

Improving the Process of Student Evaluation

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Abstract: In this paper we analyzed the process of student evaluation from “Spiru Haret” University. The process under consideration occurs according to a specific Procedure – Process of student evaluation from the Manual of Quality Assurance Procedures, “Spiru Haret” University, Edition 1, 2012. The goal of this procedure, mentioned in the Manual, is to present the student evaluation procedure by using the Blackboard educational platform and other evaluation techniques of quality learning, based on materials developed by teachers of “Spiru Haret” University, as well as corresponding responsibilities, in order to increase the learning process quality and the exigency degree in the examination process, as well as students’ satisfaction measured by accumulated competences. We appreciate that the purpose of this procedure is first and foremost to ensure transparency and objectivity in exam passing decision. After identifying the weaknesses with the “cause - effect” chart, we have sought to improve student evaluation process using PDCA (Plan-Do-Check-Act) method, resulting in the design of a new assessment flowchart.

Keywords: higher education; improvement of process; student evaluation; assessment

1 Introduction

The evaluation theory and practice in education registers a variety of viewpoints of approaching and understanding the meaning of the evaluation activities. The assessment and evaluation process in higher education involves the use of multiple sources of information collected in different ways, different contexts and at different times. The term assessment is defined, in many faculty guidebooks, as a preliminary phase in the evaluation process. In this phase, various techniques are used to gather information about student progress. Assessment has usually been used to indicate that at least some hint of improvement is expected in the assessment process (Bordon and Owens, 2001; Palomba and Banta,

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1999). Evaluation is the weighing of assessment information against some standard (such as a curriculum learning objective) in order to make a judgment of quality. It is easily acceptable by the student the evaluation process if it follows a procedure. The students' learning improves it if they understand the assessment criteria and processes. (Rust et al, 2003)

2 Description of the Current Process of Student Evaluation

The current student evaluation procedure is applied at "Spiru Haret" University in all faculties and departments which provide educational services through their curricula. Designing student evaluation process is part of the teaching-learning process. Evaluation is based on measuring student progress towards expected outcomes and goals of learning, but it is also a means to continuously improve the curriculum and the allocation of necessary resources for the educational process. Student evaluation is achieved through three forms: self assessment, assessment during semester and final evaluation of a course in the study program. The design of the student evaluation process goes through five working steps, which complements the Procedure - Process of teaching material development. The complete chart of the initial evaluation process of students at "Spiru Haret" University is summarized in Figure 1.

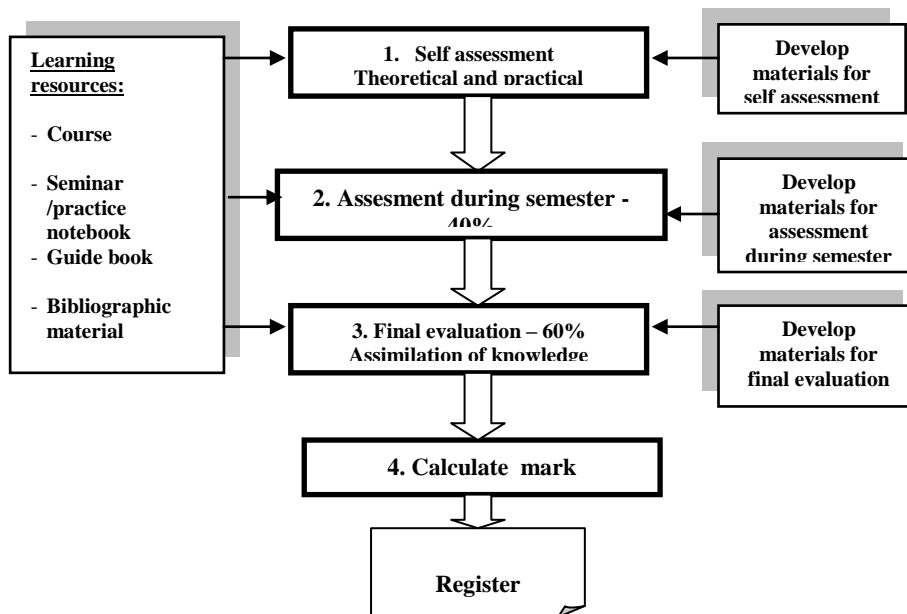


Figure 1. Chart of student evaluation process

Source: *Manual of Quality Assurance Procedures*, 2012, p. 213

Step 1: development of self assessment material: it is presented at the end of every lesson and seminar and it is found in the Course, Seminar/ Practice notebook and Bibliographic material, posted on the Blackboard platform.

Step 2: development of assessment during semester material: complete directions regarding students' tasks are presented in Student's Guide.

Step 3: development of final evaluation material:

- topics and questions which are made available to students by posting them in Blackboard;
- tests which are included in the Blackboard platform by the course lecturer only during the examination session;
- evaluation homework at some disciplines included in vocational programs or other programs require face to face evaluation.

Step 4: posting materials on the Blackboard platform.

Step 5: determining the mark (total score).

Evaluation includes the full range of tests – written, oral, and practical examinations, projects and portfolios etc. - used to measure and assess students' progress in a particular course/module. In practice, the final evaluation was made especially using multiple choice or/and true/false tests and this is a weakness of the system applied (Epure et al., 2011).

Competences are formed in various course units and they are assessed at different stages. We can differentiate between specific competences related to a particular field of study and general competences (common to any type of program). Mark obtained by the student during the evaluation process for a subject consists of: the scores of assessment during semester weighted 40% and the weighted scores of the final evaluation by 60%. The sum of the two scores is divided by 10 and rounded to plus or minus half a point. Minimum mark to pass the exam is 5. If the student has not performed assessment during semester, that is shown as zero and the scores of the final evaluation shall be weighted at 60% and divided by 10.

Indices: not listed in the procedure.

3 Process Analysis

In analyzing the student evaluation process the “cause - effect” diagram (Ishikawa diagram) was used; it is also called “fish bone” because of its resemblance to a fish back, in which the “head” is the effect of the problem to be solved, and the “bones”, represented as branches and sub-branches, are the causes. The factors that bind to the “spine” form a trunk which influences process behavior. Identifying the causes that led to the analyzed effect was performed using brainstorming

techniques. In the student evaluation process the intended effect was that of passing the exams by students.

The “cause - effect” diagram of the student evaluation process is represented in Figure 2.

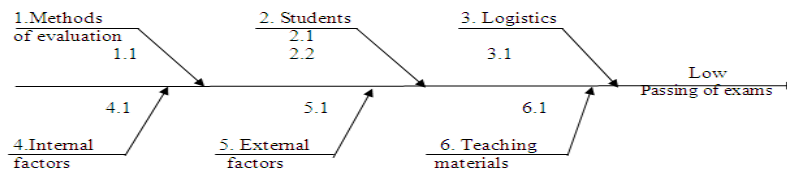


Figure 2. “Cause - effect” diagram of the evaluation process

Explanation:

1.1 Using only Blackboard platform does not provide a complete and comprehensive evaluation of all the competences acquired by students – the tests measure mostly what students remember, understand and apply but not how they analyze, create, deducted or synthesize;

2.1 Interest only for certain subjects;

2.2 Lack of networks connection or personal computers of students;

2.3 Uninspired choice of specialization without taking into account vocational aspect;

3.1 Limited access to specialized databases at university library necessary for students’ self study;

4.1 Inadequate planning of exams. The short period of preparation before exams does not provide the necessary time for study;

5.1 Employment status of students influences their level of participation in teaching activity;

6.1 Large volume of information, some of it redundant, that students fail to process.

Our analysis identified the following issues:

- Ongoing evaluation of acquired knowledge exclusively through multiple choice tests on the Blackboard platform which does not prove assimilation of theoretical knowledge, the results being distorted as competences acquisition, based on short-term visual memory.
- Passing the final exam is not subject to participation at assessment during semester tests;
- Existence of significant differences between the marks obtained by students at assessment during semester and/or between them and final evaluation;
- Lack of indices of measurement of the evaluation system performance comprised in the Procedure.

4 Methods of Process Improvement

Following the identification of weaknesses with the help of the “cause - effect” chart, we have sought to improve the evaluation process of students using PDCA (Plan-Do-Check-Act) method. The method involves the following stages (Deming, 2000):

A. PLAN – Planning

Identifying the purpose: evaluation process aims at measuring students’ progress towards expected results and learning goals, which is a means for continuous improvement of resource allocation of the educational process. Problem analysis showed that the evaluation process is mono-valent and insufficient, and therefore it is necessary to diversify it in order to reflect more accurate and efficient measurement of specific knowledge and skills acquired by students in a given period of time for each subject. As a result of PDCA method of improvement of student evaluation process at “Spiru Haret” University, more particularly at Faculty of Accounting and Financial Management of Constanta, the following deficiencies were identified:

- Students’ failure to participate at evaluation during semester and/or final evaluations;
- 2 points larger gaps between the marks obtained at assessment during semester and final evaluation;
- Untying students’ participating in the final exam to their participation in courses and seminars and/or their presence at the 2 assessment during semesters.

B. DO – Performance

In order to address the identified weaknesses the following solutions were suggested:

S1. In the performed analysis, we considered appropriate *to diversify the methods of assessments during semester of students/clients* in order to improve the skills acquired during the teaching-learning process, as it follows:

- E1 = one evaluation as a multiple choice test – 1 point (week7/14, at seminar)
- E2 = a project/paper/essay – 2 points. (week 12-13/14, at seminar)
- E3= active participation at over 50% of teaching activities – 1 point (the whole period of semesters).

S2. *Conditioning participation in the final evaluation exam by participation and passing of ongoing evaluations.* Presentation of the project/ paper/ essay from the second stage of evaluation (E2) provides student 2 points of the final mark. Presentation provides student with communication skills and facilitates the acquisition of skills necessary to support graduation project - oral test - at the end of the Bachelor’s degree studies).

C. CHECK – Verification

Check stage was later replaced with Study stage. (Moen and Norman, n.d.) Improving student evaluation process through diversification of evaluation means represents the complete and complex form that students can demonstrate the knowledge, skills and abilities acquired during the study periods. This leads to increased student motivation as it encourages their greater involvement in the evaluation process and provides a smoother transition from school to work. At the same time, it provides teachers and students the opportunity to achieve the ultimate goal of the evaluation process, which means to improve it by increasing exam passing and thus the degree of students’ satisfaction.

D. ACT – Action

Full implementation of the PDCA method of process of evaluation improvement will be done using the new map of process and the standardization of the means of evaluation newly introduced.

5 Solution Approach

In designing the improved map of the student evaluation process we used Five Ws and one H method, represented in Figure 3.

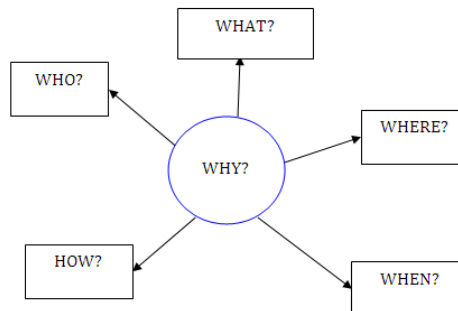
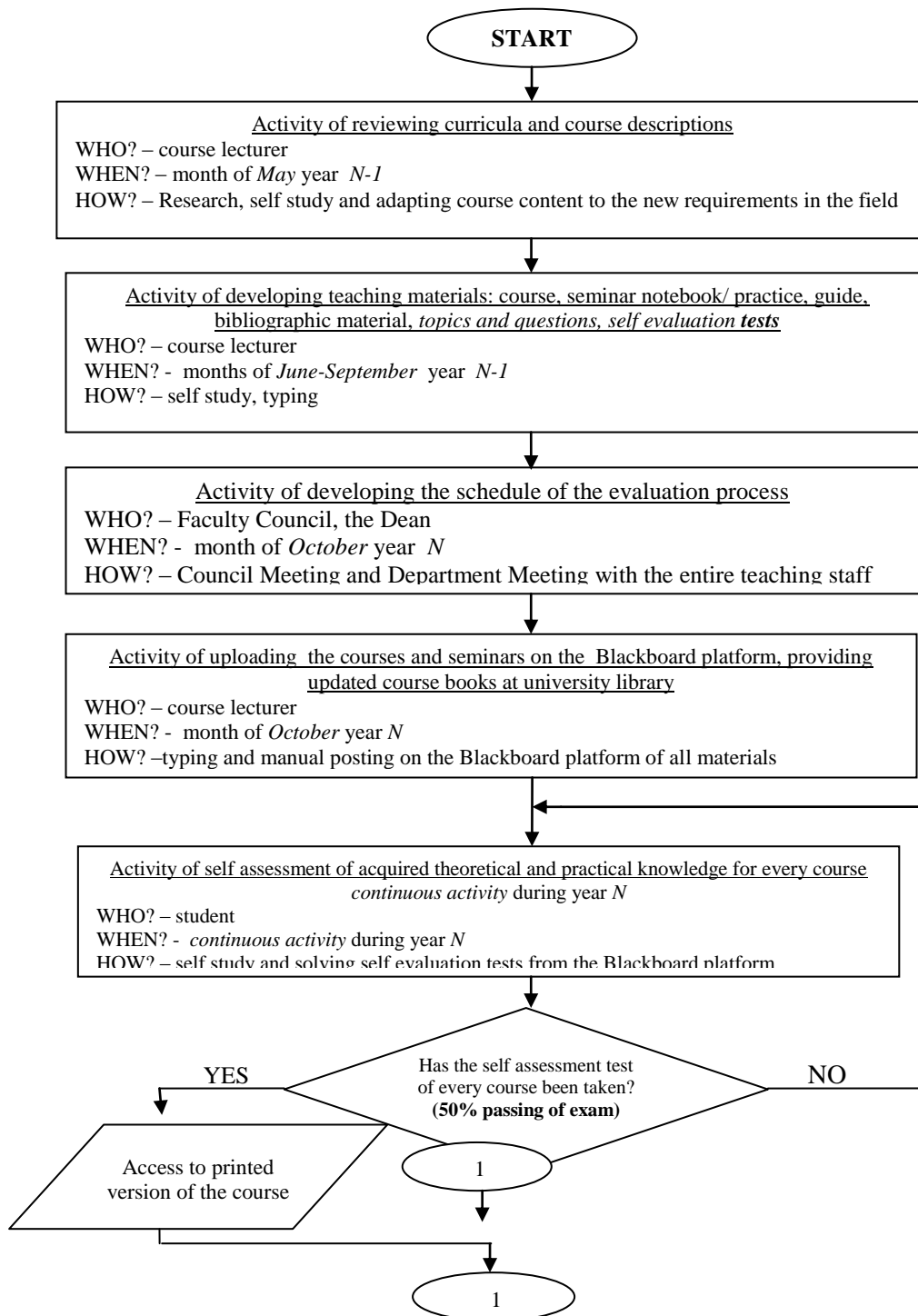
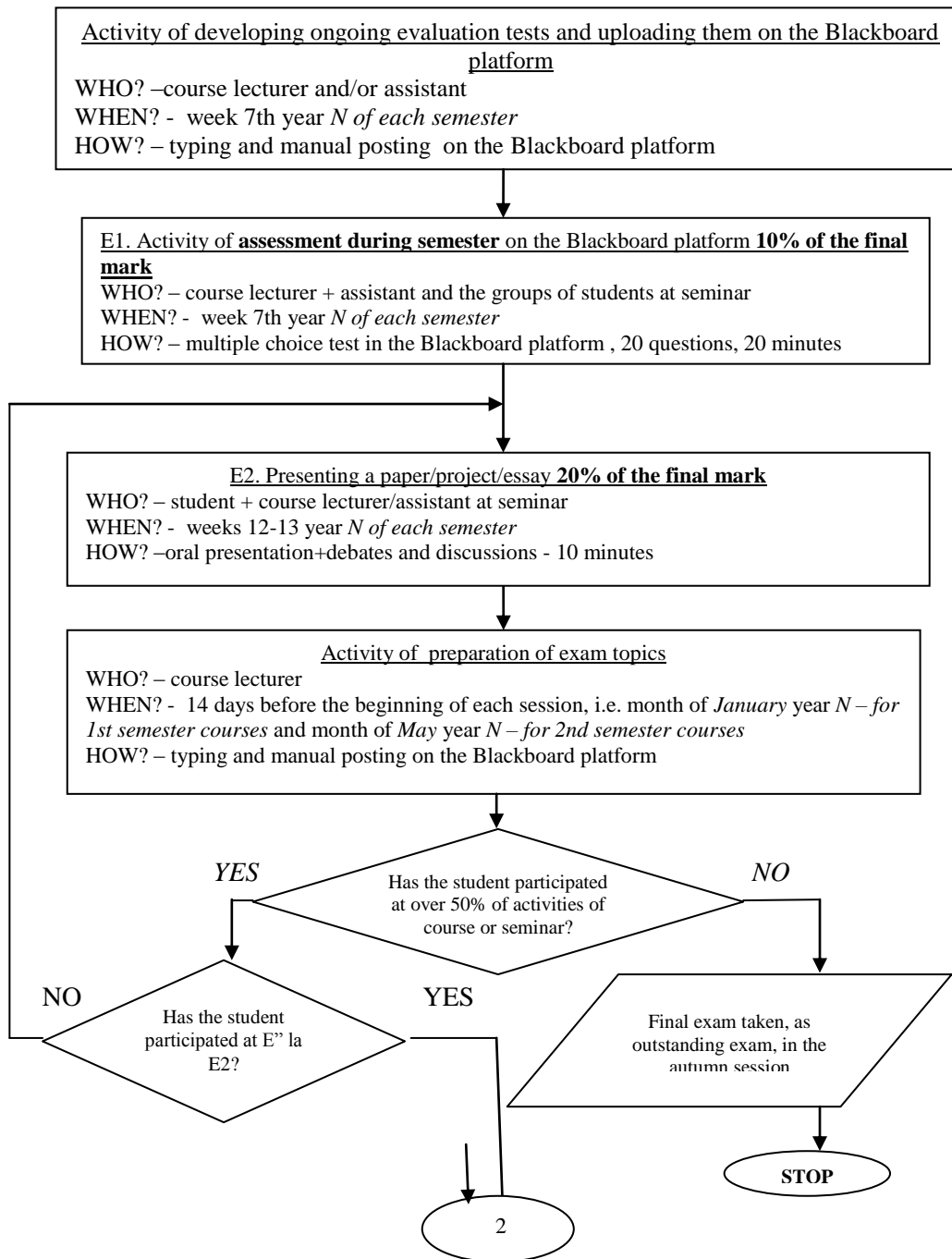


Figure 3. Five Ws and one H Method

Source: Authors

Note: Who does it? – students/ teaching staff
 What does? – self assessment/ ongoing evaluation/final evaluation
 Where does it? – at home, at seminar/laboratory classes/course room
 When does it? – during the semester and exam session
 How does it? – written exam: multiple choice tests, oral examination: projects/papers/essays
 Why does it? – to study and measure the uptake degree of knowledge and competences gained after browsing the teaching materials that students could use.
 Chart of improved process of student evaluation is represented in Figure 4.





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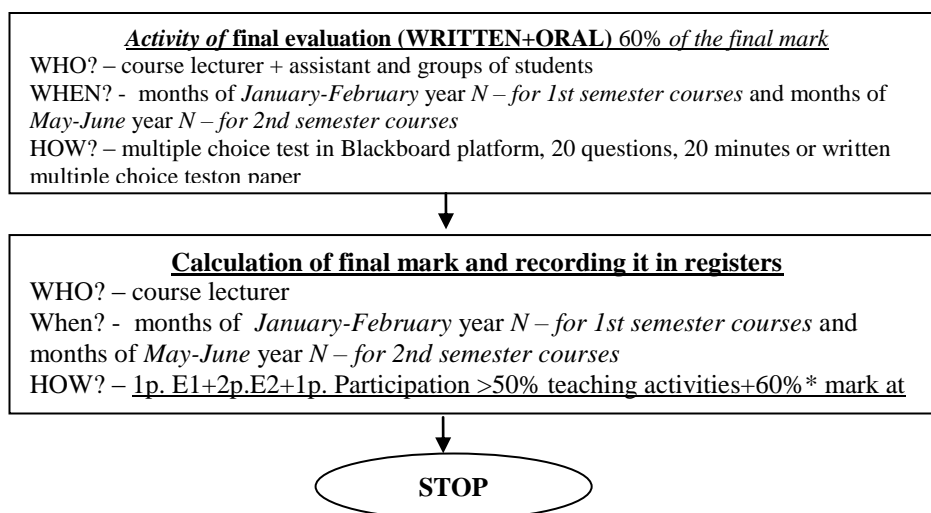


Figure 4. Chart of improved process of student evaluation

Suggested **indices** to measure the degree of assimilation of knowledge:

Number of students who got over 100 points = 50 points/test (50 x 2 assessment=1 point+1 point = 2 points at final mark) at assessments during semester of total students

Number of students who got between 101-160 points at assessment during semester of total students

Number of students who got over 160 de points at evaluations during semester of total students

Number of students who passed final evaluation (marks 5-10)

Number of students who got marks over 7 and has less than 2 points out of assessments during semester

Time for ongoing evaluation using the Blackboard platform: 30 minutes x 2 assessments during semester

Time for final evaluation: 4 hours 30 minutes

The results obtained from implementing the evaluation process allow us to consider the following solution pertinent to rectify the deficiencies found:

- 1 evaluation as multiple choice test – 1 point;
- 1 project/paper/essay, etc. – 2 points;
- active presence at over 50% of didactic activities – 1 point;

- conditioning participation at final evaluation exam by participation and passing of assessment during semester.

6 Conclusions

According to the procedure, evaluation shall include all due range of examination tests – written, oral and practical examinations, projects and portfolios etc., used to measure and assess students' progress in a particular course/module. But, in our faculty practice, until this academic year, the most used criterion for final evaluation was tests using Blackboard platform. This practice threatens that human evaluation could be substituted by computer evaluation.

In order to remedy the deficiencies in students' evaluation process a set of indices to measure student evaluation process and the following solutions have been proposed: *diversification of methods of assessments during semester of students/clients* in order to improve the competences acquired during the teaching-learning process and *conditioning participation in the final evaluation exam by participation and passing of the assessments during semester*.

In our opinion, using computer evaluation affects the student's creative capacity, which is the engine of the New Society.

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