

Performance and Learning Evaluation in Distance Education: A Proposal on What and How Evaluate New Learning at the Undergraduate Level in Mexican Universities

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Abstract—In these changing times, globalization hales the education systems to have different alternatives of education, and one of them is Distance Education. Today distance education is an interesting option for those people who lack the opportunity to attend the traditional system of education -face-to-face – due to constraints in time, space, and money that the students might have. What and how the students learn is the main concern which can take us to establish what is to be evaluated and how to evaluate considering that DE could be for everybody no matter the background, self-confidence and intellectual preferences of the interested students. Recognizing that participation in e-forums individually or in groups allows professors to plan different goals and analyze the contributions of the students in the forum discussions in order to promote feedback, the evaluation and the capabilities of critical thought and the knowledge provided when needed, is the ultimate purpose of this paper. An integral evaluation includes a diagnosis, formative, summative and self and co-evaluation by the students; also the use of strategies, techniques, and activities that will allow a significant learning; and should include an easy way to understand what is being evaluated for both the learners and the teachers.

Keywords—On-line evaluation, diagnosis, formative, summative, strategies, learning techniques, self and co-evaluation.

I. INTRODUCTION

The Autonomous University at Juárez, Mexico in its natural but agile growth is conscientiously and laboriously preparing to adopt and adapt on-line and distance education as a new option of education in its curricula. At the same time is seriously committed to ease and smooth out the transition for both the professors and the students that are interested in being a part of this new trend/mode of teaching-learning using upbringing courses that will facilitate costs, time, and effort and will tend to achieve an eventual certification for the professors who are participating in it. The business department of this university aware of the important role that it plays in the development of professionals ad hoc to the particular business characteristics of the regional and national market, it is fostering more and more the implementation of courses of on-line and distance education, which allows a more comfortable participation of many working students at the university level. UACJ has designed its own Pedagogical Model based on constructivism and focused on student learning, with its own

guidelines, strategies, policies, processes, techniques, activities and styles and/or forms of learning, where all professors interested in teaching courses on-line and distance education have to comply with the following requirements of this type of courses:

- Prepare an instructional design including didactic planning with goals to achieve, strategies to implement, technical tools to apply and activities for each one of the subjects to achieve the outcome previously established in each one of the topics and/or areas or modules to discourse.
- Design the didactic materials to be used in order to support learning during the semester.
- Design and implement a Programmatic Advance (a semester program with goals, development of the contents, timetables, methodology, means and materials to use, including rules, norms and procedures to follow through, as a control template that will explain and show the sequence, order, and the way that each one of the activities will be performed and evaluated; as well as, the results that will be achieved in each one of them. (Modelo Educativo UACJ, 2000).

II. GUIDE FOR AUTHORS

The first thing to ask about what and how to evaluate the student's significant learning in a constructivist I on-line course is: what is evaluation for the evaluator, in this case the teacher should be considered a pedagogical intention or simply as a personal and/or institutional control instrument. For Bonvecchio and Maggioni (2006), evaluation is to be able to formulate and assign a reasonable value judgment about what is learned and constructed by the student during the course, which authorizes or hinder him to continue. To Alicia Bertoni (2000) evaluation is the marker of the institution's efficiency measured by the rates of pass or fail-compare, measure and grade the results against the pre-established goals previously announced. The design of this research is not field experimentation. It is qualitative using the observational method and interviews. The sample

¹ From a particular point of view, constructivism is a way or form of performing the teaching-learning process focusing on learning by discovery, significant and affective learning whether done individually, in collaboration or in cooperation.

includes e-learning researches and teachers, traditional education teachers, distance education platform administrators and tutors. It is of primary importance to determine what is evaluated in and during the courses that are taught. It is necessary to have a previous knowledge (to recognize if the students know what they are supposed to know) in order for them to obtain a new significant learning and approve written and oral exams; as well as, to achieve results according to learning goals previously established.

III. EVALUATION ASPECTS

Are the following aspects evaluated in an objective way? Or simply it is not considered necessary to do so:

- Individual and/or group participation on a daily basis.
- New learning at the end of each session/class.
- The proper use of the language by the students and of course by the teacher.
- Discipline (respect and tolerance) in the virtual classroom.
- Attendance and punctuality (considering that in this university) the regulation for students in the undergraduate level allows them up to 20% of absences. How do you measure absenteeism, tardiness or lateness in distant education?
- Attitude (cognoscitive, affective, behavioral).
- Personal and group commitment.
- The quality of homework delivered.
- Timetable schedules.
- Grammar, vocabulary, legibility, syntax.
- The extent of the program, the goals to achieve, the contents to develop and methodology to use.
- The strategies, techniques and activities to complete, as well as,
- The conditions (shortages, problems and conflicts) in which learning and teaching takes place.
- And above all, is the value that each aspect that is assessed has been objectively pondered?

Is the case method used? Is field and library research done? What about the electronic portfolio, chats, wikis and the mother of all wikis, the wikipedia, web sites, webquest, weblogs or blogs, as well as, day to day in class participation through questions-answers and dialog-debate? How well and how often they are used?

How should we evaluate the teaching material used? Is it appropriate? Does it measure what is supposed to gauge to evaluate and control the results (advances, delays and/or setbacks) of that which is assessed? Does it have a grading comprehensive control template that the students know and can use from the beginning of the course? Do professors apply exams (partial, departmental, final, and the well known pop quizzes)? Are the rubrics used ad hoc to evaluate oral and written presentations? Are reading controls for specific topics being used? Are on-line platforms used (Claroline, Moodle, etc.)? Does the professor use essays and projects, if so, how and for what purpose? Are the techniques of self and co-evaluation used, especially in group assignments?

When to evaluate – How can it be determined the right time to evaluate newly acquired learning and how? Several

constructivism authors affirm that learning and performance evaluation of the students includes at least three moments to do it. Diaz Barriga (2002).

- 1) At the beginning (or starting point) as a predictive diagnosis (individual diagnosis-group prognosis) assessed previously to a new process or education cycle to determine if the participants have the necessary knowledge and skills to go further, this moment also includes the on-time evaluation, which is recommended to apply before starting a sequence to determine what to do if the participating students do not have the necessary knowledge, skills and the right attitude. Should the dynamics of the course development, timetable, goals, and contents, be adjusted?
- 2) During the teaching-learning process (advancement), in a continuous, partial and/or formative way, by topic, activity, or by a whole unit in a proactive, interactive, affective and retroactive way? It will always be important to anticipate or at least be able to determine at the end of each didactic unit/module what to do with those students that don't approve each unit or partial exams, if there is any.
- 3) At the end (results) in a summative form. This evaluation can be done with a final exam or a final paper which may require an oral and a written presentation. It is also very important and interesting at the same time to identify, analyze and evaluate why all or most of the students approve or why a vast majority flunks.

IV. CONCLUSIONS

Then, what is the purpose and/or why evaluate? Generalizing you could say that the evaluation of the learning and performance of the students by the professor seeks:

- To determine the level of knowledge, skills, aptitudes, competencies and attitude (motivation) that the students already have and their probable ability for learning and performance within the constructivism model in the virtual classroom using the modality of distance education.
- To know if the foreseen learning is being attained; as well as, the expected performance according to program and the individual/group results (collaboration and participation).
- To detect problems, needs, new ideas, creativity and differences; and be able to correct, re-orient and improve performance and behavior.
- To feedback the students and any other stakeholder in the university or corresponding institution.

- To appraise and judge the student's learning in its real process; and last but not least.
- To appraise, improve and enrich the own ethics work when forming new college graduates and future professionals for the business sector.

V. PROPOSAL(S)

Ben Franklin once said "tell me and I forget, teach me and I remember, involve me and I learn", so we propose the following:

First - What to evaluate? Starting with what is being learned- The proposal then is to identify and determine:

- If the students that took a DE course acquired a new significant learning.
- What percentage of the proposed individual and group goals were attained.
- How applicable are the contents taught and learned during the entire semester.
- The quality of the partial and final products/tasks/exams and group cases done.
- The creativity and wit shown by students when presenting written and oral tasks; as well as, final papers.
- The compliance with a timetable scheduled.
- The tasks and papers delivered according to timetable schedules, but above all,
- The forum participation, especially in the debate forums on a daily basis.

Second – How to evaluate what we are to evaluate? The proposal then is to prepare, design and implement:

- Written exams whether partial, unit or final. It is recommended that each partial/unit exam will be a combination of multiple choice (with no more than 25 questions/options/items) and open questions with short answers (no more than 10) for each unit (with a value of 10 points out of 100 for each unit exam). Exams should be simple with key questions which when answered correctly show a significant learning. A final (with a value of no more than 40 points out of 100) exam may be implemented and applied to the students in order to help them regain points which did not get when presenting the partial exams. This final exam could be a recollection of the unit/partial exams with up to 100 questions.
- Reading controls on specific business topics, which will be presented in a written form and commented through the General Communication Forum.
- The group case method with real business situations to deal with, in order for the students to make decisions and learn to live with the consequences of making such decisions.
- The use of multimedia presentations in oral or written form (audio-visual), such as web conferencing, webcasting, power point, pps, etc.
- Participation Forums must be the main reason/elements to evaluate student performance and learning aspects. The participation forums will easily identify when and how the students are participating,

the quality and quantity of their participation and interrelations with the group and the professor, the frequency of the use of the forums and so on. This platform control will facilitate for the professor the evaluation process and will empower him to grant an objective final grade to each one of the course participants.

The following participation forums are recommended:

- **Presentation** (value 2 points) where every participant must present himself or herself with a personal labor and academic résumé up to three hundred characters which may or may not have a picture/photo on it;
- **General communication** (value 2 points) to generate dialog and argumentation from the students on specific business topics which may or may not be related to the course contents. This forum allow participants to give their personal opinion on the course development, the dynamics of the contents, the materials used and other professional, personal or ludic activities. This forum is a more open space than the debate forum. M. Zapata (2003);
- **Debate** (it is recommended to have 2 debate forums for each didactic unit, each forum should last at least 2 weeks with a value of at least 5 points each forum). This kind of forum must require at least one participation per student each day, to present ideas and arguments supported on dialogs, questioning, academic confrontation and if necessary, provoking the cognitive conflict to move earlier schemes and make room for new share learning zones, as already does the Socratic Mayeutic;
- **Doubts** (value 1 point) this forum will remain open during the entire semester to be used when the students do not exactly know what to do in regards to a specific task, such a library research or a visit to a local business, etc.;
- **Unit Project Proposals** forum in which every unit project will be deposited for review, analysis, argumentation and discussion. J. Montes (2005).

In any case, participation forums are the space where individual or group virtual community takes place. Under this scenario professors should seek to value participation and presence in three different dimensions:

- **cognitive** in regards to quality participations on contents taught as part of a metacognitive process;
- **didactic**, in regards to the instructional design, didactic planning, development of the program with

its contents, timetable schedules, means and materials; as well as, rules, procedures and norms and,

- **social**, in regards to the interaction and affective learning process among participants.

Finally, a strong presence of tutoring should be issued through orientation, assessment, guidance and development by the professor himself or by one of his assistants and is to be shared by each and every one of the class participants. Tutoring is to be done regardless of any other tools/techniques/methods, preferred and/or used by professors in different institutions in different countries in different levels to evaluate performance and learning, whether they are exams, research, projects or final papers.

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