

Participative evaluation as instrument to build student's knowledge

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SUMMARY

The way that the communication, information and knowledge are developed nowadays needs to be part of educational process. The knowledge network that students builds are more evident when it is used information and communication technology, and it can be integrated with others elements of personal development in the discipline, such as: personal meanings of knowledge, the interaction and collaboration with classmate, and innovations built with the collective by the use of different communication strategies. The participative evaluation methodology presented in this article considers that the student has primary responsibility for their learning evaluation in the discipline, reflecting on their actions and personal paths to knowledge. It was realized increasingly in the case study the involvement of students with the themes addressed, their ease in communications and representations of knowledge, and especially about the maturation of personal and collective goals in the discipline.

Keywords: participative evaluation; education and technology, methodology of teaching and learning.

1- Introduction

The way we interact with the information is changing in accordance with the interests of global society. New digital technologies are being constantly developed to meet these needs and it also creates new behaviors and actions [1]. We live in an age of ever-accelerating transience of information. We have easy access and fast to a large amount of various ideas and knowledge, which can be manipulated by all or individually, and with varied possibilities of associations between resources, languages, media reading and to create information.

Another emerging aspect of this society is the ability to set priorities and path of personal and professional training, as well as, the individual pace in a world dynamic, flexible and communicative.

The use of didactic strategies that improves the development of the student learning through the articulation between different types of information communication sources with other students by diverse means and media, and active participation in learning process becomes critical in educational environments. This fact requires thinking about what is the new knowledge, the professor function and student behavior with the teaching-learning relation and how these knowledge that can enable didactic choices integrated with digital technologies.

In this context, we present the participative evaluation as a methodology that relies on a vision of education with a focus on student and integrated into the process of educating. It is based on Zabala [2] which presents the evaluation focused on personal possibilities of each student, considering the conceptual content, procedural and attitudinal that promote motor skills, balance and personal independence, interpersonal relation and social inclusion.

The main difference from the proposed method and Zabala, is about the role of evaluator, which we look for a greater partnership between the student and the teacher. In our model, the student evaluates himself according to categories and pre-defined criteria, which is related with its learning activity during the discipline. The main objective is to become viable the diagnosis of student's learning process, in a critical and participative way.

This paper is organized as follows: section 2 presents a discussion of the implications of the use of digital technologies on society and on education; in section 3, shows a case study developed in the discipline "Collaborative Projects Learning to integrated Information Technology and Communication"; finally, in section 4, it is discussed the results and conclusions regarding the use of this methodology.

2- Digital technologies on society and education

Technological evolution is an expression of culture and society in search of innovation and invention, in order to change the world and simplify it to carry out the actions of the day by day. Technology is the result of man's knowledge based on their laws and theories. It allows us to develop new knowledge based the creating of a new relationships physical and / or mental. Therefore, it opens possibilities for thinking new cultural and social options, as well as integrate various cultural groups [1].

Knowledge happens in this network cultural, social and technological evolution. Each new information relationship is created a new network design. For this, it is necessary the ability to process, analyze, organize, evaluate, store, and make connections between seemingly unrelated informational elements [3].

With easy access to information produced in different means and media, new connections are established in a short time and by different cultures that blend, update themselves and are expressed in a particular way and / or globalized. Digital technologies enable new ways of learning by reducing the distance and time barriers, providing communication and experimentation in different scenarios, collectively and / or individual [4]. The school is still learning how to integrate the potential of digital technologies into education, referring with the use of educational resources and methodologies which increase the student's communication with others (teachers, classmate, researchers and other members of society), as well as the student with information (manipulating, experimenting and creating).

The integration of digital technologies in learning environments must be linked to a change of attitude of the institutions against the definition of education in the digital age. Breaking the barriers of time and space requires

constant innovation, it results from the relationship between thoughts, languages, media, means and people. When we connect with other people to communication and to get knowledge, we become able to build private roads to mean the world.

Globalization has supported the values of particular aspects of each culture and each individual in connection with others. We have easy access to different means and media to disseminate thoughts and its representations in cyberspace, according to the choices of resources better suited to our possibilities and interest. There is a continuous evolution of social networks to correspond the needs and interests of communication of a society more autonomous in their choice of communication. This highlights the importance of the particular thoughts and ideas of each person to create innovation with others.

The participative evaluation methodology proposed in this research can facilitate visualization and understanding of the processes of personal student knowledge and can approximate the school in the way that the contemporary society has established communication and knowledge.

3- Participative evaluation: case study and results

This case study was developed as part of the methodology of teaching and learning the discipline "Collaborative Projects Learning integrated with the Information Technology and Communication", offered to undergraduate students of licenciatura courses at the Federal University of Sao Paulo - UNIFESP, campus of Guarulhos, in the year 2011.

The proposed participative evaluation is based on recognition of the constant relationship between the personal processes of construction of knowledge and its negotiations in the collective. Thus, we considered the relations which the student establishes with their experiences, prior knowledge and word associations for the composition of the meanings of knowledge in the personal sphere and, since then, the integration with the meanings of the collective.

The method proposes evaluation as a formative process, systematic and continuing through the student's actions, directed by the teacher during the

development of the discipline. It is worth noting that the student's evaluative actions are an expression of their interactions in the virtual environment of discipline through different communication resources, and also in the presence classroom, socializing with classmate meanings and mental associations for the construction of knowledge.

Following are presented the first activity that facilitates the understanding of this evaluation method. Figure 1 shows the first proposed activity, which was developed on the tool diary in order to initiate discussions with the student.

Dear student,
*Before starting work in the discipline, think about the subject **Project**, considering the following questions:*

- *How do you define the word **Project**?*
- *Present at least three (03) other words that associate with the term.*
- *Present two other associations that makes to reflect about the project, showing the possibilities of relations of meaning that does mentally (ex: remembering a lived situation, images, graphics, lyrics, movie ...)*

Make a text considering these questions as the first self-reflection on their learning process.

Figure 1: First activity reflective of the student in diary tool.

Another activities were proposed to the students in this thematic cycle, continuing the individually and collectively movement (Figure 2), and vice versa.

Dear group

1. Think on the subject Project, considering the following questions:

- How do you define a Project?
- What are the associations of meaning on the subject made by you? Present at least two associations made by each member of the group.

- As the definition of Project of each group member contributed to the realization of the activity?
 - What the group learned from the theme?
2. Compose a text that contains these questions.

Figure 2: Activity in the wiki tool for collective composition of the groups.

At the end of the cycle of the theme the student evaluate their movement learning, considering three (03) aspects: dedication to studies, collaboration with classmates and personal learning (Figure 3). He assessed their performance according to criteria and argued the note.

Dear student

After the end of each cycle use this space evaluates your learning process in the discipline.

Consider the following points and criteria for this evaluation:

- *0-20 points: dedication to study this cycle*
 - 1- Reading of the material.*
 - 2- Do the activities.*
- *0-30 points: collaboration with colleagues during group activities.*
 - 1- Contribute to the production of activity.*
 - 2- Question and suggest.*
 - 3- Participate in the writing of the collective material.*
- *0-50 points: Personal learning about the topics discussed in each cycle (understanding of texts, understanding of the evaluation meaning discussed in class; performance in developing the activities of each cycle).*
 - ✓ *Only in class 15 including the perception of personal trajectory in construction of activities in the cycle.*

Compose a document with the total score and the arguments about the evaluation with the criteria listed above.

Figure 3: Model of participative evaluation of the student

The figure 3 shows the model for participative evaluation used in the discipline during its development. This evaluation model helps the student to realize and understand his trajectory of knowledge, considering also their actions throughout the process.

Table 1 presents the students' grades in the discipline (Table 1).

STUDENT	Rating of student			
	Cycle 1	Cycle 2	Cycle 3	Grade point average
1	85	85	90	87,5
2	50	88	86	68
3	77	0	0	38,5
4	95	95	80	87,5
5	95	95	95	95
6	93	93	95	94
7	80	60	70	75

Table 1: Grade of the student to each thematic cycle.

The Table 1 shows that most students' evaluate himself over the average, developing a critical evaluation which identifies some particular deficiencies in the learning process.

To complement this statement, we present the texts 1 and 2 below, representing the evaluation of two students about their personal performance, according to the categories proposed:

1) Student Evaluation 1 – Cycle 2

“ - *Dedication to studies: I believe that the study of the material was good. I have not read all the texts. But I read some articles related to the discipline and realized satisfactorily activities (Note 1);*

- *Collaboration with colleagues in the realization of group activity: I contributed with some materials. I ask relevant questions to the issues. I do suggestions when it is necessary. I also frequently participated in writing of the collective material (Note 25);*

- *Personal learning about the topics discussed in each cycle: Each class which I participate and each text I read, I learn a lot and try to complement the themes*

at home. I'm pleased for myself and by my cooperation of all to my understanding of the discipline. (Note 45)."

Final average: 85"

2) Student Evaluation 2- Cycle 3

"-Dedication to studies: I give 17 points to the development of reading of the material and performing activities.

- Collaboration with colleagues in the realization of group activity: Collaboration with the collective activities was not perfect. They appeared differing opinions in their elaborations. For my contribution, cooperation and collaboration attribute 26 points, referring to the questions and participate in the production of material.

- Personal learning about the topics discussed in each cycle: My understanding and performance in the cycle was a little less than I would like for me, because the time variable was a strong opponent against all my development in this area. Therefore, my points for this topic is 43s.

Final average: 86 "

As can be seen in the texts presented, the main purpose of this evaluation method is to enable the student the reflection about their performance in the discipline, considering the actions of study, collaboration and understanding of knowledge construction. This approach is possible in a proposal for interactive classroom where the student develops activities that support the construction of meanings about the themes presented. Interactivity in the discipline should happen from actions that develop in a continuous cycle of building individual / collective / individual that facilitates the visualization of the network of meanings that make up the student and the group for the construction of knowledge.

Each learning cycle of discipline was perceived the involvement of students with the themes, the developments in communications and representations of knowledge and, especially, the maturation about their goals with the discipline.

4 - Conclusions

What we intended in this case study was to develop a proposal for evaluation where the grade is not only unit of measurement of learning, but a

way to understand and appropriate of the student's learning process. Therefore, the student reflected on their continuous movement of knowledge, which arises from their network of relationships, according to their personal interests, his time, and integrated with other meanings that are beyond the sphere of discipline and through communication and key element of this network.

Each category of evaluation of the student about his process was a proposal set by the teacher and we believe that it can be reconsidered. It can be planned with students in future studies of this methodology, starting from the first negotiations of teaching and learning with the group. Thus, the proposal can be integrate with the goals of each discipline proposed.

The teacher's role is becoming a learning facilitator and a conductor of knowledge processes integrated with the reality of each student and each group. He is the advisor of the group building, the proposer of a new vision of knowledge that arises from the particular meanings negotiated by the collective discipline.

In this model there are no possibilities for the student passive, it is fully active and responsible for its process knowledge and their relationships with the groups for the consolidation of learning.

References

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