Chapter 7
Distance Collaboration with Shared Concept Maps

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ABSTRACT

This chapter aims to review Web-mediated practices in collaborative concept mapping which were set up in informal partnerships among teachers from different schools and countries, and their students. Starting with various examples of such practices, we will outline some models of collaboration which will be compared and criticised in the hope that they will be useful in challenging other teachers to plan suitable strategies for engaging in similar experiences. It is important firstly to examine the context in which distance collaboration can be established and then outline some theoretical background to show the reasons why this kind of collaboration should be recommended as an objective for educationalists.

INTRODUCTION

WWMaps (World Wide Maps) is a community of practitioners aimed at establishing concept-mapping collaboration teams among groups of students from different countries. Unlike other international twinning initiatives (e.g.: etwinning in the European Lifelong Learning Programme), this community is unofficial and based exclusively on concept mapping.

The topics chosen by collaborating teams are mainly drawn from their curricula and cover such issues as the environment, citizenship, history, specific science topics etc., depending on the preferences of the teachers involved. It is nevertheless possible for partners to deal with inter-cultural topics or for teacher members of the community to debate educational topics.

The choice of Collaborative Concept Mapping (CCM)is doubly valuable. Concept mapping firstly facilitates the engagement of teachers of non-language subjects (such as L1, History, Maths or Science), although support from an L2 teacher is welcome. Secondly, concept mapping is more than a medium. It can be considered as a skill in itself, being a learning tool for metacognition that

can be applied and transferred to other fields by pupils and teachers.

If these collaborative practices and technologies are to have a positive impact on local educational communities, they should be set up with objectives and expectations that are agreed and shared by both school partners. They should also incorporate strategies to assure effective interaction and sharing among students. These are the reasons for studying in depth the educational objectives of, and strategies for, an effective CCM.

BACKGROUND 1: THE CONTEXT OF COLLABORATION

Collaborative Learning (CL) is different in *presence-based* education (for groups of students in the same classroom) from *distance-based education,* where students may collaborate from different countries. First of all, *face to face promotive interaction* is not possible in distance-based CL: the mother tongue is often different, and communication depends on different technologies and time zones (for instant messaging). There are also multiple factors which can greatly differ among partners -- their respective cultures, degrees of cosmopolitanism, educational missions, priorities, objectives and curricula and, last but not least, the ages, grades and number of students per class. All these differences, often under-estimated, strongly affect the effectiveness of collaboration.

Furthermore, teachers can also be granted very different levels of independence (or conversely restriction) by their institutions in deciding (freely or otherwise) how to manage time and plan educational projects involving international collaborations, even on curricular topics.

Finally, the relevance of such international collaborations, and the educational results they achieve, are not evenly appreciated and promoted by all institutions and their managers. These factors are somewhat related to the concept of *governance* introduced by Gowin and Novak

(Novak & Gowin, 1984; Gowin & Alvarez, 2005). Governance factors affect the intrinsic meaning of the educational experience, even when the same tasks are undertaken. The environment in which the collaborating team operates may modify the development and *sustainability* of the collaboration because of the presence or absence, and quality of feedback.

Apart from governance factors, the sustainability and effectiveness of collaborative work depend strongly on efforts to attain such other well known requirements of the *Cooperative Learning* model (Johnson & Johnson et. al., 1994) as individual and group accountability, interpersonal and small group skills, and group processing.

We are aware that interpersonal and small group social skills training should be strongly implemented from the very beginning of a collaboration, while individual and group accountability need to be assured as the process develops. This is why in the collaborations we are currently undertaking daily communication takes place between student and teacher partners, helping them to construct suitable communication skills, technologies and methodologies independent of the contents to be elaborated in subsequent Collaborative Concept Mapping activity. This activity would be sterile without the vital habit of communication and feedback among partners.

Finally, *group processing*, i.e. reflection on the work of students and their interactions, focusing on achieving group goals and ensuring effective working relationships, is normally delegated to the teacher. On the contrary, however, this task should rest with team members. Given that the above conditions are rather complex and not always controllable, the working teams in *Wwmaps* cannot be considered as a flat terrain where formal research questions can be easily planned and carried out. They are, rather, fertile soil where good practices of collaborative concept mapping and friendly co-operation can be nurtured through the years.

Despite the disadvantages already outlined, there are indeed great opportunities to enhance

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