

Asia Pacific Journal of Contemporary Education and Communication Technology

ISBN (eBook): 978 0 9943656 8 2 1 ISSN : 2205-6181 Year: 2021 , Volume: 7, Issue: 1



## SOME ELEMENTS TO CONSIDER IN PLANNING TO CREATE AN OPEN, FLEXIBLE AND NETWORKED LEARNING MATERIAL

Azmat Gani<sup>a</sup> and Liz Hardy<sup>b</sup> <sup>a</sup>Sultan Qaboos University, Oman. <sup>b</sup>Southern Institute of Technology, New Zealand. Corresponding Email: <u>azmat@squ.edu.om</u>

#### Abstract

The open, flexible and networked learning (OFNL) is increasingly adopted as a model for providing learning in the higher education environment. This research note provides a discussion of the essential elements to consider when planning to create the OFNL course material. It is suggested that to implement a successful OFNL program, it is necessary as part of the planning phase to consider several issues. These are, but not limited to, stakeholder consultations, matching technology with learner outcomes, the appropriateness of technology, the sequencing of contents and meeting organisational requirements.

*Keywords*: Open, flexible and networked learning (OFNL).

# 1. Introduction

The education sector does get disrupted either intentionally such as through wars, civil unrestand political instability or unintentionally such as through natural disasters, environmental pollution or disease outbreaks. The outbreak of the coronavirus at the end of 2019, that spread exponentially, throughout the world has disrupted the learning processes at all levels in many countries across the globe. Closures of educational institutions and bans on the face to face learning activities have been the hallmark of the educational environment in 2020. The learning process of millions of learners has been adversely affected (Huang et al. 2020).

Many providers of higher education are now introducing more flexible approaches to learning. With the advancement and rapid diffusion of the information and communication technologies, new learning modes, such as the OFNL, has started to emerge as one of the dominant models in the provision of learning activities across the globe. While the coronavirus crisis has diverted most training to online teaching, Dabbagh's (2007) research revealed that online courses suit some types of the student (older, part-time and working) better than others. Nevertheless, the OFNL provides an affordable and easily accessibleeducation to both the privileged as well as the underprivileged learners as well as employed and unemployed learners. While many higher education providers have invested in the OFNL infrastructure and transited to utilising this mode of delivering quality education, many are yet to start the OFNL process.

As part of engaging in the OFNL, the planning phase is of prime importance inits successful delivery. This article provides a review of the essential elements to consider when planning to create OFNL course material. The discussion here focuses on stakeholder consultations, matching technology with learner outcomes, the appropriateness of technology, the sequencing of contents and meeting organisational requirements. In what follows is a discussion of each of the five essential elements of planning.



## 2. Essential Elements to Consider in Planning OFNL materials

Planning provides clear, systematic as well as logical steps to follow for a successful outcome of developing OFNL materials. The planning phase is of significant importance in a well run OFNL program (Robinson, 2000 and Care and Scanlan, 2001). Proper initial planning allows for efficient use of resources. At the same time, a systematic approach to planning OFNL can provide a quality education while reducing unnecessary costs, minimising wasted time, avoiding frustrations, confusions and undue stress. This section discusses five essential elements to consider in planning OFNL materials.

#### 2.1. Stakeholder Consultations

The stakeholder consultations are essential for obtaining consensus on the vision and success of an OFNL program.Collaborative learning involves stakeholder's working together on learning tasks, as Bryk et al. (2010) found that robust involvement of stakeholders improved learner outcomes. According to Tosh et al. (2000), stakeholders can also identify relevant policies and constraints, and without them, discontentments are possible. The stakeholders can also ascertain issues of ownership.

In a tertiary learning environment, internal stakeholders of OFNL include the discipline instructors as they can collectively define learning outcomes as well as identify overlaps and mismatches with their learning materials learning objective and outcomes. A supervisor of the discipline instructor or the Head of the unit will be requested to lead the discussion, collect other instructors feedback, get a consensus and approve the development of OFNL materials.

The instructor would consult other internal stakeholders within their institutions, such as the instructional designers and web developers. These specialists may be attached to a specialised unit such as the Centre of Educational Technology. They can guide instructors through the designing of learning materials for a specific course or topic and allow its interfacing with learning platforms.

External stakeholders are equally important. For example, learners enrolled in a particular course are the prime party who need to access course materials, interact and receive timely feedback from instructors. Quality assurance is critical in the development of any OFNL material. Hence, the education providers quality assurance representatives, as well as national program accreditation bodies, need to be consulted. Quality assurance teams can be asked to provide their input and get their approval, especially on regulatory compliance of the training materials such as credits deserved.

The community is also a vital external stakeholder. As part of the community, culture also matters in the course development process, given strong cultural orientation among learners and parents, the creating of a high degree of trust with instructor, parents and community service providers (transportation, accommodation and food retailers) is essential in making learning successful. In particular, the parents of enrolled learners have a role to play. For example, their feedback on access to technology (internet access), as well as if the OFNL will be a cost-effective learning process for their children as they may bear their financial burden if any.

## 2.2. Matching technology with learner outcomes

Learning outcomes is what the learner is expected to know (European Centre for the Development of Vocational Training, 2017), as shown in Bloom (1956). Paolini (2015) stated that active learning occurs when instructors connect relevant material to learning outcomes. The contents are organised with training activities in strands and small segments to enable ease of understanding among learners. According to the Bain (2004), good organisation reflects instructor lesson preparation skills and valued by learners (Benton et al. 2013). Weimer (2006) noted that quality contents helped learners gain mastery of topics.

Teaching with technology certainly promotes learning outcomes (Bulman and Fairlie, 2016). At the same time, instructors have to be learner-centred, communicate openly and demonstrate a genuine interest in their learners to achieve improved learner outcomes (Cox et al. 2010). To successfully match technology with learner outcomes, the development of OFNL material would need to be tailored to support technology. This can be done through online learner feedbacks on content, assessments, case study and tutorials. Learners can be asked to post online or email the instructor if OFNL material reflected content training objectives and met their learning outcomes. Besides, all learners can be reminded and followed up with to complete the online "Course and Teaching Evaluations" of course and instructor before the formal assessments of the learning materials per the regulatory requirements of the institution delivering the OFNL learning materials. In return, trainers can evaluate and make adjustments to materials and avoid mismatches.

Careful planning of OFNL also requires collaborative involvement (an opportunity rather than a threat) of the stakeholders to improve learning outcomes, as noted by Bernard et al. (2009).In their recent study, Khoo and Cowie (2020) stated that web-based tools need to afford opportunities for interaction, collaboration and participation. Discussion forums and group projects are essential elements of collaboration. The primary learning outcome for the OFNL material to be developed ought to be highly focussed. Learning outcomes need to be clearly stated and well specified. Clear learning outcomes can be a starting point for learners. A learning outcome may involve familiarisation in working with the software. To accomplish this, learners can be given remote access to software that they can use. The software can be interfaced with learning platforms such as MOODLE for easier access.

## 2.3. Technology Appropriateness

Determining how best to integrate technology to meet learner outcomes is essential. Severalfactors need attention. Identifying learners' technological capacity (through prior assessments of learners access to network systems) is the foremost factor that needs to be addressed before making any technology integrated OFNL materials. Learners may possess varying levels of technical skills such as computer literacy. Instructors ought to identify this before the commencement of any training. Instructors may assume that the learners are computer literate and have met the pre-requisites of the OFNL training material. However, this ought to be verified before the commencement of training.

Verifying learners technological literacy can help smooth the learning process. Instructors can assist in upgrading learners technical skills and provide appropriate support. A collaborative approach is essential in deciding the appropriateness of technology with the learners to identify technological constraints. The use of a combination of learning materials and asynchronous collaboration tools could form an integral part of OFNL planning. In the OFNL course to be developed, tutorial sessions jointly with instructor and students, industry speakers, weekly discussions using ZOOM, groups case study analysis are the toolsthat will be necessary. These are necessary as the materials are theoretical, and the selection of these tools will foster a higher level of collaborative learning. Trainers must make sure that they provide learners with clarity on all of the course-related instructions on readings, assessments, submissions of assignments and timelines.

#### 2.4. SequencingContent

Sequencing course contents to match learning outcomes reflects trainers clarity of their materials. Effective facilitation demands the creation of space for student discussions and reflections. Ramsden (2003) identified transparency, challenge, feedback, goals, engagement, and learning from learners as core principles of effective facilitation. In their meta-analysis of student responses to instruction, Pascarella et al. (2011) found that all instructional dimensions identified, teacher "clarity and understanding" and "preparation and organisation" significantly correlated with learner achievements. This means determining the course structure can help trainers decide which contents are relevant and can be measured through learning outcomes. Therefore, trainers need to develop a rationale



that guides the structure of their course that can direct them to explain the material clearly to the learners, such as through arranging topics in a logical order.

In developing an OFNL learning material, instructors should ensure that the topic objectives and learning outcomes are spelt out at the start. This can be followed by a presentation of an overview of the topic to be taught. The topic in-depth study and specificities can be part of the next step, such as through giving lecture notes on main and subtopics. An instructor can also add supplementary materials to each topic completed, such as topic by topic tutorial sessions with a set of questions to be answered as well as discussions and debate forums. The completion of the learning material can be rounded up by a case study presentation with an instructor working through with learners to reflect on what learners have acquired. The final stage of sequencing, the instructor, can institute assessments such as short tests to get a sense of learner's grasp of the material.

## 2.5. Meeting Organisational Requirements

In planning to develop an OFNL course, instructors should ensure that institutional requirements relating to the syllabus are met.

It is the OFNL providers responsibility to ensure that all learning materials areaccessible to learners either through direct purchases by learners or instructor leaving materials such as on reserve loan in the institutions'library. Many providers allow reserve loan material for use within the library, and any photocopying should be 10 per cent or less to comply with institutional copyright regulations. To meet this, learners would need to be informed of copyright policy. The instructor, at the same time, ensures that there is sufficient material on the reserve loan. Instructors can schedule learners for the use of reserve material for a specified time and the library informed of this arrangement.

Necessary and functional instructional infrastructure (well-equipped classrooms and computer labs, multimedia equipment) should be in place before the commencement of the training. For example, the instructor can inform the relevant sections such as timetabling committee before the beginning of the teaching session to reserve room with multimedia and computer software for OFNL materials and allocate specific time slots for the place to be used by learners when required.

Planning and setting course policies upfront makes training tasks easier once training commences. Course policies may include assessments (weightings to components assessed and contribution to final grade), percentage attendance (where for example, 20 percent and more of absenteeism would mean withdrawal from the course), the extension for assignments (one-week extension due to unforeseen circumstances) and rescheduling of exams (due to unforeseen circumstances). Trainers will have access to the University's policies on academic integrity as part of their registration in the course as well as through syllabus to send clear signals on plagiarism.

It is the instructors'responsibility to develop a syllabus for the course that will include the course title, the timing of sessions (days and times), location (through ZOOM), course prerequisites for the material will be mentioned, instructor office hours (days and time), course topics and subtopics to be covered, grade policy (grade cut-offs from A which is highest to F which is a fail), number of assignments and weightings for each assessed component. The instructor can make the OFNL syllabus available to all learners before the beginning of the training session.

#### Conclusion

This review discussed some of the essential elements to consider when planning to create OFNL material. It is quite likely that higher education will take a new shape in the longrun as education providers are expected to switch more towards OFNL modes in the interest of learners as well as making learning more cost-effective. The rapid rate of diffusion of information and communication technologies as well as its falling costs gives much room for education to be provided in the OFNL mode across many countries around the world. OFNL



is likely to be one of the dominant models in the provision of learning activities across many countries. Effective planning of the development, as well as delivery of OFNL, can ensure its long-term success. Hence, the eventual success of an OFNL program can depend on several dimensions such as effective stakeholder consultations, choosing appropriate technology that matches learners outcomes, sequencing contents and meeting organisation regulatory requirements.

#### References

- I. Bain, K. (2004). What the best college teachers do? Cambridge, MA. Harvard UniversityPress.
- II. Benton, L. S., Duchon, D., & Pallett, W. H. (2013). Validity of student self-reported ratingsof learning, Assessment & Evaluation in Higher Education, 38, 377-388. Retrieved May 12, 2020, from:<u>https://www.tandfonline.com/doi/abs/10.1080/02602938.2011.636799</u>
- III. Bernard, R. M., Abrami, P. C., Borokhovski, E., Wade, C. A., Tamim, R. M., Surkes, M. A. and Bethel E. C. (2009). A meta-analysis of three types of interaction treatments distance education, *Review of Educational Research*, 79(3), 1,243–89.
- IV. Bloom, B. (ed). (1956). Taxonomy of Educational Objectives. Vol. 1: Cognitive Domain.New York: McKay.
- V. Bryk, A., Sebring, P. B., Allensworth, E., Luppescu, S., & Easton, J. Q. (2010). Organisingschools for improvement: Lessons from Chicago. Chicago: University of ChicagoPress.
- VI. Bulman, G. and Fairlie, R. (2016), technology and education: computers, software, and theinternet, In E. A. Hanushek, S. Machin and L. Woessmann (Eds.), *Handbook of theEconomics of Education*, 5, 239-280.
- VII. Care, W. D. and Scanlan, J. M. (2001). Planning and managing the development of coursesfor distance delivery: results from a qualitative study, *The Online Journal of DistanceLearning Administration*, 4(2).
- VIII. Cox, B. E., McIntosh, K. L., Terenzini, P. T., Reason, R. D., & Luovsky Quaye, B. R. (2010).Pedagogical signals of faculty approachability: Factors shaping facultystudentinteraction outside the classroom, *Research in Higher Education*, 5, 767– 788.<u>https://doi.org/10.1007/s11162-010-9178-z</u>.
  - IX. N. (2007). The online learner: Dabbagh, characteristics and pedagogical implications, Contemporary Issues in Technology and Teacher Education, 7(3), 217-226.Retrieved Mav 11, 2020, from https://www.learntechlib.org/primary/p/22904/.European Centre for the Development of Vocational Training. (2017). Defining, Writing and Applying Learning Outcomes – A European Handbook, Thessaloniki, GREECE.
  - X. Huang, R.H., Liu, D.J., Tlili, A., Yang, J.F., Wang, H.H., et al. (2020). Handbook onFacilitating Flexible Learning During Educational Disruption: The ChineseExperience in Maintaining Undisrupted Learning in COVID-19 Outbreak. Beijing:Smart Learning Institute of Beijing Normal University.
  - XI. Khoo, E. and Cowie, B. (2020). A framework for developing and implementing an onlinecommunity, *Journal of Open, Flexible and Distance Learning*, 24(1), 47-59.
- XII. Pascarella, E. T., Salisbury, M. H., & Blaich, C. (2011). Exposure to effective instruction and college student persistence: A multi-institutional replication and extension, *Journal of College Student Development*, 52(1), 4-19.
- XIII. Paolini, A. (2015). Enhancing teaching effectiveness and student learning outcomes, *TheJournal of Effective Teaching*, 15(1), 20-33. <u>https://uncw.edu/jet/articles/vol15\_1/paolini.html</u>.
- XIV. Ramsden, P. (2003). Learning to Teach in Higher Education. 2nd ed. London: RoutledgeFalmer.
- XV. Robinson, V. M.(2000). Strategic planning for technological change: the human component, *Syllabus: New Directions in Education Technology*, 14(4).

- XVI. Tosh, M. W., Miller, M., Rice, M., & Newman, R. (2000). Factors in a holistic model for distance education, *Michigan Community College Journal: Research & Practice*,6(1),39-49.
- XVII. Weimer, M. (2006). Content knowledge a barrier to teacher development. EffectiveStrategies for Improving College Teaching and Learning: The Teaching Professor,Magna Publications.





Asia Pacific Journal of Contemporary Education and Communication Technology (APJCECT)