Learning design is part of the multifaceted role of the university teacher. However, very few university teachers have expertise in this field. The Educational Design Team at Monash University is addressing this need by developing a suite of digitally enabled capacity-building resources to support teachers at their point of need as they work towards enhancing teaching and learning practice. These resources, known as the BLT (Better Learning and Teaching) Bytes, provide just-in-time answers whilst also enabling and enhancing further understanding of the learning design process. These self-access digital resources are designed to support individuals and foster the development of communities of practice. This paper addresses the rationale for a just-in-time approach to professional learning in the higher education context. It describes the range of strategies that the educational design team has implemented in order to meet the complex professional development needs of university teaching staff.

Keywords: professional learning, capacity building, digital resources, technology integration.

Introduction

Learning design is part of the multifaceted role of the university teacher. However, very few university teachers have expertise in this field. University academics are generally employed for their expertise in a specific discipline or speciality; seldom are they employed for their knowledge and skill in passing on this expertise as a teacher. Thus, it becomes the responsibility of both the academic and university to develop and hone learning design skills. This presents particular challenges in a university with over 6000 teachers.

The Educational Design Team of the Office of the Vice-Provost (Learning and Teaching) at Monash University is addressing this need by developing a suite of digitally enabled capacity-building resources to support teachers at their point of need as they work towards enhancing teaching and learning practice. These resources, known as the BLT (Better Learning and Teaching) Bytes, provide just-in-time answers whilst also enabling and enhancing further understanding of the learning design process. The resources challenge and encourage the users to assess not only what and how they design their teaching programs, but also why designing for learning is important. These self-access digital resources are designed to support individuals and develop communities of practice.

This paper addresses the rationale for a just-in-time approach to professional learning in the higher education context. It describes a range of strategies that the educational design team has implemented in order to meet the complex professional development needs of university teaching staff.

Learning design

It is often taken for granted that if a person has expert knowledge, they thus have skills to develop and extend this knowledge in others. Although certain academics are experts in the field of education, in general few university teachers have expertise in the area of learning design. Copious research and many years of theoretical debate attest to the critical nature of understanding learners and the learning process. Yet, equally so, designing for learning requires subject-specific expertise (Beetham, 2007). Educational practice is the personal resolution between the tensions or balances ultimately created by the university teacher through the design process. These tensions resolve issues of:

- method versus creativity; theory-informed versus pragmatic approaches to the design task; the ill-defined nature of learning design versus its systematization into an ontology to underpin computational support; and conformity versus creativity (the disjuncture between completing formal documentation and designing for students’ learning (Masterman, 2007, p. 75).

It is important to make the distinction between curriculum, syllabus or lesson planning; and designing for learning. The former, ‘planning’, denotes the process of determining what is to be taught (content), by whom it will be taught (professor or tutor), where it might be taught (classroom or online), and when it
will be taught (early or later in the course). The former often encompasses teacher and content-centric foci, while the latter connotes a student-centric perspective. Designing for learning analyses what can be achieved with the cohort of students who will engage in the supported learning process. The focus is not simply on what will be learned, but how it will be learned. Designing for learning takes into account “what can be achieved within those constraints that will engage and activate the students, and have an impact on both the pedagogic and affective planes” (Masterman, 2007, p. 66). Designing for learning considers the context of the learning, the diversity of the learners, and the ultimate professional goal relative to personal learner goals.

Problems of learning design are often ill defined and highly contextual in nature. They ‘lack a single definitive solution; there is no set of steps for the user to follow that will guarantee success; and the solution chosen depends largely on how the solver conceptualizes the problem’” (Masterman, 2007, p. 73). Creating an effective learning design is not a systematic one-size-fits-all process. Rather, it engages in a rapid iteration between learning intentions, content knowledge, and context. To facilitate this iterative process, the Educational Design Team is developing a suite of self-access digital tools for learning design support, providing a context for timely reflection, sharing and professional learning. This suite of tools supports a just-in-time approach professional learning program for learning design practice.

**Just-in-time professional learning**

There is no denying that many of us live in a fast-paced, time-short professional environment. For many educators, the time for personal reflection and rumination on quality ideas seems shortened by 'pressing matters'. We are all in charge of our own personal and professional development, deciding when and how we will learn the new skills and practices that enable us to live more fully, and perform our jobs more effectively and more efficiently. Realistically, both personal and professional learning are only ever achieved in a just-in-time manner. The brain learns what it wants when it needs the information and the skill (Haines and Smith, 2012; Sousa, 2010).

Some might consider learning experiences that are ‘just-in-time’ to be informal and less efficient than formal educational strategies. Laurillard (2012) describes the differences between informal and formal learning particularly related to the influences that digital technologies have on learning environments. As Laurillard (2012) explains, Piaget and Vygotsky viewed learning in formal contexts as separate and different from learning in an informal context. The distinction is made between formal and informal strategies as being systemic, or spontaneous. The acquisition of systematic, or academic, knowledge is “known through exposition, argument, and interpretation” one step, often more, removed from ‘first-order experience’ of world phenomenon (p.40).

Motivation is key to most of our achievements. Motivation, our innate desire to do things, directs our attention to what we need to learn in order to achieve these desires (Patterson, Grenny, Maxfield, McMillan & Switzler, 2008; Pickersgill, 2013; Zull, 2002). Personal motivation drives us towards developing the skills and knowledge we need to achieve our goals. Yet we are also influenced by the social and contextual environments in which we live and work. Our family and friends will motivate or demotivate us; our leaders and colleagues may provide support or deter us from seeking new knowledge and skills. Cooperative work mates can become our teachers, and through synergistic and collaborative relationships we can find that new skills and knowledge are more easily acquired; while a less than satisfactory social relationship at work deters our progress and acquisition of relevant skills and knowledge. Amongst university teachers, perceptions of time pressure may affect motivation to take time to pursue professional learning for its own sake, when faced with the competing demands of tasks such as curriculum development, administrative tasks and research. All of these factors influence just-in-time learning of professional skills.

Just-in-time professional learning modes aim to provide digital access to resources that support and extend university teachers’ thinking during a learning design process. Each individual’s capacity to manage their own personal and professional development is critical to the effectiveness of quality output (Kegan & Lahey, 2009).

Learning can never be wholly designed, only designed for, from principled intentions, but with an awareness of the contingent nature of learning as it actually takes place. This contingency demands constant dialogue with learners, recognizing that effective designs will evolve only through cycles of practice, evaluation and reflection (Beetham & Sharpe, p. 9).

The Educational Design Team is developing the BLT Bytes as part of a comprehensive program to develop the skills of teachers whilst they are engaged in creating their learning designs. Through the
process of creating programs to support university teachers to design their courses, units and lessons, educational designers are able to provide professional learning opportunities for university teachers. The professional learning takes place within and between steps in the process of learning design development.

**Just-in-time learning design support: BLT Bytes**

Goodyear and Carvalho (2007) argue for a “holistic, ecological or architectural” approach to learning design rather than applying “fragmenting, reductionist modes of thought” (p. 51). The Educational Design Team has incorporated these aims in the development of the BLT Bytes. The Bytes are designed to engage the user’s motivation to make practical changes and improvements to the learning design of the subjects and courses they teach. They are designed to provide timely learning design support and information, and to be integrated into administrative processes such as handbook updates and subject approval applications.

These multi-level online and face-to-face resources provide readily accessed design support, information and ideas, whilst also enabling and enhancing further understanding of the teaching issues involved. They provide ‘bite sized’ digital distillations of educational research findings and examples of their application and a repository of learning designs shared for collaborative purposes. They also incorporate elements supporting the university teacher through a process of: (1) describing how learners will demonstrate their learning achievements (assessment) and (2) writing demonstrable learning outcome statements aligned with (3) comprehensive strategies for active engagement and practice.

Navigation to and within these intranet-available resources is via a contextual help menu expressed as a personal query. The BLT Bytes will be accessed by a variety of audiences within Monash University including: staff who pro-actively seek educator development support; staff involved in targeted unit enhancement work; and staff involved in the creation and delivery of new units. The BLT Bytes are being developed as a set of tools and learning objects to support all university teachers to ‘get started’ with ensuring their learning design leads to better teaching and thus better learning. Each BLT Byte incorporates elements aimed to (1) inspire, (2) inform, (3) be interactive, (4) promote reflection and sharing between practitioners, and (5) integrate and facilitate administrative processes to implement changes to curricula.

Development of the BLT Bytes incorporates a staged process, stakeholder consultation, and the development of a contemporary and consistent look and feel. A ‘lean’ consultation process was established with faculties to ensure that the development of BLT Bytes prioritised critical educator support requirements, and recognised good practice across the University. The project management assures development on-time delivery and the reuse of the many elements into a more formal unit enhancement process. The development stages include (1) consulting key stakeholders, (2) scoping and design, (3) product development, (4) review and approval for release. Each new learning object is deployed via the Monash intranet following quality review by peer panel. A post implementation review process will be undertaken in 2015, as well as an evaluation of benefit realisation following a comprehensive unit enhancement program.

All BLT Bytes aim to be solution-focused, directly relating to critical areas of knowledge and skill needed during unit redesign or enhanced delivery. While not every BLT Byte contains all features, the goal is to ensure that each has a comprehensive range of solutions to the issues and challenges associated with the identified topics of need. BLT Bytes specifically address critical issues related to:

1. assessment and feedback strategies and examples;
2. teaching large classes;
3. incorporating real-world activities into classroom contexts;
4. dealing with issues of time and space within classroom and online;
5. teaching online;
6. designing curriculum for interaction; and
7. model Moodle – pedagogical pattern templates.

Many of the BLT Bytes feature diverse elements such as: (a) case studies developed from Monash teachers; (b) audio/video with transcripts; (c) PDF task sheets, and teaching or learning guidelines; (d) whole-of-experience lesson guides; (e) graphics; (f) animated concept explanations; (g) models/exemplars; (h) interactivities/simulations/role-plays; and (i) online templates within Moodle.
Conclusion

This approach to professional learning responds to the diverse needs of over 6000 teaching academics in a large international university. These teachers have a widely divergent range of experience, training and skill in designing for learning. The just-in-time approach meets the users at their individual point of need, at a time, place, pace and level of complexity that suits them. The BLT Bytes project responds to the very pertinent issue of motivation in the face of time and workload pressure by providing practical support with learning design tasks and streamlining related administrative processes. It contextualises this support within tools that encourage and facilitate iterative design and individual reflection. In this process it delivers just-in-time professional learning that is highly relevant, even tailored, to the user and their professional tasks and responsibilities.

References


Note: All published papers are refereed, having undergone a double-blind peer-review process.

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