

Evaluating a framework for microcredential design and delivery

Julie Blackwell Young and Jack Hogan, Abertay Learning Enhancement (AbLE) Academy, Abertay University

In early 2021, Abertay University approved a suite of mandatory, online 5-credit microcredentials to be delivered to all first-year students in September 2021 (see Millard et al, 2023 for more details on the initiative itself). The focus of these microcredentials is around building the foundations of social and academic success in first year students.

These microcredentials were developed and delivered by both academic and professional services staff. It was felt that staff working on these would require bespoke support. Microcredentials, particularly fully online microcredentials, require a unique way of thinking for many and we also wanted to shift the ethos of staff from a focus on delivering information through content to focusing on student activity. Supporting student learning in a small credit size was also a key challenge which the staff development activities and resources aimed to address. Existing literature on microcredentials has tended to either recommend pedagogy e.g. chunking or concentrate on structure and content (e.g. Thawesaengskulthai et al., 2022, White, 2021) but with no detail on how to translate that into development and practice.

The Abertay Learning Enhancement Academy (AbLE) developed a package of support to upskill the academic and professional staff who were working on designing and developing these microcredentials for delivery. Through uniquely integrating Laurillard's (2012) Conversational Framework and the ICARE model (Hoffman & Ritchie, 1998), AbLE created a learning design framework which also drew on Universal Design (CAST, 2023) UCL's (2022) ABC model and Salmon's (n.d.) Carpe Diem to scaffold staff through the stages of the design and development process. Framework resources included an asynchronous workshop on the university virtual learning environment (VLE), synchronous online workshops, and templates to support the process. With a focus on "what the students will do," these resources walked participants through the steps of turning the ideas within the module descriptor into a high-quality learning experience for students within the VLE. These resources will be available via a Padlet with accompanying materials for suggestions on how they can be used.

This project evaluated the framework for its impact on staff knowledge, teaching practice, what worked well and what could be improved with a view to rolling out with future microcredential development and potentially wider university provision.

We evaluated the framework using Guskey's (2008) evaluation framework and the toolkit in Kneale et al (2016) to create questions which we used to conduct semi-structured interviews with six members of staff originally involved in the initial suite of first year microcredentials. We were unable to interview an additional two: one was off long-term, and another had left the sector and was not contactable. We also engaged in a self-reflective process as part of our data collection where the two authors wrote reflective accounts on their experiences of supporting and developing the microcredentials (one of the authors was a microcredential module leader as well as supporting the development of the other microcredentials) which was then followed up by a reflective dialogue where the authors shared their reflections with each other. We used the funding to pay a student to analyse the transcript and she also engaged in some of the initial discussions around themes that had come through from her listening and transcribing activity. The transcripts were analysed using Thematic Analysis (Braun & Clarke, 2006). We also looked at the quantitative data available through the Virtual Learning Environment (VLE) where resources had been stored along with a self-paced workshop. The study was conducted as per the BERA (2018) ethical guidelines (Abertay Ethics Certificate number: EMS7575).

Our analysis suggests that all the module leaders found the framework of models and resources introduced through the workshops to be useful.

“It was really super helpful the workshops that you both delivered and some of the models and frameworks that you introduced allowed us to construct the microcredentials and maintain a level of quality”

The framework allowed module leaders to work through how to structure their materials within the 5-credit structure as well as provide a variety of activities for the students in an asynchronous online environment. Even experienced content creators indicated that they had found it useful, and it was a helpful addition to their pedagogic toolbox. The combination of the ICARE model and Conversational Framework was useful in supporting structuring of content whilst integrating a variety of activities for students to do in the microcredentials. Several module leaders mentioned that they still use the materials and models in supporting their development of other provisions. Having named people to go to for support was also highlighted by the module leaders as particularly valuable.

The VLE data turned out not to be particularly useful in terms of evaluation. Some of the staff were no longer employed by Abertay which meant their VLE data was no longer in the system. Four of the microcredential leads still employed at Abertay had accessed the resources with some accessing the materials on multiple occasions (maximum number of visits by a single staff member was 6). However, all the resources had been sent out to module leaders by email as well as being on the

VLE and the module leaders did report using the resources. Therefore, the VLE data has not given us much additional information.

Our analysis also produced the following thematic success outcomes from the implementation of the framework:

Learning Design Development – our focus was on pedagogy first, then how to do that within the VLE. Module leaders reported that they had learnt a lot about pedagogy, particularly asynchronous online delivery, and were taking that practice into other areas of their work.

Skills Development – module leaders reflected on the development of their digital skills and their ability to use the VLE more extensively and effectively. Some were inexperienced in using the VLE so now feel more confident in utilising that, and other more experienced colleagues found ways of using the VLE that were beyond a repository as well as being exposed to new digital tools to enhance student learning.

Building confidence and reducing anxiety – several module leaders had little experience of producing credit-bearing modules, other more-experienced module leaders noted that they were learning to support students in a vastly unique way from which they were used to. However, the framework of support led to a reduction in anxiety in all colleagues and a gaining of confidence in their abilities to the extent that some had then shared their new knowledge and practice with others.

Collective understanding and a sense of connectedness – As part of the workshops, module leaders were paired together to discuss plans and put into small groups as part of the development process. This peer aspect of the support was mentioned a lot by the module leaders and considered very positively and led to feelings of being part of a community of practice. Some module leaders would have liked even more of this during the development phase. We still bring the module leaders together as a group every term to discuss their microcredentials and how they are being implemented. If we were to do this again, a buddying system might be useful to introduce, pairing more experienced colleagues with less experienced colleagues.

Understanding of inclusive practice – Several module leaders reported that their understanding of inclusive practice and how to implement this within an online environment had increased. However, a couple of module leaders who were already experienced in this area indicated that they would like it even more. This highlights some of the challenges when there is a wide range of experiences within the group as too much extra materials might have been overwhelming for those just starting to consider how to implement inclusive practice within this kind of setting.

The feedback on our framework has led us to be satisfied that our framework to support the development of the microcredentials was effective. At the end of the process, we had confident microcredential module leaders who developed a successful, high-quality suite of

microcredentials to support student transitions in the first year of their undergraduate degree. Our colleagues have been able to use what they have learned through our support framework to develop their own practice beyond the original project and share that practice with others. We have also used the framework to support colleagues across the university with adapting to blended and online learning environments outside of the microcredentials.

The authors of this project intend to release a handbook which outlines the development structure with accompanying resources and present findings at conferences and in journal articles.

Contact details:

Julie Blackwell Young (j.blackwell-young@abertay.ac.uk)

Jack Hogan (j.hogan@abertay.ac.uk)

References

BERA (2018) *Ethical guidelines for educational research, fourth edition.*

<https://www.bera.ac.uk/publication/ethical-guidelines-for-educational-research-2018>

Braun, V., and Clarke. V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*. 3:77. <https://doi-org./10.1191/1478088706qp063oa>.

CAST (2023) *About Universal Design for Learning.* <https://www.cast.org/impact/universal-design-for-learning-udl>

Guskey, T.R. (2000) *Evaluating professional development.* Thousand Oakes: Corwin Press.

Hoffman, B., & Ritchie, D. C. (1998). Teaching and learning online: Tools, templates, and training. *SITE 98: Society for Information Technology & Teacher Education International Conference Proceedings.* <https://files.eric.ed.gov/fulltext/ED421092.pdf>

Keale, P., Winter, J., Turner, R., Spowart., L. & Muneer, R. (2016b) *Evaluating teaching development activities in higher education. A toolkit.* York: Higher Education Academy.

Laurillard, D. (2012). *Teaching as a Design Science: Building Pedagogical Patterns for Learning and Technology* (1st ed.). Routledge. <https://doi.org/10.4324/9780203125083>

Millard, L., Blackwell Young, J. & Hogan J. (2023) 'Designing personalized student development through microcredentials: An institutional approach' in Willison, D. & Henderson, E. (eds). *Perspectives on enhancing student transition into higher education and beyond.* IGI Global, pp. 122-142.

Salmon, G. (n.d.) *Carpe diem*. <https://www.gillysalmon.com/carpe-diem.html>

Thawesaengskulthai, N., Sing, B.P., Chemnasiri, W. & Borsano, P. (2022) Three steps to developing useful microcredentials. *Times Higher Education*. 7 March.
<https://www.timeshighereducation.com/campus/three-steps-developing-useful-microcredentials>

UCL (2022) *ABC Learning Design @ UCL*. <https://blogs.ucl.ac.uk/abc-ld/>

White, S. (2021) Developing credit based micro-credentials for the teaching profession: An Australian descriptive case study, *Teachers and Teaching*, 27:7, 696-711,
<https://doi.org/10.1080/13540602.2021.2003324>