

THE MULTIPLE USES OF CONCEPT MAPS FOR PLANNING AND DEVELOPING A MOOC ON CONCEPT MAPPING

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1 Learning how to create concept maps

The training of users in the concept mapping technique is critical for ensuring a high-quality concept map regarding the graphical structure and content accuracy. The knowledge represented using propositions must be related to the internal mental schemas to reveal what we know, what we do not know yet, and our misconceptions. This identification rarely occurs when novice users start to create concept maps, because they need to deal with the content (the topic under study) and the format of the task (create a concept map). A MOOC on concept mapping was developed to focus on the mapping technique, to reduce the cognitive overload imposed by novices. We aim to offer the foundations of concept mapping and practical activities to anyone interested in learning how to create good concept maps. Coursera hosts the MOOC as one of the several online courses offered by the University of São Paulo (USP) at <https://pt.coursera.org/learn/mapas-conceituais>.

2 Concept map uses to create a MOOC on concept mapping

The use of concept maps for planning and developing the MOOC addressed multiple challenges. The most relevant involved the plan of the overall structure of the contents and the development of assessment activities. Figure 1 shows the advanced organizer to make a full presentation of the course.

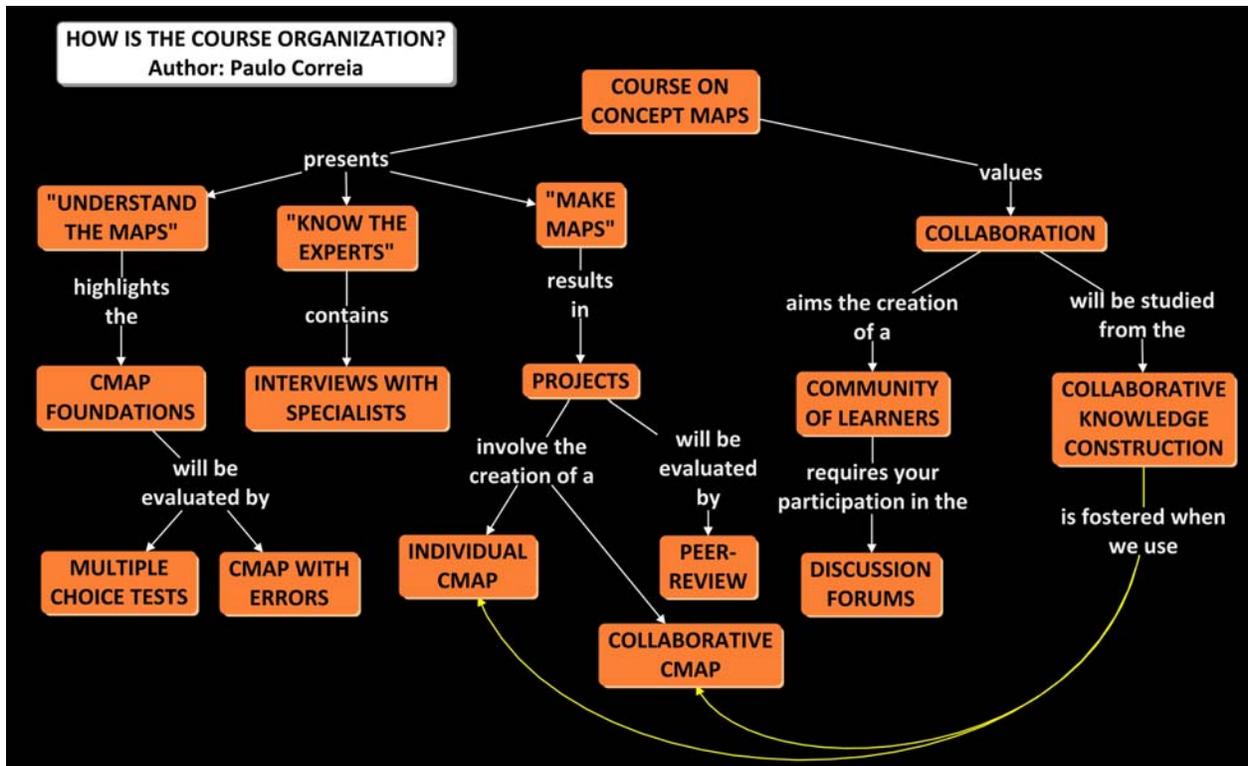


Figure 1. Advance organizer created using a concept map to summarize the course organization.

Healthy life habits are the topics chosen to set up the projects, which involve the creation of an individual and a collaborative concept map. All maps will be evaluated considering the structure (a computational tool was developed for this aim) and the content (using peer-review). Participants' concept maps will be regarded as part of the course assessment. The understanding of the foundations will be checked using multiple choice tests and tasks based on the concept map with errors. These are maps made by experts, who intentionally add some errors to the propositional network and ask students to find them. Cmap with errors have been explored to deliver fast, and reliable feedback to students and it is amenable to online platforms.

3 Summary

Concept mapping is widely used throughout the world and training novice users is an increasing demand. The course we have developed is the first MOOC about concept maps to issue certificated signed by Coursera and USP. This initiative aligns with Concept Mapping Academy, confirming the need for online solutions to training users in modeling knowledge using concept maps.

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