

The Logic of Sense incorporated to the notion of Inquiry as an Orientation for Learning: two classroom experiences¹

La lógica del sentido incorporada a la noción de investigación como una orientación para el aprendizaje: dos experiencias en el aula.

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Abstract

A reflection about two classroom experiences is presented in the attempt to incorporate the Logic of Sense into the notion of inquiry for learning. The author used the method of Experimentation introduced by Deleuze and Guattari, who based its principles on philosophical conceptions by Baruch Spinoza. The first experience is conducted with students from the subject called Reading and Speaking workshop from the BA in English Teaching at Tolima University. The researcher designed a reading protocol which, in an initial stage, allowed students to comprehend the texts assigned for the class. Afterward, this protocol enabled students to reach levels of application and evaluation through the formulation of questions based on the Series of the Logic of Sense. The second experience was carried out with students from the Masters in English Didactics from the same University. The same reading protocol format was used; but, this time the questions constructed let students envision perspectives in the design of new curricular proposals.

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Key Words: Experimentation, Innovation, Inquiry for learning, Logic of Sense.

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Resumen

Se presenta una reflexión en torno a dos experiencias de aula en las que se incorpora la Lógica de Sentido a la noción de indagación en el aprendizaje. El autor utiliza el método de Experimentación, propuesto por Deleuze y Guattari, y el cual a su vez se basa en principios filosóficos de Baruch Spinoza. La primera experiencia se realiza con estudiantes de la asignatura Taller de Lectura y Conversación, perteneciente al programa de Licenciatura en inglés de la Universidad del Tolima. El investigador diseña un protocolo de lectura para desarrollar inicialmente niveles de comprensión de los textos asignados para la clase. Posteriormente, los estudiantes alcanzan niveles de aplicación y evaluación a través de la formulación de preguntas basadas en las series de la Lógica del Sentido. La segunda experiencia se aplica con estudiantes de la Maestría en Didáctica del Inglés. El mismo formato de protocolo, utilizado con estudiantes de pregrado, es aplicado; pero, esta vez las preguntas formuladas permitieron visualizar perspectivas en el diseño de nuevas propuestas curriculares

Palabras claves: Experimentación, Innovación, Indagación para el aprendizaje, Lógica del Sentido

Resumo

É apresentada uma reflexão ao redor de duas experiências de sala de aula nas que se incorpora a Lógica de Sentido com relação à noção de investigação na aprendizagem. O autor utiliza o método de Experimentação, proposto por Deleuze e Guattari, o qual ao mesmo tempo se baseia em princípios filosóficos de Baruch Spinoza. A primeira experiência é realizada com estudantes da disciplina Oficina de Leitura e Conversação, que pertence ao programa de Licenciatura em inglês da Universidade do Tolima. O pesquisador desenha um protocolo de leitura para desenvolver, em princípio, níveis de compreensão dos textos designados para a aula. Logo, os estudantes alcançam níveis de aplicação e avaliação através da formulação de perguntas baseadas nas séries da Lógica do Sentido. A segunda experiência é aplicada com estudantes do Mestrado em Didática do Inglês. O mesmo formato de protocolo, utilizado com estudantes de graduação, é aplicado; mas, dessa vez as perguntas formuladas permitiram visualizar perspectivas no desenho de novas propostas curriculares.

Palavras clave: Experimentação, Inovação, Indagação para a aprendizagem, Lógica do Sentido

Introduction

“En vez de preguntar y responder dialécticamente, hay que pensar problemáticamente” (Foucault, 1995, p. 27)

Knowledge at school seems not to be constructed, or even contradicted. It is, most of the times, assumed as a product, which students need to learn. In this way, questions are most of the time a kind of mechanism that enables the assimilation of pre-established knowledge. They function as a strategy that enables to confirm the pure comprehension of the theory (dialectical thinking in the words of Foucault). For this French philosopher, questions should go beyond comprehension (Foucault, 1995). They should envision problems, which are understood as a possibility to think differently: Nowadays, we come across the idea of knowledge as a problem: Thinking the unthinkable, emphasize the difference and see the statements as happenings (Wiesner S, 1999, p. 10) 3

There have been many attempts to change these dialectical practices. Among these attempts, I can highlight: Cultural Historical Activity Theory (CHAT) founded on the bases of Vigostkian theory, Global Citizenship Education (GCE) which intends to connect education with the idea of forming global citizens through the principles of Emancipation proposed by Paul Freire, and Inquiry-oriented Curriculum.

This reflective article is based on a qualitative study that seeks for new manners of conceiving the concept of “problem” in the perspective of an inquiry-oriented curriculum through the use of the Logic of Sense (Deleuze G, 1989). I experimented with the concept of problem proposed by Deleuze and Guatari in the construction of a learning proposal that changes the dialectical role of questions. The experience was conducted in two groups of students from Universidad del Tolima:

Experience 1: The course called Reading and Speaking Workshop. Fourth Semester B.A. Program in English Teaching.

Experience 2: The Course called Curriculum: Design, Implementation and Evaluation, Second Semester, Masters in English Didactics.

The model was applied to both groups with different purposes. The data collected was analyzed in terms of the possibility of conceiving an inquiry-oriented curriculum.

Translated by the author for publication purposes.

Literature Review

The notion of “problem” for the Logic of Sense

In order to understand the concept of problem for Deleuze (1989), we need firstly to elucidate the images that people commonly have about the concept of “problem”. Most of the times, a problem is seen as an obstacle. It is frequently associated with a solution. If a problem exists, there must be a solution; or at least we need to look for one.

For the Logic of Sense, a problem does not necessarily imply a solution. When a problem finds a solution, it dies, it is not a problem anymore. From this perspective, the problem seems to have a positive connotation. Deleuze (2005) understands the problem as the crossing of three series: The series of concepts, which is composed by images and ideas; the series of questions, and the series of happening or events.

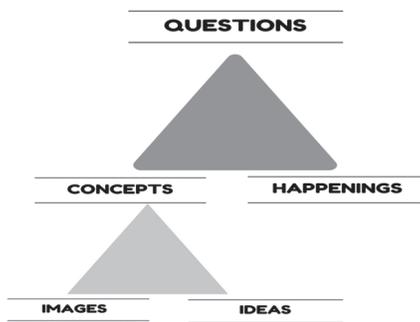


Figure 1: The problem for the Logic of Sense

According to this model, problems do not exist - they are constructed through questioning the concepts inside the discourse:

Problems and questions are not defined according to lack. It is not that subject does not know something and therefore has a problem and asks questions. Instead, problems determine objects and cannot eliminate the problem as determining, since the evolution and genesis of objects, their singularities and signs, are determined by the problem. So, in the same way that instances problems and generating questions for a body of knowledge allow it to be understood better, the problem and questions are a positive aspect of the object rather than a lack or insufficiency to be negated and eliminated (Williams, 2013, p.88)

As a result, concepts are made of images or ideas that need to be contradicted by means of questions that become new possibilities, new ways of seeing. They are made of paradoxes that allow us to turn the concepts around. A question is problematic when it makes us see a happening; but a happening is not what commonly occurs in daily life; on the contrary, a happening is an accident, a turning point in our lives, a possibility, a proposal, a new state, a new dimension.

Inquiry as an Orientation for Learning

Gordon Wells (2002) presents an interesting approach to what Inquiry means in the organization of a curriculum. Through clear examples, he lets us realize on the importance of questions in the establishment of problems that define not only the content of a syllabus, but also the sequence of learning by considering the singularities and interests of learners. In a typical lesson about the time, beyond learning how time is measured, students question the same essence in the idea of measuring time: Why is it necessary to measure time? How did ancient civilizations keep track of time? Could there be other ways of measuring time? The notion of time is something that everyone assumes as a fact, without hesitating or doubting it. Inquiry as an orientation takes students to the field of questioning notions that we assume as part of our daily routines. We use time every day, but we never think about it: can time be conceived in a different way? What could happen if an innovative method to measure time were invented?

Bearing the former idea in mind, we can see the connection of the Logic of Sense with Inquiry as an Orientation for Learning: both of them expose students to think the unthinkable.

With regards to the learning and teaching act, for Wells (2002), problems have the following characteristics:

1. They may be spontaneous; they need to be opened to unplanned situations.
2. They are social constructions and as such have to be understood from the perspectives of Cultural Historical Activity Theory (CHAT)
3. They arise in the course of ongoing activities in which students are affectively and intellectually engaged.
4. They have no single correct answer; nevertheless, a solution has to be constructed for the participants to be able to continue to act effectively and responsibly.

M. Foucault and Gilles Deleuze would disagree with the fourth characteristic of problems stated by Wells in the sense that the reason of being in the problem is the problem itself and not the solution:

Problems as complex themes resist a seventh postulate of the image of thought whereby truth and falsity are said to apply solutions of problems rather than to problems themselves. There are no technical, practical or theoretical solutions to problems that finally dispel their capacity to regenerate and raise novel questions and challenges (Williams, 2013, p 139)

In other words, it is the problem the one that keeps the mind looking for new alternatives; some of them become happenings when they are in the way of innovation.

Methodology

Research Design

I applied Experimentation as a method (Lichilín, 1999, p 16-18) in the sense that the philosophical foundations on the Logic of Sense were incorporated to the notion of Inquiry oriented learning and teaching. In the first experience, the Logic of Sense was applied in the subject of Reading and Speaking Workshop from the B.A. Program in English Teaching through the creation of a Reading Protocol (Appendix A) that problematized concepts in the text that were part of the syllabus. The reading protocol asked students in item 5 to make problematic questions based on the contents of the text. These questions must accomplish the conditions presented in Figure 1. In the second experience, students from the Masters in English Didactics used the Logic of Sense as part of the procedure to design an innovative curriculum proposal.

As Lichilín (1999) says, Experimentation as a method is not the same as the Experimental method from research traditions. The latter aims at scientifically demonstrating the effectiveness of a research variable by applying it to an experimental group in reference to a control group that is not intervened (Griffee, 2012, p. 71-72). The former must be understood as a relation with the plan of immanence in Baruch Spinoza. For this philosopher, a thing is not defined by its form, its organ, its function, its substance or its subject, but because of its velocity, affective states and dynamic charges (Deleuze, 1988)

In this order of ideas, the research problems for experimentation would be located in the realm of immanence or consistency. That is to say, changes that transform an established state of things are those that

affect its essence; while a change that modifies, the form belongs to the realm of organization or extension. Deleuze (1998) gives a typical example of the two planes when he says that the change from the result of pouring a jar of water into two cups is in the plane of extension, while boiling a jar of water and pouring it into two cups will not result in 50 degrees Celsius each. Temperature is a quality that cannot be subdivided.

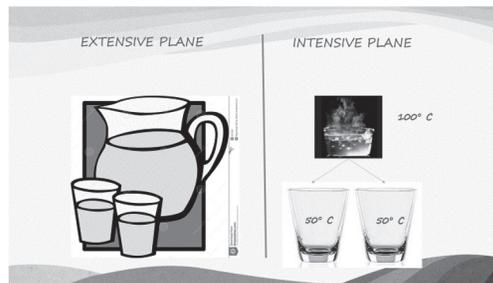


Figure 2: Experimentation as a method: the extensive and the intensive planes

From this assertion, we can tell that real changes in education will not occur in the extensive plane: when more desks are put into a classroom, more rooms are built in a school or more teachers are trained; but in the intensive plane: when there is a relation of affection with knowledge that moves a community to learn.

In this sense, the question that leads the conducted research study is located in the intensive plane, since it wants to affect students' perception of knowledge through the idea that this is not a universal truth legitimized by its scientific denomination, but a singular act that becomes a creation of mind, when knowledge is contradicted:

What could happen when the notion of problem taken from the Logic of Sense is incorporated to an inquiry oriented learning experience?

What new insights will students be able to see in the reading texts when questions are created to contradict the authors' concepts through the use of the Logic of Sense?

Learning Experiences

Two learning experiences were designed for the two groups of students already described.

Experience 1: A Reading protocol

The aims of this tool were firstly to ensure comprehension of the texts that were part of the syllabus of this subject; and secondly to lead students to inquire on the content of these texts through the application of the Logic of Sense. The protocol consisted of 5 steps: title, author(s), key words, thinking map and problematic questions. The first three parts were intended for students to identify the texts, the thinking map enabled the comprehension of the texts through the organization of information according to the purpose of the author(s). Thinking maps consist of eight established maps, each one of them connected to the development of a mental skill (see Appendix B). Students were trained in the identification of each map, and the association of them to the purpose of the reading passage. That is to say, in the text called “Teaching ESL vs Teaching EFL. Principles and practices” by Daniel Krieger (2005), and as the author describes similarities and differences, the proper map to use from the eight proposed by Thinking Maps is a double bubble map (Yeager and Hyerle, p. 37)

Finally, the problematic questions were constructed by using the following model:

The author says/establishes/asseverates that “
_____”; however/nevertheless, what could
happen if/ what if/ how could it be _____?

The model to construct the question corresponds to the three series proposed by Deleuze in the Logic of Sense: the series of concepts, which is composed by images and ideas, the series of questions, and the series of happenings or events (see figure 1)

Experience 2: A model for designing an innovative curriculum proposal

As a final project of the course called Curriculum: design, implementation and evaluation, students were required to design an innovative proposal and present it at the end of the semester in a poster session. The proposal was based on a needs analysis conducted at the institutions where the MA candidates worked and it had to consider

the main concepts constructed during the development of the course. It could be related to any of the curricular elements or combination of them, such as: syllabus design, methodology, materials, or evaluation.

Designing an innovative curriculum proposal is not an easy task and the hardest part seemed to be: “How to guide students to construct a problematic question that let them see a clear proposal for the design?”

The experience of learning consisted of three stages:

1. Students were encouraged to reflect on their teaching and learning habits and beliefs by reading and discussing the text “Examining Our Beliefs and Practices through Inquiry” by Kathy G. Short and Carolyn Burke (1996). The authors present some change stories to exemplify the ways curriculum may be reformed. In one of these stories the authors show:

A belief: As teachers we remain in control of the standards and the communication, mostly by sending home report cards and announcements.

A question: How can schooling be a collaborative venture among parents, teachers, and students?

A proposal: Establish a three-way communication by using exchanging dialogue journals.

2. Students were exposed to the idea that an obstacle, a difficulty or scarcity may be an opportunity to see innovative ways of conceiving learning. To achieve this purpose, I showed the group a video entitled “Embrace the Shake” (2013) in which Phil Hansen developed an unruly tremor in his hand that kept him from creating the pointillist drawings he loved. Hansen was devastated, floating without a sense of purpose. Until a neurologist made a simple suggestion: embrace this limitation ... and transcend it.

For the purpose of the model, the video was summarized by equating Deleuze original triad:

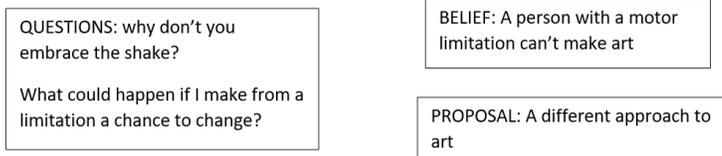


Figure 3: Summary of the Video “embrace the shake”

3. The original triangle proposed by Deleuze in the Logic of Sense was transformed in order to include beliefs and habits that teachers commonly have about the curriculum. These beliefs and habits were questioned by using the base “what could happen if/what if / how would it be?”

Application

The two learning experiences were applied under the following conditions:

Experience 1: The group of 16 students from the fourth semester wrote 4 reading protocols. Each protocol was part of a learning unit that lasted 4 weeks. Students wrote protocols on these texts:

Protocol 1: The Role of Metacognition in Second Language Teaching and Learning (Anderson, 2002)

Protocol 2: Tips for Reading Extensively (Ono L, Day R, and Harsch K, 2004)

Protocol 3: The Teaching Tool Box. Reconciling Theory, Practice, and Language in Teacher Training Course (Vanderwoude A, 2012)

Protocol 4: Using the Simpsons in EFL Classes (Ruckynski J, 2011)

Experience 2: The model to design an innovative curricular proposal was administered in the group of 7 students from the second Semester of the Masters in English Didactics during three sessions of 12 hours each. Each student designed a curricular proposal that was presented in a poster session and a written report.

Data Collection

Experience 1

The data from the Reading Protocol model was collected by using a language portfolio. The problematic questions content in the protocols were taken and analyzed in two moments: one in the middle of the process and the last one at the end of the semester. The purpose of this division was to evaluate the effectiveness of the model in the construction of problem questions and make further decisions on the sequence of learning.

Experience 2

The seven curricular proposals were presented in a written report that included an introduction; the problem question connected to the habits, beliefs and concepts, as well as the happening that resulted from the crossing of the first two series. Besides, students presented a poster which contained an abstract of the paper orally.

Data analysis and Interpretation

Experience 1

Students from 4th semester wrote a total of 57 reading protocols: 13 students wrote protocol 1, 14 students wrote protocol 2, 14 students wrote protocol 3, and 16 students wrote protocol 4. As I said before, I divided the total of protocols into 2 groups: the first group comprised protocols 1 and 2, and the second group comprised protocols 3 and 4.

These are the results of the first group of questions:

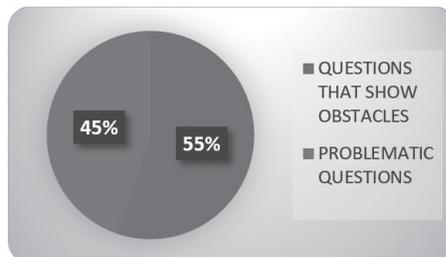


Figure 4: Data from the first group of questions

This is the data collected from the second group of questions:

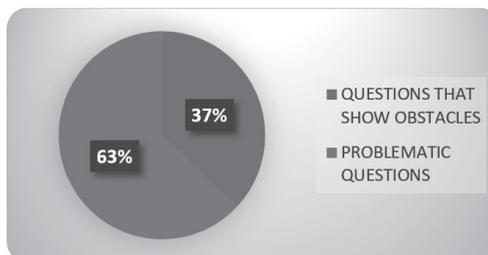


Figure 5: Data from the second group of questions

As can be seen in figure 5, most of the questions formulated by the group of students included obstacles; nevertheless, after providing extra practice, the number of questions that included a proposal increased an 8%. I can infer that more practice in the use of the model could enlarge the percentage of problematic questions.

Experience 2

The information of the seven curriculum innovation proposals is presented in the table below:

Table 1: Curricular innovation proposals from the Masters in English Didactics Students

Belief/habit/concept	Question(s)	Title of the proposal
Students are given books, but they cannot work on them	What could happen if the 21 students from 401 at Suba Compartir School designed their own material as a support to work on their everyday English classes?	Learning model based on the design of Material for the English Class
Students at UT Language Center resigned as levels in the program increase.	How can a needs analysis enable teachers to design the curriculum? How can a curriculum be developed by taking into account the educational community?	Needs Analysis: A case Study to an Innovation in the Curriculum design
Political and social issues are hardly considered to be part of English Teaching Classes	What could happen to students' critical thinking skills when they are exposed to social and political debates?	Fostering Critical Awareness Through hypothetical situations: social and political debates
Students are not self-confident to speak the language. English is not seen as a real necessity	How would it be possible to have students being confident in the process of learning a second language by working on their own and having them participating in the learning process?	The use of an online recording voice program to help students increase self-confidence in oral production skill
Objectives are given by the Common European Framework or performance Standards provided by the Ministry of Education	What could happen if the objectives of the syllabus are constructed based on needs analysis?	Constructing objectives based on students' needs
In our culture, teachers and students are used to be told what to do We adopt top-down education models	How to design a curriculum that enables students to react and solve problems from their surroundings?	Design of an inquiry-oriented curriculum based on CHAT and post-method theories
Students must work in a book that is grammar-focused	What could happen if critical-thinking based material is integrated in the English classroom?	A learning proposal based on the exploration of feelings at Sarento Inocencio Chincá Military School

Results

Experience 1

In the first group, as it can be seen in figure # 4, most of the questions showed an obstacle instead of a proposal. This is an example of a question as an obstacle that students wrote in their reading protocols: The author explained that activities to work with the Simpsons' show are just thought to be worked in class; however, what could happen if students have already watched the episode we want to use for the class at home?

This is an example of a problematic question that contains a proposal: The authors say that in order to understand the content of American TV shows like the Simpsons, viewers need to be culturally literate; as a result, how could it be a learning unit if a cultural aspect such as political humor is discussed without watching the episode?

Taking into consideration that most of the students tended to formulate questions that contained an obstacle (false questions in terms of Deleuze) I found it necessary to make an intervention in the group in order to make students aware of this phenomenon. I provided further practice in the way problem questions should have been formulated and expected to see the improvements in protocols 3 and 4 (see figure # 5 for analysis of data).

Experience 2

Bearing in mind the notion of Logic of Sense proposed by Deleuze, previously explained in the conceptual background through figure # 1, it was found that 85% of the questions in the curriculum proposals were formulated in terms of providing what Gilles (2005) defined as a “happening”: A happening is not what commonly occurs in daily life; on the contrary, a happening is an accident, a turning point in our lives, a possibility, a proposal, a new state, a new dimension.

To refer to only one case, at a Suba Compartir school in Bogotá, students are used to having access to a book bank in each classroom. Students count on the books, but they are not allowed to solve the exercises or write side notes. This habit is questioned by asking: What could happen if the 21 students from 401 at a Suba Compartir school designed their own material as a support to work on their everyday English classes?

This question takes the problem into a new insight in the moment that the in-service teacher who wrote the proposal sees the possibility of changing the idea that resources, in this case books, are elements that are provided to the teacher and students. Instead, he considers the idea of incorporating students’ needs, likes and interests in the design of the material; also, he sees that the learning process starts in the moment when students and parents are involved in the analysis of needs, the development of the materials and the evaluation of the process.

Conclusions

After analyzing the two experiences and taking into account the initial research question, the most important findings were: In the formulation of questions, postgraduate students were able to link English teaching with other areas of knowledge and aspects of human dimensions; especially what Wells and Claxton denominate as the principles of CHAT. This group of students tend to be more skillful than undergraduate students at linking theory with practice. Being in contact with real teaching environments enables graduates to detect cultural needs, habits and beliefs. I also found that setting examples such as the video about “Embrace the Shake” and formulas like the inquiry triangle enable comprehension and ease the path to get to a problem question; however, examples and formulas tend to minimize students’ mental effort. Besides, problems established through the formulation of questions fostered students’ engagement in both groups. This aspect may be an interesting area for further research.

Students from both groups focused more on solving the task than on being aware of the rules of the language. As a result, language acquisition was unconscious, and reduced levels of anxiety.

As an English teacher, I learned that the Logic of Sense and Inquiry as an Orientation for Learning seem to be a path to be what Kumaravadivelu (2003) calls a Transformative Intellectual: an educator committed with introducing change to the community where he lives.

The current study allowed me to see that students struggle with the formulation of problem questions. There is a tendency to make questions that present obstacles more than proposals to the established habits, beliefs or concepts; moreover, most of these obstacles function like “tags” that students use for every question. In this way, these tags become excuses that block any type of change. On the other hand, getting to a problem question demands time and effort from the teacher as well as from students. The effort implies the use of mental capacities and think what have not been thought. Students appear not to be prepared to formulate questions and, what is worst, they look like not being exposed to formulate questions before.

With regard to language use, proficiency limitations seem to be an obstacle to develop high order thinking skills, which are a requirement to inquire.

Finally, since this study is in the field of experimentation, little has been said about the use of the Logic of Sense and Inquiry as an Orientation applied to language learning, the author of this article

has carried out other studies where the former method has been used to criticize learning philosophies like the Thomas the Aquinas pedagogical model (Camacho, 2013) and the pedagogical project of Tolima University (Camacho, 2013). The Logic of Sense proposed by Deleuze may be a valuable research tool to open new insights in the dominant educative discourses, and as a result, propose new ways of conceiving teaching and learning.

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Appendix B

Thinking Maps a Language for Learning

