ONL Group 9 Topic 4: Recommendations for learning design processes

The aim of this document is to present recommendations and possible best practices for structuring learning design processes.

We are not only considering blended learning, since in a design process, it might be useful to first consider your objectives and purpose for any teaching enterprise and then consider the suitable teaching methods selected or developed.

Before we can even conclude on whether we will be pursuing a particular blended or asynchronous teaching methodology, we need to consider our objectives and what our needs, resources are - we then proceed to decide on the suitability of blended / asynchronous learning and the particular type or blend to pursue.

Our design process below is not a complete toolkit and not intended to be followed as a strict checklist but is a guide to possible 'best' design practice to follow when designing a course / learning experience.

1. List of requirements
All design should start with defining the objective, with a detailed **list of requirements**.
      What are the learning goals?
      How many students are there?
      What prerequisite information do the students need?
      What resources are available?
      Is there a given schedule?
      What is the target group for the content?

2. Course development principles
In all development, consider [constructive alignment](). How do we strike the right balance between assessment and content and teacher and student-led activities.

We need to consider our content: how do we split the content into modules and other learning activities to support the learning goals. How do we select a suitable approach for each subtopic of the course? And is it possible to use blended learning, combining online and physical face-to-face methods to support this learning.

Courses, modules and curricula should include continuous loops for review and evaluation of feedback. Next iterations should be adjusted based on collected feedback.

3. Reviewing / Surveying existing solutions

This section presents and assesses known solution options for learning and course design problems, which course designers can apply on courses. For example, if we are wanting to trouble-shoot communication issues the learners might be having then what kinds of solutions are possible. Another example, the Flipped classroom approach has been shown to be useful to increase efficiency. Mini-quizzes or other tools can be used to ensure students get familiarized with the content. Surveying existing solutions can be useful when designing a learning experience.

Assimilative	e.g. Read, Watch, Listen, Think about, Access, Observe, Review, Study
Finding and handling information	e.g. List, Analyse, Collate, Plot, Find, Discover, Access, Use, Gather, Order, Classify, Select, Assess, Manipulate
Communication	e.g. Communicate, Debate, Discuss, Argue, Share, Report, Collaborate, Present, Describe, Question
Productive	e.g. List, Create, Build, Make, Design, Construct, Contribute, Complete, Produce, Write, Draw, Refine, Compose, Synthesize, Remix
Experiential	e.g. Practice, Apply, Mimic, Experience, Explore, Investigate, Perform, Engage
Interactive/ Adaptive	e.g. Explore, Experiment, Trial, Improve, Model, Simulate
Assessment	Include summative (graded) assessment only here e.g. Write, Present, Report, Demonstrate, Critique

Figure. Table Setting out Learning Solutions for Particular Learning Objectives
[Source: ONL Webinar]

Further surveyed learning solutions:

Teaching approaches
- Physical teaching
  + Teacher knows students in-person
  - Requires a lot of resources
- Hybrid (meaning here: physical teaching with possibility for online participation)
  + Offers some flexibility for students

- If content is not tailored for online or physical but something in-between (such as a simple lecture stream)
- Completely online teaching
  + Offers even greater flexibility for students
  + Enables convenient collection of data and tracking of student progress
  - Content needs to be very structured and tailored to online delivery
  - Online content should be: easier for students to follow, more structured
  - Some structures can be difficult without teacher or peer support

Assessment methods
- Student peer review
  + Feedback from other students has same value as feedback from teacher (Hattie & Timperley 2007)
  - Students can be too nice to each others, how to ensure critical assessment, can have statistical checks to detect outliers, feedback on the given feedback
- Exam
  + Efficient in terms of resources
  - Allows for read-memorize-and-forget approach - something to guard against
- Project work assessment
  + Assessment can be done also for individual students
  - Difficulties of determining each students' contribution
- Formative assessment, viewed also as a learning activity
  - Why should fast learners or students who already are familiar with the content use their time on the course content
- Summative assessment, judging what is known
  + Good for assessment of what is known
  - Doesn't support learning (Boud & Falchikov, 2006, p. 399-413)
  https://www.tandfonline.com/doi/full/10.1080/02602930600679050

Collecting feedback and tracking students.
- Direct student feedback
- Indicators from online systems
- Exams / quizzes

Internal and external evaluation. Review processes.
  + Structured framework for comparing different actors
  - Fixed indicators can steer in the wrong direction

Tools for collaborative work and progressing group work; managing flow of group work
- Miro
- Padlet

- Notion / Notion API
- Scrivener
- Discord
- Trello
- Kanban / GANTS
- Google workspace
- Google docs
- Kialo - https://www.kialo-edu.com/

Content delivery
- Video services
- Study stream / online library environment

Assessment
- Peer review platforms in LMS or blogg

Feedback
- Quiz platforms https://kahoot.com/
- Mentimeter - https://www.mentimeter.com/
- https://strawpoll.com/
- http://www.polljunkie.com/
- Online office hours
- Virtual focus groups