Autonomous learning as a supporter of curricular experiences.

The significance of PBL in online education

César Correa Arias
Department of Human Resources Studies, University of Guadalajara
Guadalajara, México
cesarca@hotmail.com

Abstract— Autonomous learning is a topic that has been developed since long time ago, but mostly, it is related to isolation, lack of opportunities, self learning and a fragmental literacy activity out of the frame of the responsibility of educational institutions. However, learning in a basis of autonomy is always linked with the interactions of others (individuals and institutions). It means that we are able to performance and to experience an autonomous learning process, thanks to the presence of the social interaction. That brings up to mind the affirmation of constructivism theories, that the process of learning is a social act and we might say, a social evolving process. In spite of that, it is difficult today to identify, within educational institutions, far beyond the rhetoric in their officials discourses, plans and goals, truly practices of autonomy in the process of teaching/learning. It means that the institutions of higher education barely endorse practices of autonomous learning. First, perhaps it is due to institutional control practices over the educational community, and secondly mostly because, autonomous learning is connected to curricular flexibility, something institutions of higher education, just start to understand and to include in their curricular practices. As for curricular flexibility within online education, we can see as heterogeneous practices that can help educational communities to understand the possibilities of a blend education, and to bring back the educational process as a share responsibility: Teachers and students cooperating work. This research focuses in the possibilities and restrictions of autonomous learning in on line education focus in an ongoing research place at the University of Guadalajara, México, around postgraduate programs in online and blend learning, 2010-2012. We use qualitative data analysis and a phenomenological approach to analyze how autonomy is related to on line/blend learning in Mexico from the own voices of the informers.

Keywords—Higher Education; autonomous learning; on line learning; didactics; curricular experiences.

1. Introduction

Autonomous learning is guided by four major dimensions: 1) motivated teaching; 2) contextual learning; 3) student self responsibility; 4) Institutional support and leadership. These four dimensions are at the service of a significant learning and a responsible production of knowledge.

Learning as an autonomous process and responsibility, does not represent a distant or lonely educational activity, in fact, whatever education does, according to different context, happens because the presence of others (teachers, institutions, students, parents, associations, society). Autonomous learning does not have to consider to center or de-center a role of teachers and students or even the educational institution as

What it is in the center of an autonomous learning process is the meaning and sense of learning, the experience in which the individuals are involved in the diverse acts of learning.

In the same sense, on line education creates spaces of dislocation of educational traditional rhetoric and practices augmenting the complexity and the nature of the educational community.
Teaching and learning suffer amazing conversions because the presence of online education, not only because the transformations in technology, but due to how the educational community transforms technology in educational discourse and practices. We can identify traditional practices into online education that uses ICT as if their nature *per se* could develop all the complexity of the learning process.

It is clear that the development of online programs is marked by a medium and high technical and administrative development, but still it is evident a lack of a large academic debate in the context of autonomous learning mediate by online education.

The pedagogical and didactic components cannot be cut off from the educational practices. It is because these components and from these components that we can build high quality curricular experiences.

This paper analyzes these four dimensions mentioned above to see the possibilities of autonomous learning within the flexibility of online educational environments.

### 2. Research Topic

#### 2.1. Motivated teaching

Teaching in an autonomous learning model requires full awareness of the way in which teachers understand the educational trajectories of their students and their own professional itineraries as teachers.

It means that the process of building a course and to take, assist and experience this course, has to be based in the trajectories and not, as it has been done traditionally, only in the contents of a subject or a discipline.

The autonomy of learning requires autonomy of teaching, which means the possibility that teachers grow and go forward their planning to analyze their own practices. Autonomous teaching has to do with three components: a) flexible curriculum design and implementation, it means that the students educational trajectories are more important that the topics and the contents themselves; b) critical didactic that enhance the curiosity to learn and to develop thinking skills in the students and teachers, within an integrated network of concepts and ideas [1], and c) high quality curricular experiences as one of the main educational goals [2].

The flexibility of the curriculum has to do with the fact that teachers might consider to stop “design” in their offices and cubicles all alone, the curses, without facing the students and know about their educational trajectories. The flexibility is done in the run, in the development of the courses. For this reason, teaching has to be transform with different methodologies approaches such Problem Basic Learning (PBL) and Project Basic Learning (PRBL).

Critical Didactic is referred to this methodological disposition that is well distant to a technical didactic. The didactic has to be built by analyzing how the learning is occurring and how can we improve the way students and teachers are learning. A critical didactic is centered in the continuing reflection of students and teachers about the act of learning and the different experiences that make possible make valuable and meaningful these act of learning.

Curricular experiences represent a narrative process, where reflection is put around the recollection of acts of learning, whether or not they were achieved or not as themselves.

An act of learning should contain a clear intention to develop autonomous subjects and to uphold conditions for autonomy and self realization. As social act, curricular experiences through teaching such as Problems-based Learning and Project-based Learning can foster an educational philosophy that allows students and teachers to learn and understand, as well as contribute to the transformation of teaching.

As one of the components of teaching and learning, the process of evaluation takes another nature and identity. Evaluation will not be a sheer exercise of the traditional one-way relationship: teacher evaluates the student and then the learning process stops as it was over. Within autonomous learning, evaluation is as a city map, guiding students and teachers to go where they have both promised to walk and to arrive where the participating process of learning commands. This means evaluation will focus in the process of learning with others in the perspective of educational trajectories.
Overall evaluation from teaching practice is transformed to a participatory evaluation, where is included the process of evaluation as such, the self assessment, the co-evaluation and the hetero-evaluation.

Within the online education, a motivated teaching is linked to the possibility of creating, together with a strong work as the PBL and the PRBL methodology, active participation of students and teachers in the way that both are invited and capable to build the curriculum in every interaction. Therefore, on line sessions are becoming a vehicle and not and end of the educational process.

2.2. Contextual learning

We start from the experience that gives us, as an educational philosophy, Problem Basic Learning (PBL). This type of educational model allows analyzing the followings educational aspects:

- Replace a traditional education based on offering contents by the teacher, and manage that content through standardized evaluation instruments. The PBL breaks down classroom rituals, and fractures the spatial and discursive scheme of the traditional classroom sessions. Also PBL implements a multidimension and integrative approaches of evaluation.
- Replace the assessment as an end of the educational process, to become a continuous process of expanding curricular experiences and reaching comprehension. The process of evaluation within PBL does not mean an adaptation, but a creation. As teachers we evaluation within PBL because we look for learning experiences, not for evidences of learning.
- The evaluation within PBL exists thanks to the logic of providing quality experiences. That is to say that evaluation operates as a vehicle for better curricular experiences of students and teachers and not to look for evidence of each potential or de facto act of learning [3]. That makes possible for students to build themselves the learning objectives of the course, and not to follow them from a pre-designed course for the teacher in charge of this course. In fact, the course begins to be in charge of students and teachers both interacting in the base of a collaborative academic work.
- The evaluation within the PBL process is necessarily framed within a multidimensional model. It requires the proper evaluation as a general concept, self-evaluation, co-evaluación, hetero-evaluación and reflection within evaluation groups. In this regard, the evaluation does not seek a deterministic basis, a positivist model consisting of a self verification of the results of the evaluation, but in the contrary, qualitative data that could enrichment the reflection on the evaluation process. Here the displacement that occurs is decenter the response in searching concepts and focus the reflective process in the the trinagulación between: curricular experience, evaluation process and the process of coprehension.
- The curricular experiences coming from the PBL are developed thanks to the flexible arrangement of the class room sesions and the possibilities of a continuous reflective process. The curricular experience is narrated as a fundamental component of the comprenhsion of the object of study. A classic example would be that the experience of feeling the enviroment outdoors leads easily to the integrative understanding of the concept of temperature. The network of concepts that results from the laws of thermodynamics are based on the sensitive experience of the concept of heat and cold, therefore the construction of the concept of temperature passes by a sensible experience that we call curriculum experience (Mckernan, 2000). It is vecause we feel the world and the others that we learn.

Within education online curricular experiences represent a challenge for the educational systems, because the fragmentation of learning contexts done by the ICT. Therefore, the curricular experience does not happened in one only place: the classroom, or the combination between institutional places (family, libraries, institutional activities, etc), but in a multitude of places in the virtual space.

This does not mean that learning it is not contextual, on the contrary, it means that the territory of contextualization is not already concentrated in the bipolar relationship: inside the school and outside school, but in multitude of spaces.

2.3. Student self responsibility
In general, within the dynamics of a regular and traditional course, from the students’ practices, we can identify a response pattern that is related with the institutional control. It means that regular students push themselves to accomplish the course’s general objectives, to get the required scores and to take care of not having troubles with a distant relationship they establish with teachers.

We can affirm that learning appears as a constituent element of the course, but not necessarily the most important one. Diverse institutional power games are at hand in the classroom between teacher and student relationship. Consequently, simulations, manipulations from teachers and students is a normal practice; besides, arrangements that are more in the intention to maintain the status quo that requires the educational institution, than to encourage a significant process of autonomous learning.

Students play an important role in taking responsibility, not about the course’ contents or units, or the different courses they have to take during a term or a school year, but of their own educational trajectories. The students identification of learning gaps, make possible that they also, bear on mind different learning plans and strategies. This process can be lead by the help of a tutor, or mediate by the relationship students have established with teachers, for instance in using PBL.

Certainly, of what PBL brings to learning environments is the possibility of considering the educational trajectories of every particular student as an autonomous process, because the diversity and specificity in with those have will be built. It is at this point where the responsibility of education is oriented towards the implications of a meaningful curriculum experience.

It is not possible to share a world of knowledge in a highly interactive knowledge community, -as it is in the case of the PBL-, if there is a minimal conceptual strength, or if this is not considered as a capital of knowledge constantly changing.

However, the methodology of the PBL inside online education generates a kind of greater responsibility, since it suggests a degree of larger complexity in the commitments that lead to good administration of learning objectives. But this responsibility is extended to respond to the academic task and to the educational interactions that lead to the fulfillment of these objectives.

It is about a nodal responsibility, where the learning process is not regulated directly by the institution, but by the quality of the educational interactions that occur in this deregulated virtual space. This individual and collective share responsibility allows the flourishing of an ethical education. Maybe one can simulate about capture great deal of information, and even to be qualified, but to simulate trajectories, it is not only more complex but useless.

For this reason, the educational responsibility is definitely in the particular trajectory of each student and not in the records of the academic performance of the students. To put it more clearly, grades represent small sectors of the educational trajectories of the students, but certainly, not the core of the trajectories themselves. Teachers must de-center their evaluative activity and allow students to be in charge of their own educational trajectories.

Finally, biographical emphasis in education [5], [6], is essential, because it is narrating the experience that students and teachers can recover the meaning and sense of a curricular experience and understanding the action of the individuals.

2.4. Institutional support and leadership

The administration of the institution is a small and complementary part of the educational function. However, it represents an important role for institutional operation and management. But in spite of that, today, and, particularly in the sector of public education, universities present a high status of politicization, financial market logic, and a few educational senses.

Managers could not be farther from the educational logic, due in part to the use of educational performance through quantifiable evidence-based education.

Educational systems, through certification processes, and exams such as PISA focused in the quantification of the students’ performance of reading-writing language and mathematics skills, and the
certification logic that comes from the Institute for Higher Education Management (IHEM) suggest that education has been taken over from the logic of an academic capitalism [7].

The ethical responsibility of the institution is fundamentally, accompany the educational process were built up in the Academy and not command the educational function a perspective administrative. Instrumentalism education as a corporate and administrative process denies all episteme where the educational institution as such is founded. Many reforms with zero cost, with a general logic of market, under an academic capitalism simply betray the disciplinary statutes of education.

An institution of excellence is not governed by the type and quality of flooring and furniture, nor by the rankings of universities, although today is a factor of great concern among managers and for society in general. This esthetic task, universities are using today leaving out substantive administrative work in the field of education.

The institution should promote independent learning from the responsibility of ensuring educational autonomy, and not just financial, independent learning, is a chimera in a schematic, politicized institution or ruled only by managers.

Teachers have lost enormous ground at the decision-making level of what is substantive: educational, while managers are part of the decisions, even in the sphere of the curriculum design and implementation.

Leadership of an institution of higher education consists of administrators leave the imaginary that are responsible for the operation of the entire university; indeed, they have to support the complementary activities and to wrap up the educational processes. But the place around the educational process requires high responsibilities and the awareness that they work for an educational institution.

While universities become increasingly bureaucratic and less friendly for teachers and students, educational policies at the global level are looking for flexibility, cooperative and responsible work, Institutions of higher education must consider teachers as intellectuals in order to consider the repercussions of the public policies they embrace.

Autonomous learning online cannot drag the same vices of a traditionalist education has had from long time ago, but it should be an integral educational management, where the substantive is education.

The role of the institution cannot be to institutionalize the virtual spaces, but create the best conditions for the education community should re-think the nature of higher institution, considering the lessons that offers flexibility, fragmentation, connectivity offered by learning in on line education.

3. Key Questions

- How teachers and students build practices of autonomy in the development of acts of learning in online education in degree programs in Mexico?
- Which relationships are established between curricular design in on line education and practices of autonomous learning in higher education in Mexico?
- What kind of obstacles teachers and students find in the construction of autonomy of teaching/learning in the framework of institutions of higher education?

4. Methodology

The qualitative approach is used in this research, and it is tied with a phenomenological approach, since the intention of the study is to get qualitative data from the interpretation of the experiences of the individuals of the research (teachers and students). The storytelling inquire is very important, because is from the informants that we can discover the practices that allow and restrict the autonomy in the process of learning, and the interactions in a virtual or on line environment allows the research to know and interprets the experiences of teachers and students when they try to learn in autonomy and with a clear conscience of their educational trajectories. To analyze how these experiences in online education, but as well, to analyze how these experiences are able to show up cultural and educative issues at the time these individuals are involve in autonomous learning within on line educative environments.
This research uses in-depth interview which it is based in the phenomenological approach. These two approaches allow informants to retell the experiences they have had in facing practices that limit or/and uphold autonomous learning within online education in degree programs. It is important to consider as well the structure of Mexican higher education and the uses of ICT within online education. Taking into account the flexibility and unstructured nature of this type of interview, it results very handy to work through categorical analysis. It means that from the storing telling

It is important to remember some aspects of the nature and characteristics of In-depth interview from a phenomenology approach:

- The objective of this type of interview is not particularly to answer to questions from given hypotheses previously designed, or evaluating some type of situation [8].
- This interview links events with temporalities in a narrative way. It’s temporary dimension and literary structure allows to know a particular sector of reality, the own reality of the individual s who describe the reality [9].
- This interview allows particular for this research the triangulation between a) the social, educational and professional trajectories, b) the autonomous learning and, c) the institutional regulations, will lead the researcher to a dimension of meaning and sense [10].
- Its center of analysis is located in the informants’ experience, which makes possible the differentiation between the official rhetoric of reality and the particular individuals’ interpretation of reality [11].
- It facilitates the analysis of the individuals’ social, educational, cultural and professional trajectories and the particular and collective memory within the institutions.
- It provides the compression of institutional and particular expressions that lie in rituals, celebrations, life styles, desires, expectations and values.
- It uses biographical methods to approach to the informants’ configuration of reality.
- It makes possible the analysis of the subjectivity.

This ongoing research analyzes the possibilities and limitations of the autonomous learning within online education and learning environments in degree programs at the University of Guadalajara, in Mexico, in order to improve practices and policies around online education in higher education and to offer new theoretical and methodological approaches to identify these limits and opportunities of autonomous learning.

5. Findings and Discussion

This is an ongoing research and the field work is just starting. However, there are some considerations related with the institutions of higher education in Mexico which can be described as a component of the field work:

- The large implementation of ICT in different degree programs, allowing institutions of higher education to offer a large menu of on line education.
- The instructional design as the unique model of teaching learning among on line education.
- The lack of a critical didactic design inside on line education. Instructional design does not evolve to new didactics forms and tools, methodologies remains the same; the algorithmic design is the general pattern, while there is not much debate about the possibilities of expanding the quality of curricular experiences.
- Institutions of higher education support mainly the technical design but little the education design. The curricular process is shade by the national regulations of the educational system of higher education in Mexico and the particular political issues inside these types of institutions.
- Autonomous practices can be survive and promote in a very schematic educational system where not even on line education is consider at the status of face to face education. The on line education is, in this case, understood for the government, as something that can be not control entirely for the same regulations that are applying for face to face education. However the lack of proposals is the normal case among the policy makers.

6. Conclusion
The PBL is a didactic and educational philosophy that allows access to an independent learning and focuses on the quality of the curricular experiences. Institutions of higher education have a significant commitment in supporting the flexibility of the curriculum and to allow in education face to face, but also in online education, the full access to high quality curricular experiences.

The role of the PBL in online education is related with not allowing the inclusion of traditional pedagogies, and old models which reproduce traditional educational institutions.

In the same sense, online education in Mexico has a high anchorage in the practices of the most traditional pedagogy so innovations in technological clash with those in pedagogical approaches. For instance, online education oriented by a behavioral curricular basis. This situation is affecting a great deal, the process of learning among students and the teachers’ educational practices.

Autonomous learning has to break through particular didactics such PBL the students and teachers the isolation of students and to enhance reflective practices that improve the quality of the interactions between teachers and students.

The curricular experiences are very important to regard and analyze the educational trajectories of students and teachers and to target learning and the self realization of students and teachers within learning processes.

7. References