

Designing Learner-Centric MOOCs

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Lecture 16

What is an LbD?

The Learner-Centric MOOC model that is the LCM model, consists of the elements: Learning Dialogues, Learning by Doing activities, Learner Experience Interactions and Learning Extension Trajectories. Here, let's focus on what learners do, that is the Learning by Doing activities.

A Learning by Doing or an LbD is a formative assessment activity designed by an instructor for students to self-check their level of concept attainment, or for them to immediately apply the concepts that they have seen and learnt in the LeD, or for integration of various concepts and various parts of the module in the MOOC.

LbDs can be in the form of multiple choice questions or they can require longer responses in the form of a text box or so on. The main goal of an LbD is formative assessment. To see how that is achieved, let us examine the dynamics of learning by doing.

Learners perform an LbD activity right after which, they receive rapid, specific, and constructive feedback that guides them on improving their learning. This feedback can be designed by the instructor and provided by the platform, such as feedback for various options of a multiple choice question LbD.

For such a question, the learner can go through the various options, reason through them and click on the option of their choice. Once they click, the MOOC platform, the system provides them feedback. You will see that this feedback goes

beyond correct or wrong. It is specific and constructive in the sense, the feedback here is telling the learner what they can do, what are the resources they can access, what they should revise and so on, so that they can get their reasoning and their response correct.

Each option has its own specific constructive feedback that helps the learner figure out exactly what went wrong and how to fix it. Now, some of us MOOC instructors want to go beyond multiple choice questions. We may want to assign questions requiring longer answers or some design question or maybe even a problem solving activity. What can be done in such a case?

For such goals, LbDs can be designed and the LbD can contain the statement of the problem, or statement of the longer question that the learner has to work on. The learner can provide their responses, even if they are long, in a text-box, and finally feedback can be provided to learners via rubrics, that can be used in a self-assessment or a peer assessment process.

We will now go to a reflection spot. You will see a screen containing a question. This reflection spot is about the differences between a learning by doing activity and a regular multiple choice quiz. What are some differences? Please list two differences.

Now that you have thought about the question and written your responses, let us see what some of your responses could have been. In fact, some of you may have listed more than two differences and this is because there are many differences between LbD and regular multiple choice quizzes.

One of the main differences is, in the goal of such an activity or such a quiz. While Learning by Doing activities can be considered as assessment, they are formative assessment activities, that means, their primary goal is not to grade the learner but to provide feedback to the learners so that they can improve their learning.

Another difference is that some typical multiple choice questions give feedback in terms of correct or wrong answers. As we had mentioned earlier, the feedback designed in a Learning by Doing multiple choice activity goes beyond it. Each option in a multiple choice Learning by Doing activity tells the learner not only if they were correct or wrong, and even goes beyond telling them why they were wrong. In fact, it guides the learner on what she or he could do to improve the understanding.

An LbD provides an immediate application of concepts seen. LbDs appear right after the content LeDs, not only at the end of the module. LbDs or Learning by Doing can be in the format of multiple choice questions, but they can even go beyond. As we saw they can be longer assignments or problems. The feedback in such LbDs is provided via peer review, so Learning by Doing activities are learner-centric in the sense they exploit the power of peer learning. The process of peer review helps both the giver of the feedback and the receiver of the feedback.

As MOOC instructors, the main takeaways for us is that we should follow up each Learning Dialogue with corresponding Learning by Doing activities. And, we should ensure customized constructive feedback for each Learning by Doing activity.