



DevalSimWeb

Development of Professional Skills Through Participatory
Evaluation and Simulation Using Web Tools

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Executive Report of the joint report on detection of training
needs in evaluation of learning of the student from Bolivia,
Colombia, Costa Rica and Ecuador

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The project aims to improve the quality of Latin American Higher Education through the development of evaluative competence for professors and students with the purpose that students complete their studies successfully and integrate into working life. In its initial phase, applied research is conducted on the topics of student dropout, labour insertion, transverse competences to the evaluation from the perspective of students and professors and work skills from the perspective of companies. The project is complemented with another phase in which an innovative training program is designed, validated and implemented, for students and professors.

The European universities involved are: the University of Cadiz, general coordinator of the project and Durham University. The Latin American partner universities are: University of Antioquia, University of Costa Rica, Pontifical Catholic University of Ecuador, Ibarra Campus and the Salesian University of Bolivia.

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Review by: Teams of universities participating in the project

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Introduction

This paper analyzes the joint work carried out in the research on the detection of training needs in evaluation of learning in students from Bolivia, Colombia, Costa Rica and Ecuador, taking into account evaluative competences in students of initial and final levels of the four Latin American universities involved in the project "DevalSimweb - ALFA III".

The objective is to determine the status of student's participation in initial and final courses, in the evaluation of learning in five careers at each university involved in this study. The research process considered agreements and consensus taken previously, in order to determine: instruments, methodology, analysis of data and reports.

Method

It is applied surveys to students from the four participating Latin American universities, who were required to identify: the strengths and weaknesses detected in the processes of student's participation in the evaluation, competences that are enhanced, competences that should be promoted and strategies to improve the participation in different evaluation processes.

Results and Discussion

The study shows that there is no legislation that regulates the participation of students in the process of evaluation of learning in universities and in higher education of the different countries; but it points out particular initiatives that universities have been considered to involve students in these processes.

The results obtained in the diagnostic carried out to detect the levels of student's participation in the process of evaluating their studies, indicate that there are some experiences that arise in different proportions: Evaluating their classmates, evaluating their own assignments and exams and elaboration of criteria for evaluation, with the professor.

The general framework of the results in the evaluative practices applied by the students throughout their studies provides the scores obtained not only of the evaluation applied to the students but also to the institution. In addition, it is noted that students mostly think that their learning would enhance if they were involved in the evaluation of the teaching-learning processes, as well as in their own assessment.

It is found that the evaluative competences that students have mostly developed are: *Teamwork* and *Sense of Ethics*. However, the competences suggested to be promoted in the universities are: *Critical thinking*, *Decision making* and *Problem solving*.

In general, results provide an overview on the status of the evaluative practices in the teaching-learning processes used in the universities and constitute a reference point to develop strategies that, in the future, will allow to improve the participation of the students in the evaluative process.

1. Objectives

Based on the contribution made by the participating universities through their individual reports and within the context of implementation of the second phase of the DevalSimWeb project, this process of research aims to achieve the following objective:

- Determine the status of student's participation in the initial (preparatory or first level) and final courses, in the evaluation of learning of five careers selected in the universities involved in this study.

2. Methods, procedures, techniques and sampling used

The adopted methodology consisted of the study of five careers defined by branch of knowledge at each university, according to the highest levels of dropout and the lower numbers of graduates. Each of the universities submitted a report which identified training needs in the evaluation of students of initial courses and at the end of these careers.

The population was formed by a group of students of initial and final courses of the universities involved in this study. Tabla 2.1 shows the distribution of the number of students surveyed by each university, as well as their distribution by branches of knowledge.

COUNTRIES	Bolivia		Colombia		Costa Rica		Ecuador		Total	
LEVELS	Nro.	%	Nro.	%	Nro.	%	Nro.	%	Nro.	%
INITIAL	182	20.27	176	19.6	272	30.29	268	29.84	898	65.73
FINAL	105	22.44	121	25.9	152	32,48	90	19.23	468	34.26
GENERAL TOTAL	287	21	297	21.7	424	31.03	358	26.2	1366	99.98

Table 2.1: Total Number of Students Surveyed by University.

Source: Specific reports by university. DevalSimWeb, 2012

The following table shows the distribution of students by initial and final level and by university:

BRANCHES OF KNOWLEDGE	USB				UDA				UCR				PUCE-SI			
	INITIAL	%	FINAL	%	INITIAL	%	FINAL	%	INITIAL	%	FINAL	%	INITIAL	%	FINAL	%
Arts and Humanities	7	0	0	0	21	11.9	23	19	0	0	0	0	51	19	17	18.8
Engineering and Architecture	11	6.04	0	0	64	36.3	33	27	64	24	26	17.1	45	16.7	10	11.1
Social Sciences	121	66.4	105	100	28	15.9	32	26	110	40	116	76.3	172	64.1	63	70
Science	0	0	0	0	15	8.52	23	19	0	0	0	0	0	0	0	0
Health Sciences	50	27.4	0	0	48	27.2	10	8.3	98	36	10	6.57	0	0	0	0
TOTAL	182	100	105	100	176	100	121	100	272	100	152	100	268	100	90	100

Table 2.2: Total Number of Students Surveyed by Branches of Knowledge.

Source: Specific reports by university. Web DevalSim, 2012

In order to gather the information required and in coherence with the proposed objective, it proceeds as follows:

- Identification of the determined population for this study.
- Definition and characterization of the population, taking into account their personal and academic data (Gender: male / female; public / private education, career and educational level).
- Implementation of surveys.
- Determination of levels of student 's participation in the processes of evaluating through the survey.

- e. Identification of evaluation competences that students surveyed have developed.
- f. Identification of competences that the university should promote in the students who applied the instrument.

For the analysis, were considered the characteristics of each university related to the levels of student´s participation in the evaluation within the teaching-learning process.

The individual reports produced by each Latin American university considered the following categories:

1. Strengths and weaknesses detected in the process of student´s participation in the evaluation.
2. Competences that are enhanced.
3. Competences that should be promoted.
4. Strategies to improve the levels of participation in the various processes of evaluation.

The competences considered in the survey were:

1. Analytical judgment.
2. Planning.
3. Sense of ethics.
4. Reasoned communication.
5. Negotiation and participation.
6. Critical thinking.
7. Decision making.
8. Teamwork.
9. Problem solving.
10. Adaptation to change.

3. Results and conclusions

Based on the analysis carried out on the results, it is observed that:

- The distribution of students by branches of knowledge is not uniform, since selected careers for the study do not coincide entirely in the four universities. However, in the branch of *social sciences* knowledge, it was possible to collect information from four Latin American universities and determine that it is in this

area where there is greater number of students, except the University of Antioquia, whose majority group is located in the branch of knowledge of *engineering and architecture*.

There is an active participation in the processes of evaluation of both students of initial and final levels. Thus, first-year students valued primarily the item ***Evaluating its own assignments and exams***, at three universities (PUCE-SI, UCR and USB). The UdeA stays with the whole score on the item ***Elaboration of criteria for evaluation with the professor***. Instead, students of the final levels generally report having participated more in “***evaluating their own work***” and “***evaluating their classmates***”.

The student’s participation in the case of study processes, which corresponds to the practice of first-year students at the four universities, shows that the highest scores are concentrated in ***evaluating their professors***. Similarly, the students of the final courses coincide with the previous group, choosing the ***evaluation of their professors***, except the PUCE-SI which evaluate to the institution.

Regarding the way in which the learning process would improve if the students got involved, the results allow to determine that there is no percentage differences in the assessment of initial and final students, because in both cases, it is maintained the highest rating in ***Evaluation of teaching*** followed by ***Its own assessment***.

In the assessment of the competences that students have, it is observed that at the four universities, first-year students value two competencies: ***Ethical Sense*** and ***Decision Making***, while last-year students include ***Teamwork*** and ***Ethical Sense***.

The competences that first-year students chose mostly so that they are developed by the university are: ***Critical Thinking*** and ***Problem Solving***. Other competences detected are: ***Reasoned Communication*** and with a lower score, ***Decision - Making, Teamwork*** and ***Planning***. Last-year students, on the other hand, perceived that the university should place greater emphasis on the development of the following skills: ***Critical Thinking*** in the UCR and the UdeA, ***Problem Solving*** in the USB and ***Planning*** in PUCE-SI.

By virtue of what was stated, it is concluded that:

- The panoramic view of the current educational legislation in each of the participating Latin American countries, does not implied the student participation in the processes of evaluation of learning.
- In the universities being subjects of the above law, regulations not include it explicitly. However, mentioned initiatives aim a greater involvement of the student in these processes, which is confirmed by the results obtained in the surveys.
- It follows that we have a weakness to successfully face this new scenario, in which the student´s participation in evaluation is much more active. Therefore, it is necessary to think how to transfer these skills to the new actors and the consequent role that is theirs to take. This requires new strategies and strong institutional commitments to implement the aims of this innovative project.
- The levels of student´s participation in the process of evaluation of the selected criteria are not unified at the universities. Each of them has higher scores on selection differently. The PUCE-SI values more, **Evaluating the work of classmates**. The UCR and the USB gave the highest score to **Evaluating its own assignments and exams** and the UdeA, **Elaboration of criteria for evaluation with the professor**.
- From the results obtained can be deduced that most of students surveyed have experience of having evaluated both the professors and the institution. Despite this, it is important to highlight that this experience might exist more as an administrative practice than as a pedagogical process, under which, strategies and procedures oriented should be incorporated to give the students a more active role within the evaluation of learning processes.
- Students mainly consider that they would enhance their learning, if they are involved in the evaluation of the teaching-learning process. In the same way, it would improve their learning processes if they are involved in the evaluation.
- In a global perspective, the three competences that most students have developed are: Teamwork (UCR) (USB) (PUCE-SI) and ethical sense (UdeA).
- Consequently, it arises competences that should be encourage in the universities due to they have the lowest percentages by students. Thus, it is

suggested to promote: **Critical thinking, Decision making** and **Problem solving**.

- Taking into account the competences developed and those that should be promoted, it is considered necessary that the universities implement policies and institutional strategies that allow developing and assessing competences suggested by respondents and establish clear guidelines for a greater student's participation in the evaluative process.



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