Designing Learner-Centric MOOCs

Prof.Sridhar Iyer
Prof.Sahana Murthy
Dr.Jayakrishnan M
Dr.Sameer Sahasrabudhe

Indian Institute of Technology, IITB

Lecture 22

Creating LxTs

Namaste.

The Learning Extension Trajectories or LxTs are mechanisms in a Learner-Centric MOOC to address diversity of learners and their learning levels. Structurally LxTs consist of multiple types of resources, followed by an assimilation quiz that incentivizes the access to these resources.

To create LxTs, the MOOC instructor will have to answer three 'How' questions. First one, how much diversity should I address or Scoping for Diversity? Second, how will I search for appropriate resources and provide them or addressing the diversity? And third one, how do I frame the Assimilation Quiz or how do I Incentivize the Learning Extension Trajectories? In this LeD, I will be providing you with guidelines that help in answering the first two questions.

Consider the scenario where you are going to offer a MOOC of a course that you regularly teach in a classroom. Take a moment now to think about the variety of learners who will register for this MOOC.

Now that you have given thought on this question, let me provide some of the possible answers that you might have written. An immediate type that you would have thought of, are the regular students for this course who register to learn this content newly.

You might also have thought of the experienced learners who already are familiar with this content but register for refreshing their knowledge or improving their existing knowledge.

There is also another type of learners, whom I am calling 'the curious learners', who may not be directly connected to the topic or the domain but just out of their curiosity and interest they explore this course and understand what it is all about. Now these set of learners represent the diversity in terms of content expertise and motivation.

There could also be diversity in terms of age, quite unlike a regular classroom where students are of similar age. There could also be learners from different cities or countries that represent diversity in terms of region or language. The more you start thinking about the variety, the bigger is this list going to be. Now, as an instructor, what you should be doing is, you should rank or prioritize these diversity categories by answering the question, "who are your main target audience to help you in scoping".

When it comes to an individual topic, you should use this priority to perform the scoping exercise but when it comes to the entire course try to address most of the diversity categories that you have already listed. For example, consider the case of an Introductory Computer Programming Language Course offered as a MOOC.

Now, as an instructor of this course, there may be the following different categories of diversity, I think about. A spectrum of learners from novice to expert in terms of their prior exposure to programming language. Another set of learners with diverse motivation starting from deeper theoretical understanding about the programming constructs to those who are interested in writing programs for real life applications.

A third type of diversity maybe in terms of their interest with respect to the programming assignments. So some may want to build games or handsome UIs while others may want to do more computational kind of problems.

Yet another category of diversity maybe based on the fluency of the English language depending on the region from which they are all coming.

So as a MOOC instructor, I may have one set of priority of the diversities that I am going to address, while another instructor can have a different set of priorities in their mind. Borrowing the terminology commonly used in scratch programming what the instructor has done right now is setting up the basic requirements and supports, that you will provide in the course that is deciding on how low the floor should be.

Then, explore the depth to which the course topics are going to be covered, that is, how high the ceiling of this course is, and finally looked into the variety of topics being addressed in the course, that is, how wide the walls of this course are. Each instructor will have their own dimensions of the room and this scoping exercise actually determines how much people can be accommodated in that room.

Now that you have scoped for diversity, the next question that you should ask is, how will you get the resources to address the most important diversity? So take a moment now, again, to think about your own list of diverse participants. List the various places that you will search for gathering resources to address this diversity.

So some of the possible answers that came to your mind could be, your own prior courses that you offered as an instructor which has all the necessary slides, books or programming assignments that could be given as pre-requisites. Similarly, for the advanced learners, as an instructor, you can point to the advanced courses offered by either you or your colleagues and its own set of resources.

To engage learners with diverse motivation, you may also look into websites and video aggregator sites like YouTube, so that you could get some possible new resource that they can explore and they could be more motivated about programming.

Apart from these, the other possible starting points could be Open Books like Openstax or Wiki Books. Open Online course repositories like Online Learning

Initiative, MIT Open Courseware, Learning Spaces from Open University or NPTEL which is India's own MOOC. Or there could be Open Repositories like OER Commons, Curriki and Connexions.

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