

CONSERVATION AND SUBVERSION IN THE SOCIAL REPRESENTATIONS OF STUDENTS AND TEACHERS IN TEACHER TRAINING PROGRAMS MADE EVIDENT THROUGH CONCEPT MAPS

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Abstract. This study is a doctorate thesis in progress contextualized in a scenery of need for significant changes in the pedagogical practices taking place in classrooms around Brazil. The objective is to set light upon teacher training courses, as they could represent the place where such changes should be being sowed. The thesis assumes the perspective of Subversive Meaningful Learning for Humanization as the most appropriate approach for shaping the paths for quality education and consequently social improvements in Brazil. The study collects and analyzes social representations of students and teachers of teacher training courses as way of trying to identify movements of conservation and subversion guiding performance in the classroom. It uses concept maps to do so. The methodology is itself innovative for it involves a questionnaire that consists of designed maps, either representing subversion or conservation, that subjects will interpret, answer questions about, and redesigned as they wish so that they reflect their own representations.

1 Introduction

Teacher training programs have been failing in training teachers to act in a way of improving the quality of education in Brazil in terms of student performance in basic academic curriculum and in the so called critical and active citizenship dimension curriculum – which will all together be here considered Subversive Meaningful Learning for Humanization, under a theoretical frame built upon Joseph Novak, Neil Postman and Paulo Freire’s thoughts.

It assumes that in order for a prospective teachers to perform in the “subversive meaningful learning” dimension as teachers, they should have lived it in the training course as an experience, and that does not seem to be happening, so “conservation” is perpetuated in classrooms both at the universities were they study and at the schools they will teach. Considering that words such as “change”, “innovation” and other notions related to the idea that the traditional methods and concepts of education are outdated can easily be found in spoken or written discourse, but not in practice, we aim at “looking” deeper in these subject-collaborators cognitive thinking frames, more specifically, their social representations, trying to understand what guides their performances.

The study focuses on the social representations of teachers and students in undergraduate level teacher training courses on “students’ role in the course” aiming at identifying the social representations guiding their academic performance and comparing them to check for possible divergences specially between teachers and students representation of “student’s role” in the training process taking place in a course situation. It is carried out under the hypothesis that the social representations of teachers and students on “student’s role” differ even still towards the end of the course, and understands that, if so, that might be one of the reasons why the training program is not as effective as it should be. The study sets light upon the problem of not taking in consideration, or accessing, social representations of the people involved in the training process and the need to rebuild them together during the course as ways of enabling subversive meaningful learning to happen.

The study in the study, here to be presented, involves the use of concept maps as a methodology tool for presenting and accessing such representations. The methodology of the thesis project is a study in itself for the use of concept map in the way it will be used in this research is in itself innovative.

2 The study in the study – ¿Why use concept maps?

Concept maps aim at representing knowledge structures and are here assumed as a distinguished discourse genre, considered under the thoughts of Bakhtin.

“Concept maps are graphical tools for organizing and representing knowledge. They include concepts, usually enclosed in circles or boxes of some type, and relationships between concepts indicated by a connecting line linking two concepts. Words on the line, referred to as linking words or linking phrases, specify the relationship between the two concepts. We define concept as a perceived regularity in events or objects, or records of events or objects, designated by a label. The label for most concepts is a word, although sometimes we use symbols such as + or %, and sometimes more than one word is used. Propositions are statements about some object or event in the universe, either naturally occurring or constructed. Propositions contain two or more concepts connected using linking words or phrases to form a meaningful statement. Sometimes these are called semantic units, or units of meaning”. (Novak and Cañas, 2008).

Concept maps can be used in very different ways. Novak’s idea was education, it involved the use of concept maps to assess student’s understanding of a domain, or a specific concept and helping them understand such concepts through map design and meaning negotiation. I would like to highlight at this point, the process and not the product, that is, the process of map designing as learning experience, as an experience of reflection. People have to think to build good concept maps.

A more recent use of concept maps, facilitated a great deal with the Cmap tools, is the use of cmaps for Cognitive Task Analysis (Candal, Klein & Hoffman, 2006). The CTA is used for expert knowledge elicitation. Frequently practitioners have knowledge they can not express, either because they don’t have the time, they don’t think it “expert” or just because they are never asked to. Before the concept maps, and still in a great sense today, such knowledge was “captured” through interviews, specialist analysis over some uncommon practice or a creative way of having good outcomes from specific situations. In any way, this knowledge will have to be represented, and to Novak and Cañas, considering the Ausubel theory and the epistemological ideas in which they are based, concept maps are the best way to represent them.

Knowledge structures can certainly be accessed through many research approaches and the choice for concept maps for this study is due to two main reasons: it’s synthetic visual trait and the individual, challenging, reflective action involved in the process of meaning construction either in interpreting or creating a concept map.

2.1 A dialogical look at the concept map

According to Bakhtin, the history of society is linked to the history of language transformations which are reflected in genres. That is to say that the different historical moments and contexts are marked and determined by genres that come and genres that disappear or are transformed.

The use of language happens in the form of statements (oral or written), concrete and only, which emanate from one or another sphere of human activity. The statement reflects the specific conditions and purposes of each of such spheres, not only for its content (theme) and its verbal style, that is, for the operated selection of language resources – lexical, phrasal and grammar resources, but yet, and most, for its compositional structure” (Bakhtin 1975 p. 279) According to the author, these three elements – them content, style and compositional construction – cast in the whole of the statement and are marked by the specificity of a sphere of communication. Each sphere elaborates its relatively stable types of statements, such types Bakhtin calls genres of discourse. The author states that the one can ignore the nature of the statement and particularities of the genre in a linguistic study.

A Concept map is a specific genre, it uses language to communicate statements. Studies involving concept maps are linguistic studies too and should be considered as so. A concept map has content theme, has a style and a compositional structure, which should be considered in the production of meaning which designing or reading it aims at.

Concept map is a map of concept and their relations. Such concepts are considered in Bakhtin’s perspective of the notion of “word”.

The notion of “Word” is central to Bakhtin’s theory. Stella (2005) states that, for Bakhtin., the word is faced as a concrete element of ideological making, related to the life, the reality.

“The speaker, giving life to a Word with his intonation, dialogues directly with the values of society, expressing his points of views in relation to such values. These such values must be apprehended and confirmed or not by the interlocutor. The spoken, expressed, stated word constitutes itself in a ideological product, result of a interaction process in live reality” (Stella 2005 p.178).

This study will, therefore, consider the concepts in Bahktin’s dimension. According to him, a word has meaning but does not have sense if it is considered in use, that is, a word’s meaning is just a potential of sense which will only happen once the word is used in a communicative situation. In a communicative situation, sense happens because the word is being used in a context and the context determines the sense. The context of concepts in a concept map are the propositions, the relations between the concepts, and the relation between the propositions that the reader is guided to built for the understanding of the text as a unit. The context of a concept map is also the context in which it is produced. Specially when used in teaching and learning processes, concept maps should be interpreted considering the context of production. To Bahktin the context determines what and how something should be said, or if a utterance should happen at all; it is not a self decision as many people would think: someone thinks of something he wants to say to someone and that is it, communication occurs. To Bahktin, it is the context, the exterior, that will make the utterance necessary, the context makes one want to speak. The context of production would involve: who designed it, where was it designed, when was it designed and , maybe the most important, why was it designed. The importance of this can easily be understood if we imagine a concept map of the notion “Democracy” to different countries with different systems among the different social levels or “God” in different cultures or religions.

Other important aspect when carrying out a word analysis assuming Bahktin’s framework is that a word pronounced by someone may not be that person’s word. Bahktin states that our discourse is a mosaïque of other people’s word. So in a discourse such as a concept map we will probably find a lot of the teacher’s voice, or the author’s voice, but there may be other ideological voices present and only rarely there will be the student’s own voice – when he will be the true author of a statement.

This study will also consider the notions of centrifugal and centripetal forces in discourse proposed by Bahktin. According to this theory, there are always two forces acting upon a discourse: a centripetal force that tends to monology, that is to consense; and a centrifugal force that tends to dialogy, that is, to divergence. The two forces don’t act with the same intensity it will all depend on the context of the discourse. Sometimes in the infinite human evolutionary current there were times of more consense on theories and other times where there seem to be almost chaos in terms of such theories due to divergences concerning such theories. In either times, there were the two forces acting and, according to Bahktin, that is what keeps the current evolving.

This study considers the concept map a text in such current. It will relate “conservation” to the centripetal force of monology, and “subversion” to the centrifugal force of dialogy. It will set from the understanding that both can be found in any of the subjects’ discourse -and that will bring hope to education. Analyzing a text is a complex activity, so it is for a concept map.

3 Procedures

The methodology will involve a questionnaire in which the students will be presented a concept map on “What does a good student do?”. Concept map shown in Figure 1 represents the traditional rote student “good student” – this will be representing *conservation*. Concept map shown in Figure 2 represents subversive meaningful learning for humanization, the approach taken as ideal – it will be representing *subversion*.

3.1 The questionnaire

There will be four different questionnaires being used:

- Questionnaire 1: directed to the teacher and presenting the conservation concept map
- Questionnaire 2: directed to the teacher and presenting the subversion concept map
- Questionnaire 3: directed to the student and presenting the conservation concept map
- Questionnaire 4: directed to the student and presenting the subversion concept map

The questions asked:

The questionnaires to teachers will present the same questions, but referring to just one of the maps.

1. Would you say that this map represents what your students think you expect of them as “good student”? () yes, completely () no.
2. Would you say that this map represents what you expect them to do in order to be a “good student”? () yes, completely () no.
3. Would you say that this map represents what your students do? () yes, completely () no.

The questionnaires to students will present the same questions, but referring to just one of the maps.

1. Would you say that this map represents what your teacher expects you do in order to be a “good student”? () yes, completely () no.
2. Would you say that this map represents what represents to you a “good student”? () yes, completely () no.
3. Would you say that this map represents the student you truly are? () yes, completely () no.

Each question will be presented with one same map and will be followed by the same prompt:

If not, what would you change in the map so that it would do so?

Missing Concepts? Concepts to be excluded? False propositions? Missing propositions?

Reorganize the map considering such aspects.

Feel free to draw a completely different map from start on the back if you prefer to do so.

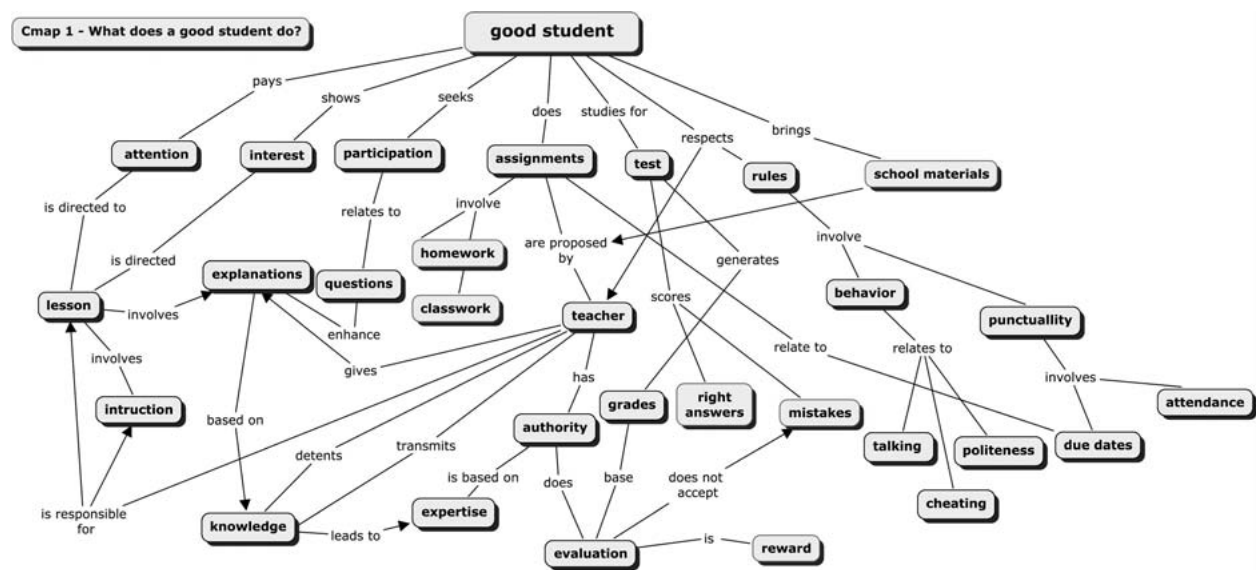


Figure 1. Concept map 1 on “What does a good student do?” based on the rote learning process, representing educational conservation.

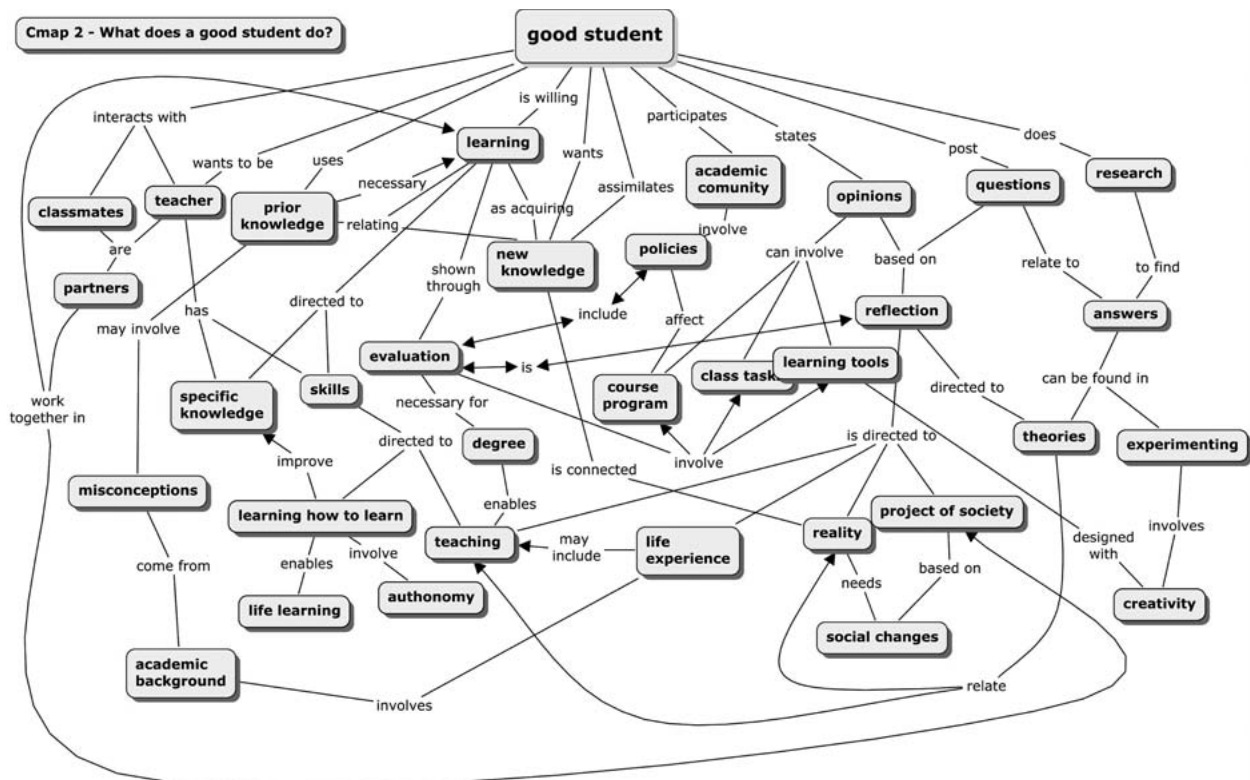


Figure 2. Concept map 2 on “What does a good student do?” based on the critical meaningful learning process, representing educational subversion

3.2 The analysis

The questionnaires will be analyzed in terms of the students’ interventions , or not, on the concept map presented. The questions that will guide the analysis are:

1. Was the map changed?
2. What were the changes?
3. What do the changes show in terms of the subject’s social representation of “good student”?
4. Are individual final maps “good student to my teacher”, “good student to me” similar showing similar representations?
5. Are individual final maps “good student to me” and “student I am” similar?
6. Are teacher’s final maps “good student to my students” and “good students to me” similar?
7. Are teacher maps “good students to me” and “students I have” similar?

3.3 Collaborators

The study has as informant-collaborators students, teachers and course coordinators of 3 different teacher training courses in one university as a case study.

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