# A Comparison of the Reinvestment of Collaborative Asynchronous Discourse Observed by Two Main Actors of Pre-Service Teacher Education

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**Abstract:** Networked communities are growing and they offer new affordances for reflection on practice in education. Few authors have observed how collective asynchronous discourse can be re-used in the classroom. This is the objective that we pursued in research combining a questionnaire filled out by pre-service teachers and *in situ* observations from their university supervisor. Analyses showed that both the pre-service teachers and the university supervisor recognized that the former used many ideas elaborated online.

### Introduction

Since Donald Schon's work about the reflective practitioner, reflective analysis has gained importance in education, in particular in pre-service teaching. Such reflection can be individual, but research has also stressed the relevance of its collective aspect (Darling-Hammond & Bransford, 2005). Networked communities are growing and they offer new affordances for reflection on practice (Laferrière, 2005; Lim & Cheah, 2003; Schellens & Valcke, 2006). However, few authors have examined how collective asynchronous discourse produced by such communities can be re-used in the classroom.

# **Research Question and Objectives**

How could pre-service teachers' collective asynchronous discourse be reinvested in the classroom? We adopted a comparative perspective between the university supervisor (U.S.) and pre-service teachers to estimate how they perceived each other's reinvestment from their own particular point of view. Objective 1: To identify ideas of intervention elaborated by pre-service teachers in a networked learning community. Objective 2: To identify how ideas elaborated online were subsequently used while teaching. Objective 3: To compare the pre-service teachers' and U.S.'s point of view about how the former reinvested asynchronous discourse in the classroom.

#### **Framework**

To identify ideas of intervention elaborated online and during classroom intervention, we referred to the five dimensions of educational intervention that support students' learning (Wang, Heartel & Walberg, 1993).

#### Methods

## Context of the Study

Our study was conducted with five pre-service teachers (female) who were doing their final practicum, which lasted 14 consecutive weeks. Among formal requirements, reflection on action was stated. In our context, the U.S. asked the pre-service teachers to participate in a networked learning community supported by Knowledge Forum®, in replacement of writing individual reflective journals. All five of them accepted. Learning community milestones and knowledge building principles were the major pedagogical concepts that enlightened the collective online dynamic. Pre-service teachers were asked to contribute about three times a week. The U.S. also participated. There were no prescribed topics and no directives were given concerning the requirement to use any of the ideas elaborated by the networked community.

# **Data Collection and Analysis**

Data came from three main sources. The first source comprised of notes written on Knowledge Forum®, including those written by the U.S. For each new note, the idea(s) of intervention that was (were) elaborated was (were) extracted and categorized by author. The second source of data was made up of observations made by the U.S. in the pre-service teacher's classroom. Four observations (75 minutes each) were completed for each of the pre-service teachers during the 14 week practicum. Finally, the third source of data came from an anonymous online questionnaire in which pre-service teachers had to indicate, no matter the amount of times, which ideas from the collective asynchronous discourse brought them to intervene in such a way.

We used qualitative analysis to identify ideas elaborated online with reference to the dimensions of intervention. Next, we matched these ideas with U.S.'s observations using a FileMaker Pro database. Descriptive statistics were used to compute the answers to the questionnaire concerning how pre-service teachers said they had used asynchronous discourse in their classrooms. Similar statistics were also utilized to compare the U.S.'s observations and the pre-service teachers' point of view about ideas that were used while the latter were teaching students.

## **Results and Conclusion**

The analysis of the 124 notes written by the networked learning community, using the five dimensions of our framework, led to the identification of a total of 127 different ideas. Distribution is detailed in table 1.

Table 1: Ideas Elaborated by the Networked Community.

Dimensions of	Number of Different	Examples of Ideas of Intervention	
Educational Intervention	Ideas Elaborated Online		
Quality of Teaching	56	Briefly review contents of preceding course at the	
		beginning of class.	
Classroom Dynamics	36	Verbally encourage students.	
Classroom Functioning	17	Give responsibilities to students.	
Classroom Direction	14	Stop speaking to indicate unhappiness with students'	
		behaviour in a non-verbal way.	
Quantity of Teaching	4	Check to see if students are actually working on the	
		assignment that was given to them.	

It is noteworthy that the dimension of quality of teaching was, by far, the one that characterized the most the collective discourse elaborated by the networked community. It constituted approximately 43% of all ideas of intervention. Table 2 now presents the reinvestment of these ideas by pre-service teachers while they were teaching students.

Table 2: Ideas from the Networked Community Reinvested in the Classroom.

	1	
Dimensions of	Ideas Reinvested Based on Pre-Service	Ideas Reinvested Based on University
Educational	Teachers' Point of View	Supervisor's Observations
Intervention		
Quality of Teaching	32% (N=18)	52% (N=29)
Classroom Dynamic	43% (N=15)	47% (N=17)
Classroom Functioning	45% (N=8)	41% (N=7)
Classroom Direction	44% (N=6)	14% (N=2)
Quantity of Teaching	15% (N=1)	25% (N=1)

Overall, we note many resemblances between both actors' point of view about ideas reinvested in the classroom. We remark that, from the pre-service teachers' point of view, ideas elaborated online that relate to classroom functioning were the most used. More precisely, for 45% of such ideas, at least one pre-service teacher said it was the networked community who brought her to act this way. In counterpart, from the U.S.'s point of view, ideas elaborated online that relate to quality of teaching were the most used. Indeed, 52% of such ideas were observed during classroom intervention of at least one of the pre-service teachers. However, the difference between both actors' point of view in terms of the dimension of quality of teaching could be explained, in particular, by the fact that pre-service teachers tried to be at their best for this crucial aspect of pupils' achievement when the U.S. went to observe them, as his observations contribute to the formal evaluation of the practicum. To conclude, this exploratory research points out the potential of the networked community as a means to enrich pre-service teachers' repertoire of intervention in a deliberative way.

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