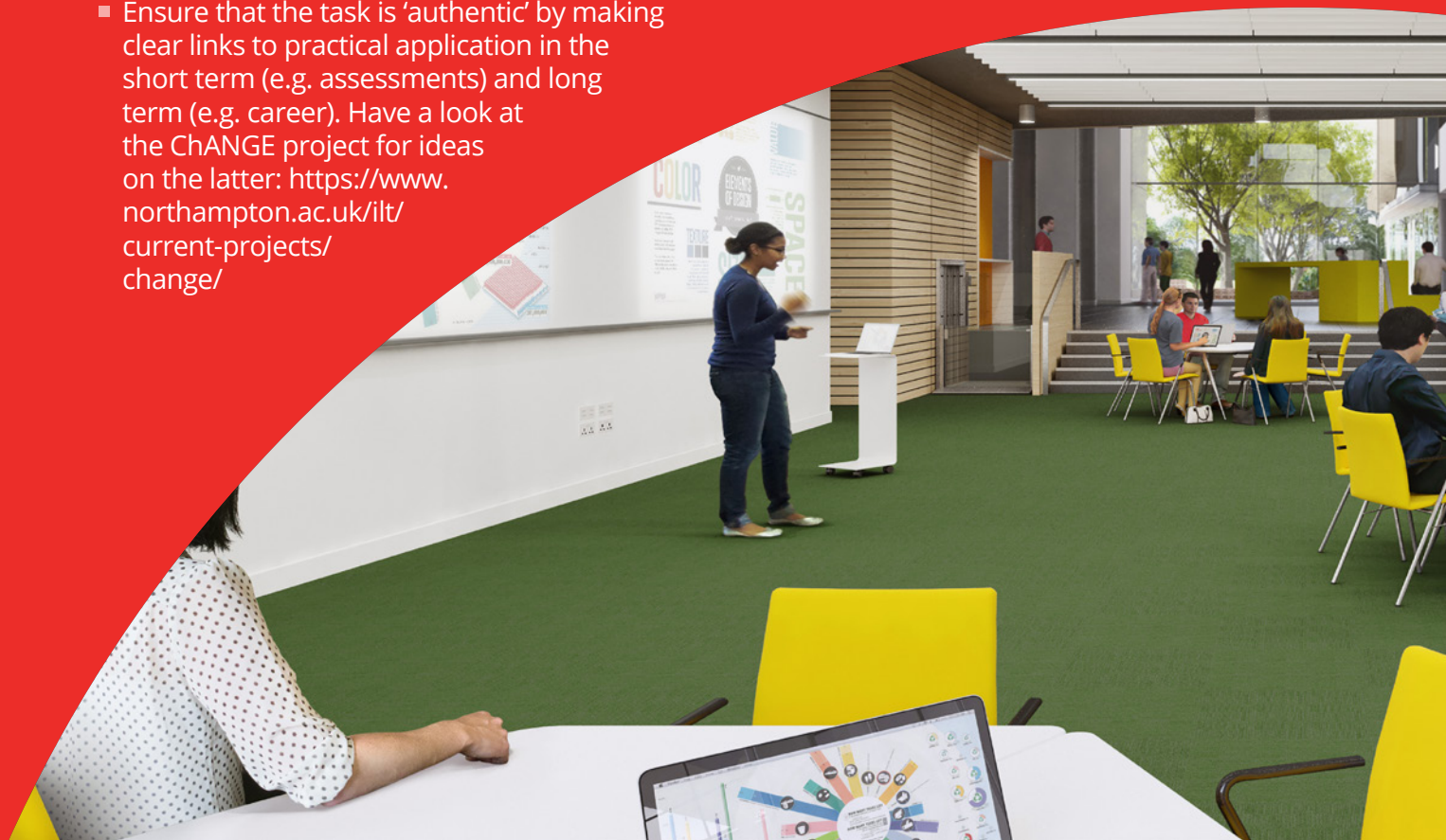
- Communication with students should be:
  - Positive and transparent about teaching and learning methods.
  - Direct, personal and clear about the online activities: what to do, when, how and why within a clear structure on NILE (e.g. 'you should do X first, then Y').
  - Timely: avoid posting in the hours leading up to a session when students are likely travelling to the campus or in other classes, or at unsociable hours as notifications may be received instantly.
  - Limited: avoid repetition and cross-posting.
  - Planned: try to avoid possible misunderstandings or stumbling blocks.
- For online tasks:
  - Provide examples, models, etc., of what students are expected to do, where possible.
  - Ensure that the task is 'authentic' by making clear links to practical application in the short term (e.g. assessments) and long term (e.g. career). Have a look at the ChANGE project for ideas on the latter: https://www.northampton.ac.uk/ilt/current-projects/change/
  - Demonstrate them live on NILE in the F2F session. Show students how to find them and keep tasks in the same place. Clarify questions, processes and deadlines.
  - Set clear timings for tasks: ensure these are realistic and provide students with enough time to absorb and digest information (consider those with additional learning needs). Consider release dates carefully with regards to the group's profile and other responsibilities (e.g. work, family, placement, etc).
  - Link activities explicitly to the module learning outcomes and assessment in task instructions and /or in verbal communication.

For support:

- Contact LD@northampton.ac.uk & learntech@northampton.ac.uk
- Read about the CAIeRO process for module and programme design here: http://blogs.northampton.ac.uk/learntech/2014/12/24/demystifying-the-caiero/
- For the 'Recipes for Waterside' session head here: https://www.northampton.ac.uk/ilt/workshops/recipes-for-waterside/

Other studies that confirm this finding:

Greener, 2015; Henrie et al., 2015; Lopez-Perez, et al. 2011; Mayes and de Freitas, 2004; Powell et al., 2015; Rovai and Jorden, 2004; Salmon, 2013; Sun et al., 2008; Sheffield et al., 2015; University of Leicester, n.d.



7. Student agency and autonomy.

Students felt ill equipped for the level of student agency and autonomy required of them in higher education. They recognised that they were expected to engage in independent learning, but were often unsure how to go about it, what they were doing it for, or whether they were actually learning much in the process. Some also challenged the validity of so much independent learning, arguing that they came to university 'to be taught'. For some students, online learning became a source of anxiety and stress. Opting out of completing online tasks (particularly where they were not required, assessed or followed up) was explained as an intentional way of managing stress and workload. Flexibility of ways and times to engage with online learning were also valued by the students.

Recommendations:

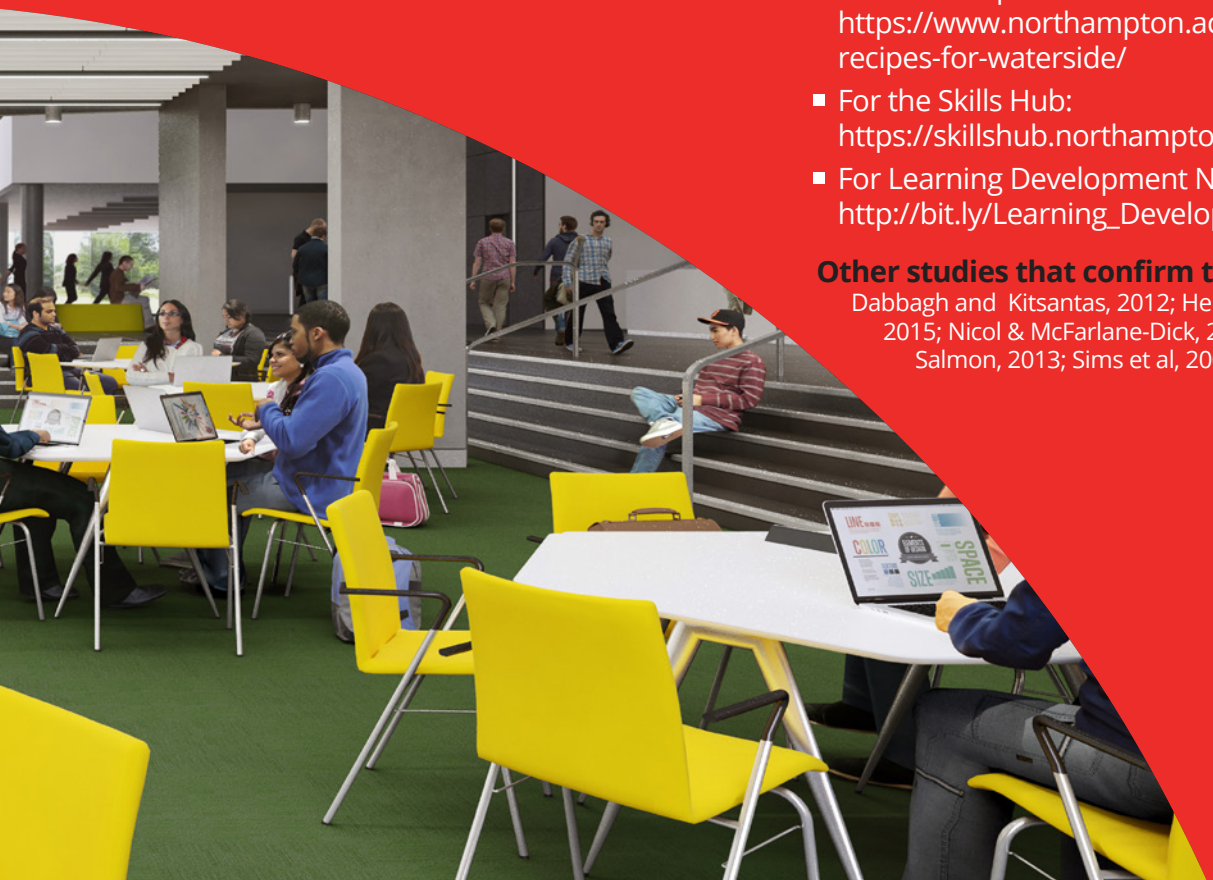
- Establish a dialogue to communicate directly about the purpose of independent learning and effective approaches to it, especially in the first year. Maintain the expectation of student autonomy, make it clear that this is an expected part of higher education and directly linked to employability because 'dependent learning' does them a disservice in the long run.
- Students will find this daunting, so provide lots of opportunities to build up the skills over time by explicitly encouraging agency, control of learning and self-regulation. Design and scaffold opportunities for students to choose what to do or how to do it. Offer a couple of limited options and alternatives for how to complete the task.
- If providing support material for a task, have it available in a variety of forms (e.g. multimedia) to support autonomy and student selection. If asking them to select material or respond to tasks, allow for a range of types of response.
- Support development of meta-cognition (see glossary) and skills of critical reflection through task design. Embed resources directly into tasks (e.g. those available on the Skills Hub and the Learning Development NILE area).
- Encourage student motivation through strong relationships, interaction, support, effective design and autonomy (although these cannot create it).
- Encourage students to give suggestions, make requests and offer feedback on online learning tasks. Demonstrate a responsive approach which values their input. With small cohorts, a flexible approach to designing online tasks can work well. With larger groups, ask for feedback and pass it on within programme teams.
- Do not assess all online components. Set high expectations through feedback and follow-through.

For support:

- Contact LD@northampton.ac.uk & learntech@northampton.ac.uk
- Read about the CAIeRO process for module and programme design here: http://blogs.northampton.ac.uk/learntech/2014/12/24/demystifying-the-caiero/
- For the 'Recipes for Waterside' session head here: https://www.northampton.ac.uk/ilt/workshops/recipes-for-waterside/
- For the Skills Hub: https://skillshub.northampton.ac.uk/
- For Learning Development NILE: http://bit.ly/Learning_Development_NILE

Other studies that confirm this finding:

Dabbagh and Kitsantas, 2012; Henrie et al., 2015; Greener, 2015; Nicol & McFarlane-Dick, 2007; Powell et al., 2015; Salmon, 2013; Sims et al, 2002; Singleton, 2013.



8. Quality content.

Students value the apparent time, effort and energy put into developing high quality resources. Many stated they felt much more inclined to engage with blended learning when they could clearly see that the materials were well made, well designed and interactive. They talked about their teachers 'making an effort' and explained that this made them more likely to make an effort in response. Some framed this as 'care': they perceived the effort involved in resource creation as staff caring about their learning, which was important to them. Conversely, students perceived some tasks as poorly designed or the 'lazy' option - as teachers opting out of F2F.

Recommendations:

- For each activity:
  - Stage it constructively and developmentally (i.e. scaffold).
  - Break it down into steps which are relatively simple and straightforward and achievable within a set, clearly communicated timescale.
  - Give each step a clear heading and make timings for each step clear and achievable (refer to programme design, p.4). Consult students about timings.
- Create clear headings and sub-headings.
- Use consistent typography: clear, readable font, such as Verdana.
- Develop a clear colour palette of no more than three co-ordinating colours that are mindful of additional learning needs and disabilities (see p.6 for support).
- Ensure content is up to date, accurate and that all links and software work across platforms.
- Make effective use of high quality visuals and multimedia resources that are copyright compliant, captioned and informative, and illustrative rather than decorative.
- Explain and articulate design choices to students. Where using external material, explain this too.
- Build in opportunities for feedback.

For support:

- Attend the 'Content Development' workshop: https://www.northampton.ac.uk/ilt/workshops/content-development/
- Explore the Course Workload calculator to help estimate task times: http://cte.rice.edu/blogarchive/2016/07/11/workload.
- Consider the principles of multimedia learning: http://hilt.harvard.edu/blog/principles-multimedia-learning-richard-e-mayer

Other studies that confirm this finding:

Rovai and Jorden, 2004; Sun et al., 2008; Wu et al., 2010.

Glossary:

Active learning generally characterised as a hands-on, interactive teaching method that strives to directly involve students in the learning process. In short, active learning requires students to do meaningful learning tasks and think about what they are doing. There are many ways that this can happen: collaborative learning, discussion, debate, project work, problem-based learning, team-based learning, enquiry-based learning, group work etc.

Blended learning (also known as hybrid or mixed-mode) uses multiple learning modes by combining face-to-face interactions with online activities. The online component includes activities (often referred to as e-tivities) such as discussions, debates, wikis, blogs, videos, tests, quizzes, online labs or virtual classrooms, as well as static resources embedded in virtual learning environments.

Active Blended Learning (ABL) at UN: The programme and modules are taught through student-centred activities that support the development of subject knowledge and understanding, independent learning and digital fluency. Our face-to-face teaching is facilitated in a practical and collaborative manner, clearly linked to learning activity outside the classroom. Opportunities are provided for students to develop autonomy, Changemaker attributes and employability skills.

Digital Natives is a term coined by Marc Prensky describing people born and brought up in the digital age, who are therefore innately attuned to digital technology. This has been widely criticised as familiarity with certain technologies, does not necessarily imply universal digital literacy. In the context of higher education, this means that although students may be embedded in technology-rich social and personal environments, not all will readily master or already be familiar with learning technologies.

Meta-cognition is thinking about thinking. This involves making thought processes explicit as a way of exposing bias, logical fallacies and beliefs which undermine self-efficacy. Discussing conceptions of teaching, learning and knowledge helps develop meta-cognition, as does self-reflection.

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