DEVELOPMENT AND ASSESSMENT OF THE SELF-DIRECTED LEARNING COMPETENCE

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Abstract

With the establishment of the European Space for Higher Education traditional teaching methods have been replaced by new ones focused on Competence Based Learning. New techniques for competence assessment are also needed. We present an assessment method for the self-learning competence, based on rubrics and questionnaires.

Key words: *Competence assessment, self-directed learning, rubric, European Space for Higher Education*

1. INTRODUCTION

The establishment of the European Space for Higher Education (ESHE), as it is defined in the Bologna Declaration, implies important changes in the organizational, pedagogical and methodological aspects of knowledge transmission. Traditional methods based on teaching must be replaced by new methods based on learning and competences' development.

The implementation of this new educational model has required, among other adjustments, a significant increase in autonomous work in relation to traditional face-to-face instruction activities. This adjustment provides more time for personal tutoring and mentoring in order to really promote a student-based education paradigm. So the success of this new Higher Education paradigm relies on the development of students' self-learning skill, that is, the ability to motivate themselves, grow their self-confidence, define objectives, search for information and select good references, organize and schedule their work and apply self-assessment to their learning outcomes as well as to the process. Self-learning is also called self-directed learning, autonomous learning or self-regulated learning.

This new educational model also requires important changes in assessment methods: if we are now focusing on competences' development instead of knowledge transmission, new methods for assessing higher order thinking processes and competences instead of factual knowledge and lower level cognitive skills are needed.

The research presented in this paper includes a definition of a model of self-directed learning, an assessment method based on rubrics and questionnaires, and a development strategy for the social interaction between teacher and student based on dialogical coaching,

2. SELF-DIRECTED LEARNING

The choice of self-directed learning as the key competence in our proposal, as said before, responds to the requirements of the ESHE which promotes a new educational focused primarily on the student who must become the fundamental agent in knowledge management. The ESHE establishes the competencies as a "common language" which allows the comparison of qualifications, professional

profiles and academic profiles. But it also establishes (as we can find in the document *Tuning Educational Structures in Europe*) the necessary development of the students' competence on "self-managed" learning

> *The interest in the development of competencies in educational programmes is consistent with an educational approach focused primarily on students and their ability to learn, which requires more prominence and highest commitment levels since it is the student who must develop the capacity to handle information, look for it and evaluateit in a more varied way (library, teachers, Internet, etc.)* . (Wagennar-González, 2003: 36)

This report also establishes that the three most valued generic skills are: *"...the ability to learn; basic general knowledge; [and] the ability to work autonomously*" (Wagennar-González, 2003: 40)

As it can be inferred from the earlier ideas, the competencies associated to the "ability to learn" and "work autonomously" become key points of the new educational paradigm proposed by the Bologna process.

In the case of Spain, most of the new learning methodology proposals derived from the implementation of the ESHE establish the need to introduce "autonomous learning" as a basic strategy.

2.1 Our model for self-directed learning

There are several approaches and models for self-directed learning. Most of them consider self-direction in learning as a learning process as well as a personal attribute.

Brockett and Hiemstra (Brockett & Hiemstra, 1991) consider self-directed learning as a process in which a learner assumes responsibility for planning, implementing, and evaluating the learning process. The notion of personal responsibility is a key factor in understanding the self-direction in learning. This model is based on the assumptions of the humanist philosophy.

Garrison's model of self-directed learning (Garrison, 1997) also includes the perspectives of self-direction as a personal attribute as well as a learning process. In this model self-directed learning is accomplished by three dimensions interacting with each other: self-management, self-monitoring, and motivation.

In our approach, we understand self-learning as acquiring *autonomously* knowledge and skills in some specific area or subject. It is also the ability to self-analyze and self-evaluate our way of learning, that is, *learn to learn* and improve our learning strategies and outcomes.

Self-learning requires three main categories of skills: self-motivation, learning process organization and self-assessment.

- **Self-motivation**. It is the ability to motivate ourselves to perform a task or tackle a new learning project. The elements involved in motivation are
    - *Reason*: The purpose of the task (the answer to the *why* question).
    - *Optimism*: Believing the task is achievable.
    - *Self-confidence*: Trusting in our resources to successfully complete the task.
    - *Enthusiasm*: The initial energy required to undertake actions which will lead us to the goal.
    - *Persistence*: The ability to maintain action regardless of our feelings.

o *Resistance*: The ability to face adversity and overcome obstacles.

- **Learning process organization.** This ability implies

  o *Selection of good references: S*earching for information in different sources and using own criteria to select appropriate information.

  o *Objectives setting:* There should be at least one general goal and some specific ones. The more detailed the objectives are, the easier and motivating to achieve them, because concrete actions will be more easily identified.

  o *Scheduling:* Defining an action plan, assigning dates to the objectives and establishing the tasks or actions that should be carried out to achieve the goals.

- **Self-assessment.** The ability to assess our learning based on different criteria of quality. The evaluation should include two different aspects: learning outcomes and learning process.

  o *Learning outcomes:* Assess the performance degree according to the initial objectives and the quality of the results, drawing conclusions. The student should develop its own standards of quality. It means also to be aware of the progression of learning.

  o *Learning process:* Asses both the quality of the initial scheduling and our own performance in the plan execution.

  Self-assessment must be continuous; partial results should be revised to realize whether we are reasonably approaching the goals. On the contrary, some adjustments must be carried out on the initial plan.

3. RUBRICS AS AN ASSESSMENT INSTRUMENT

The methodology of evaluation of self-directed learning is used in this research is based on rubrics, a dynamic and reformulable evaluation instrument, that offers effective and accessible feedback, centered in the students' work.

The rubric provides detailed information of the students' learning progress, it facilitates the elaboration of the closing reports, and allows students to be aware of their weaknesses and strengths in relation to their learning process and activities. Rubrics can be holistic (used to evaluate several competences) or analytical (used for one single competence). We are using an analytical rubric, since we are evaluating only the self-directed learning competence.

In relation to the reliability of rubrics as instruments for learning assessment, and according to Anders Jonsson y Gunilla Svingby, they have the potential to promote learning and to improve instruction outcomes by making expectations and criteria explicit which also facilitate the feedback and self-assessment. (Jonsson, 2007: 139)

In Spain, researchers Martinez Figueira and M. Rivas fox (from University of Vigo) made a study to 81 undergraduate students in order to evaluate their opinions with regard to the utility, reliability and efficiency of the rubric. The results were (Martinez, 2011)

- More of 75% (61 people) affirmed that the rubric provided useful feedback in relation to the learning process and the work carried out.

- More of 60% (54) affirmed that the rubric allowed to certify the acquired competence level.

- More of 50% (49) affirmed that the rubric shows how they will be evaluated and (42) affirmed that the rubric helped them to understand the expected work quality.

4. COACHING AND LEARNING

Coaching is a training process in which an individual gets support while learning to achieve a specific personal or professional goal. The coaching process is focused on increasing individuals' awareness, on generating responsibility and on moving people to action, because action is the change driver, and change is essential in coaching. Without change, there is no coaching.

Coaching is an old discipline that is gaining popularity and relevance every day. In fact, we could say that Socrates initiated the coaching with his teaching method (the Socratic method). The origin of "modern" coaching can be found in sports (Gallwey, 1974). The Inner Game became a revolutionary and very powerful methodology to achieve resounding results in tennis and the method was soon transferred to other sports and other fields, like business and education.

There are three main schools of coaching: the European school, with the model proposed by Sir John Whitmore (Whitmore, 2002) and Timothy Gallwey; the North-American model founded by Thomas Leonard, who also founded the International Coach Federation (the most important coach association in the world): and the Chilean school created by Fernando Flores and developed by Julio Olalla and Rafael Echeverria (Echeverria, 2009), with a model called Ontological Model.

The dialogical model is a new model created in the IDDI (a leadership training institute) at Universidad Francisco de Vitoria. It is based on solid anthropological and psychological fundamentals that provide an integral vision of the person. This model emphasizes the creation of a relation of meeting between coach and coachee, because human beings are conceived as beings that grow and develop in relations of meeting with other people and with reality.

There are two different approaches to the use of coaching in education. The first one, known as educational coaching, is focused on applying coaching process to teachers to increase their performance and results. This approach has been widely developed in the United States where we can find different validated models, such as cognitive coaching (Costa, 1992), instructional coaching (Knight, 2007) or peer coaching (Thorn, 2007).

The other approach is training teachers to use some competences and methods from coaching in their relations with the students. With these new abilities teachers can improved their teaching strategies and methodologies, favouring new more effective teaching and learning models. Although we can find a lot of initiatives in this line, we have not find any published research carried out to validate them. Our proposal follows this approach (Peñalba, 2012).

5. METHODOLOGY

One of the important contributions of this research is the assessment of the self-directed learning competence through teamwork using rubric and questionnaires. Effective questions based in dialogic coaching are introduced in a research stage to measure the effect on the own assessment and with the objective to prove the validity of proposed rubric.

Research seeks to explain, through a pilot study, the effect of the independent variable (effective questions of the coaching methodology), in the development of the dependent variable (self-directed learning competence in the team). The demonstration of the effect of the raised pedagogical model (effective questions of coaching dialogic) is performed by comparing the results obtained after its application in control groups.

The assessment used pre-test/post-test methodology, which allows for collecting data at an early stage of the project and later in the final phase, with the aim of achieving suitable quantity and quality of the data that lead to useful conclusions.

Data analysis is carried out using multivariate statistical methods to obtain an objective measurement and a standardization, validity and reliability of the outcomes. While the multivariate analysis has its basis in univariate and bivariate statistics, the extension to the multivariate domain introduces concepts and additional issues, ranging from the "theoretical value" of measurement scales used, errors of measurement, statistical results of significance tests and confidence intervals. The use of a multivariate model involves the development of a well-defined research plan that includes the analytical objectives in conceptual terms, the selection of the technique, the evaluation of the basic assumptions of this technique, the estimation of the model and its interpretation, to conclude with the implementation of validation techniques to determine the stability of the results.
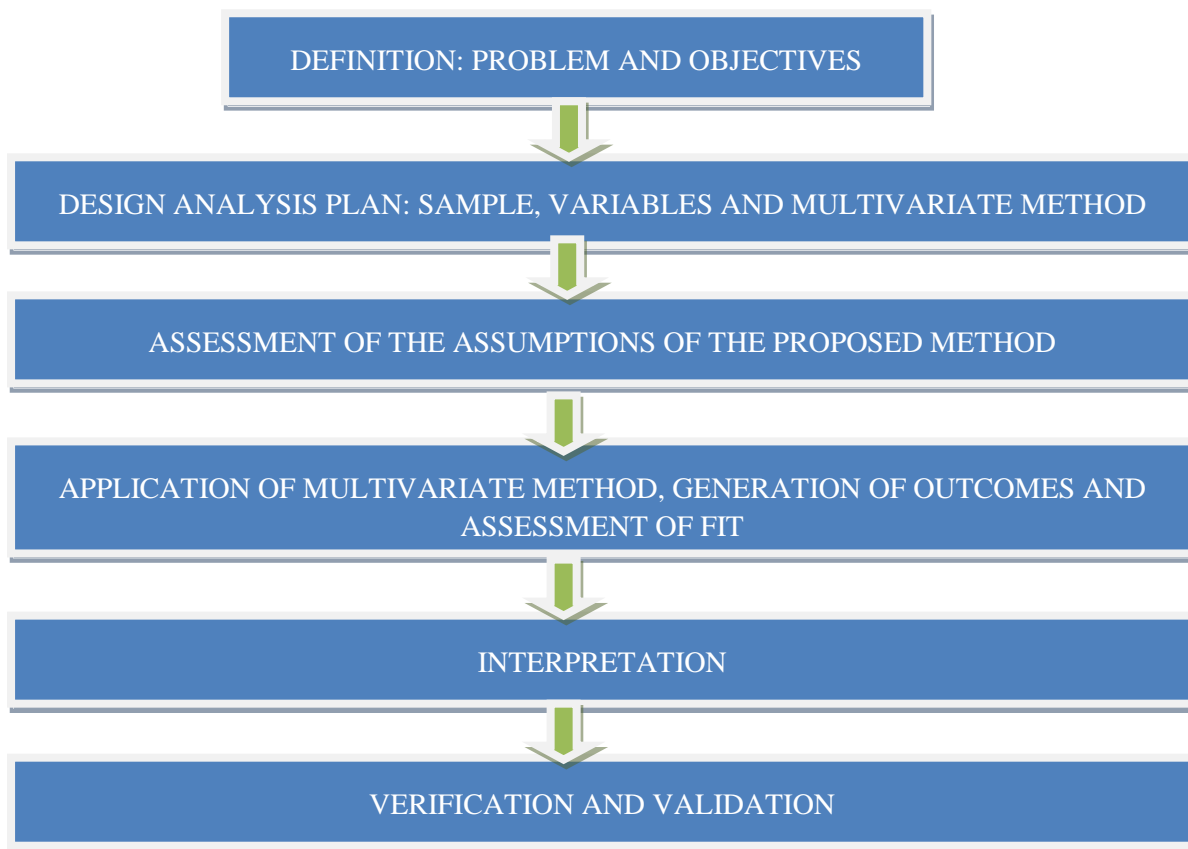
The implicit tasks in the initial examination of the data are an essential part of multivariate analysis. Multivariate techniques pose huge demands to the analyst in the understanding, interpretation and articulation of results based on relations whose complexity may become very large. Knowledge of some important or evident interrelations can help in the specification and refinement of the multivariate model to use, as well as to provide a reasonable prospect for the interpretation of the results.

Many authors have classified the multivariate methods (Lebart et al., 1981; Dagnelie, 1981; Hair et al., 1999) but all agree that the three most important to take into account in no particular order of priority aspects are: the unit or not between the variables, scales of measurement you use for each one of them and the objective of the study.

The analysis and interpretation of any technical multivariate does not lead to a single answer, although it can help by a set of general guidelines, not exhaustive, but represent a philosophy of multivariate analysis. Among them we can mention the statistical significance and practical significance; the discussion of the relationship of the statistical power with sample size and statistical significance, ensure the parsimony of the model, the analysis of the errors of prediction not as a measure of the error, but as a starting point for diagnosing the validity of the results obtained and an indicator of unexplained relationships well as the validation of the results.

The thorough analysis of data leads to a better prediction and a more accurate assessment of the dimensionality. There are analytical techniques and graphic techniques that offer researchers a set of simple forms review, both the individual variables, and the relations between them.

It becomes evident to finish successfully a multivariate analysis involves more than just the selection of the right model. They must solve problems ranging from the definition of the problem to the critical diagnosis of the results. Without attempting to provide a rigid set of procedures to follow, will use an approximation of multivariate analysis in six steps, where the first three relate to the preliminary analysis of the data, the fourth refers to the itself analysis and the latter two refer to interpretation and possible standardization of the results obtained (Hair et to the., 1999). They are:

DEFINITION: PROBLEM AND OBJECTIVES

DESIGN ANALYSIS PLAN: SAMPLE, VARIABLES AND MULTIVARIATE METHOD

ASSESSMENT OF THE ASSUMPTIONS OF THE PROPOSED METHOD

APPLICATION OF MULTIVARIATE METHOD, GENERATION OF OUTCOMES AND ASSESSMENT OF FIT

INTERPRETATION

VERIFICATION AND VALIDATION

Fig.1. Stages of multivariate statistical analysis.

The statistical methods are selected taking into account several aspects but all of them must include: (1) the structure of the data matrix, (2) the aim pursued, and (3) the nature of such data (Dagnelie, 1981).

The instruments used here for the collection of data (questionnaires and rubrics), as well as any employee in a research data collection instrument have three requirements: reliability, validity and objectivity. The robustness or reliability refers to the consistency inside of it, their ability to discriminate consistently between a value and another. The robustness or reliability of a measuring instrument refers to the degree that its repeated application on the same subject or object, produces similar results. This feature provides accuracy to the test. The validity indicates the capacity of the scale (nominal, ordinals, equal intervals and ratios) in that an instrument actually measures the variable that is intended to measure. A confusing scale may not have validity, as well as on a scale that is measuring, simultaneously and indiscriminately, different overlapping variables. A scale is in effect when it truly measures what it claims to measure. With this requirement, the test measures what it purports to measure. And, finally, the objectivity grants to test a neutral, independent of the evaluator and the evaluated subject measurements.

The studied population is first degree of Business Administration and Management of the Francisco de Vitoria University. Probability sampling techniques are used to obtain the size of sample and the elements of the same. The pilot study is carried out on the sample.

The variables or characteristics necessary to measure the independent learning are based on theoretical variables (or construct) and are transferred to indicators that allow us to better understand the dimensions (or intermediate variables) of the theoretical variables and therefore the same variable

construct. These empirical variables or indicators do not need to define, as soon as they are easily understandable, measurable and observable. The transformation of the constructs in indicators is done via a suitable operationalization of variables. Care in determining the nature of them (qualitative, quantitative (discrete or continuous), as well as its scale of measurement accuracy is essential to obtain robust results. The scales are measurement instruments and relate to the way in which the indicator is materialized.

The operationalization of the variables comprises several steps:

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[Conceptual Definition] → [Identify dimensions] → [Operational Definition] → [Define scales]
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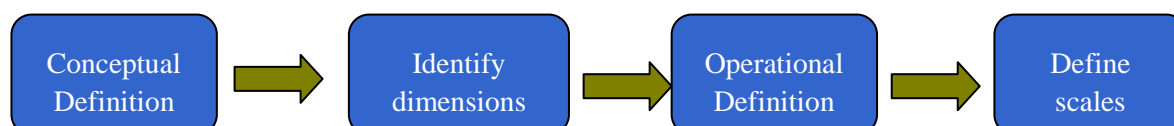
Fig.2. Steps in the operationalization of variables.

The operationalization of variables is essential. Not all variable are easily measured, this procedure allows quantify and record the aspects and elements which want to research in order to reach conclusions. The operationalization of variables in this study is summarized in the next table:

THEORICAL VARIABLE	DIMENSIONS	INDICATORS	INSTRUMENT
Self-direct learning	Motivation	1- Self-Confidence 2- Emotional Conscience 3- Resilience 4- Interest 5- Motivation and overcoming 6- Motivación and recognition	Questionnaire
	Organization of process	Information, Targets and Planning	Rubric
	Outcomes	To achieve objectives	Rubric

		Planning:	
	Self-assessment	1- Organization 2- Identification of errors 3- Fit 4- Assessment 5- Feedback **Performance:** 1- Aims and plans 2- Conscience of success and mistakes 3- Introduction of improvements 4- Feedback **Outcomes:** 1- Self-assessment with external criteria 2- Self-assessment with own criteria 3- Participation in co-evaluation 4- Feedback 5- Awareness of his/her progress	Questionnaire

Tab. 1. Operationalization of the variables of self-directed learning.

The questionnaires are applied in n control groups and m treatment groups of the first degree of the Business Administration and Management of the Francisco de Vitoria University. The students have to have a similar profile and they must study the same subject.

In order to assess the acquisition or development of self-directed learning competence in teamwork, it is prepared a rubric. This instrument measures the progress of this competence based on different aspects:

Self-Motivation	
Rubric	*Not Meeting:* Not has interest and/or considers impossible the objectives *Developing:* Display extrinsic motivation and/or possible and infeasible objectives *Meeting:* Display intrinsic motivation and/or possible and feasible objectives *Exceding:* Resilience
Indicator	• Self-confidence • Interest • Motivation to learn
Search for information	
Rubric	*Not Meeting:* No complementary information and/or selected sources are useless *Developing:* Search a only means and/or useful and reliable sources but they are not sufficient *Meeting:* Search two means or more and/or suitable sources *Exceding:* Search with experts and/or best sources

Indicator	• Capacity to find appropriate sources (quantity and quality) to provide adequate, reliable and useful information

Objectives of learning	
Rubric	*Not Meeting:*Not define and/or inadequate objectives *Developing:* Define a general objective and/or consistent but non-measurable objectives *Meeting:* Define general and specific objectives and/or consistent and measurable objectives *Exceding:* Perfectly planned objectives
Indicator	• Ability to set learning objectives: adequate, consistent and accurate

Planning of actions	
Rubric	*Not Meeting:* No design of plan *Developing:* Identify tasks associated with each goal *Meeting:* Prioritize and estimated time for each task *Exceding:* Set a proper schedule
Indicator	• Ability to schedule objectives and establish a plan of action

Identification of learning outcomes	
Rubric	*Not Meeting:* Not acquire new knowledge and/or it is not able to apply acquired knowledge *Developing:* Define and manage new concepts and/or applied partially without resolution of the case *Meeting:* It describes and explains new theories and/or implements and solves the case correctly *Exceding:* Internalize the knowledge and/or applied analysis and synthesis for more complex cases
Indicator	• Ability to achieve goals both in the acquisition of theoretical knowledge and its practical application

Self-assessment of learning process	
Rubric	*Not Meeting:* Not self-assess and/or not extract conclusions about their learning *Developing:* Self-assessment with given criteria and/or draws conclusions from the feedback given to his works *Meeting:* Self-assessment with own criteria or is aware of the progress of their learning

Indicator	• Development of criteria (planning and performance) for self-assessing their own learning process and adjusted outcomes • Identification of factors not learning
Self-assessment of outcomes	
Rubric	*Not Meeting:* It does not self-assess action plan and/or it does not self-assess their performance *Developing:* Consciousness of the failures of planning and/or errors and successes *Meeting:* Adjust your planning during the process and/or introduce changes or improvements in their performance.
Indicator	• Development of criteria and techniques to evaluate the learning outcomes that have been achieved and to undertake continuous improvement

Tab.2. Summary of self-direct learning rubric.

Evidences are described for every one of exposed criteria. These evidences are behaviors that can be observed both in each student and in the team in order to be able to assess them through certain indicators are described for each of the above criteria.

Both the pre-test and post-test, some of these indicators can be recognized directly, an expert analyses the way of working of the team and proceeds to valuation in accordance with the specifications of the rubric. This happens on the following criteria: search for information, identification of objectives of learning, planning of actions and identification of learning outcomes.

For the analysis of other indicators, several questionnaires are completed (by part professor and the students themselves, in a personalized manner and/or in team) at different times in the investigation, as discussed more below.

Previously, it is proposed to all group the realization of a project that must be resolved through the work team which consists of resolving a number of issues on the subject in question. Students do this work during a certain period of time enough so that they can acquire or develop competence.

Students have been guided to develop this project work as a team and not as a group, i.e. really sharing the leadership, distributing tasks in a collaborative manner and understanding the roles that each of the members of the team plays at every moment and sharing the final goal through the application of the techniques of meeting management explained in class.

It is applied a questionnaire to assess the way in which each team leads meetings of working to achieve the proposed objective. The answers to items are agreed by the members of each group, who also replied to questions about how to proceed from the moderator or host of the meeting. Thus analyses the implementation of the knowledge acquired on teamwork in the initial phase of the project.

During the process of work on the project, analyses the different criteria to be evaluated in this research. Thus, invites each of the members of the various groups, reply on the self-confidence (pre-test) a questionnaire, interest and motivation to learn. The same questionnaire will be also completed by the teacher that will try to answer the different questions after observing the way of behaving persons in the team.

Both forms shall apply again (post-test) both the experimental and control groups applied once the Dialogic coaching methodology through effective questions (the experimental group).During the making of this second teamwork applies new methodology of effective questions of coaching (only in the experimental groups), in order to verify if the heading has validity to provide results with regard to the measurement of the level of development of the competence of self-directed learning after the implementation of an innovative methodology.
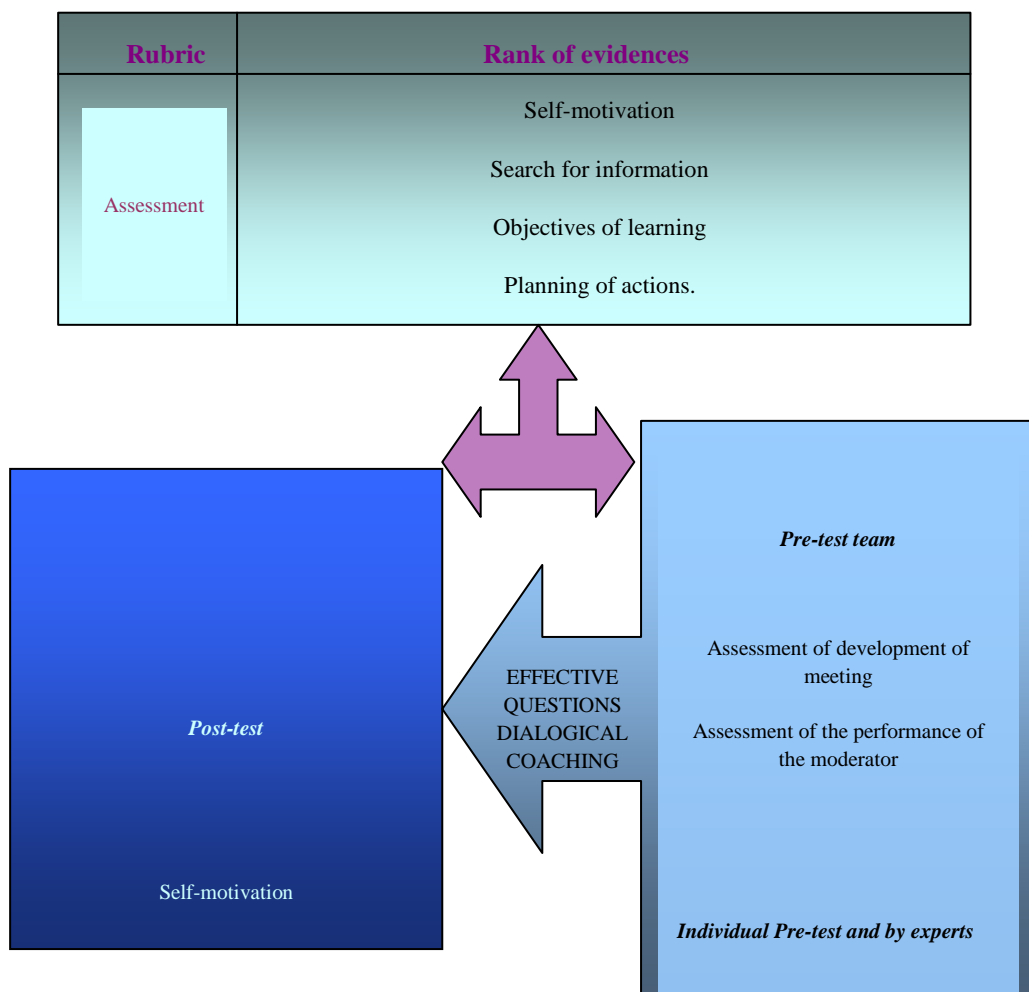
Rubric	Rank of evidences
Assessment	Self-motivation Search for information Objectives of learning Planning of actions.

EFFECTIVE QUESTIONS DIALOGICAL COACHING

Post-test

Self-motivation

Pre-test team

Assessment of development of meeting

Assessment of the performance of the moderator

Individual Pre-test and by experts

Fig.3. Scheme of research process.

6. CONCLUSIONS

In the presence of some environmental conditions which compel to change, European Space for Higher Education considers the need for changes in the teaching method. In the new educational paradigm, the unit of analysis are not the professor actions but the actions of the student. It's a paradigm that substantially changes the core. This rather than being represented by the teacher and the teaching is based on learning and the person who learns. This new paradigm leads us to think of learning as a process of constructing meaning. In this sense, the student is not limited to acquire knowledge but that builds it. The student is much more active and inventive, and his role to that of a

being independent, self-regulating, who knows their own cognitive processes and has in its hands the control of learning. Accordingly, the role of the teacher not limited to convey information but that actively participates in the process of construction of meaning of the student, making mediator between the structure of knowledge and the cognitive structure of the subject. Learning is, strictly speaking, an activity who learns, but is also a process linked to the teaching and, therefore, to the teacher that plays.

As a result, the University professor must change the orientation of its function. Rather than being a specialist that knows very well a subject and explaining it should become a learning professional, leaving the task of learning as a function of the student. The work of professor must lie in doing our utmost to facilitate their students intellectual access to content and professional practices of the discipline that explains, as well as facilitate the development of their competences.

These circumstances have been determinants for the development and implementation of a new teaching methodology based on coaching Dialogic, exercised by the teacher as coach on the group of students.

This article presents a methodology for evaluating the effects of dialogical coaching on the development of autonomous learning of the student competition. This methodology is based on the realization of a pilot study with objective, reliable and valid such as the questionnaires and heading control groups and treatment in an adequate operationalization of theoretical determinant variables of self-direct learning in the use of measuring instruments and multivariate statistical analysis of the data collected to be able to generalize the results and obtain robust conclusions. This methodology aims to produce knowledge in understanding of the autonomous learning by the student and the factors that determine, as well as assess the quantitative and qualitative impact of actual questions from the teacher (coach) on the student independent learning.

We are aware that it is a long way to go, but the effectiveness of this methodology, without a doubt, would be a step in the construction of the learning by the student, where the teacher is companion in this process.

REFERENCES

Brockett, R. G., & Hiemstra, R. (1991). Self-direction in adult learning: Perspectives on theory, research, and practice. New York: Routledge.

Costa, A. & Garmston, R. (1992). "Cognitive Coaching: A Strategy for Reflective Teaching." Journal for Supervision and Curriculum Improvement. California ASCD.

Dagnelie, P. (1981). Principes d'expérimentation. Les Presse Agronomique de Gembloux, Gembloux, Bélgica.

Echeverría, R. (2009). Ontología del Lenguaje (9ª ed.). Santiago de Chile: Dolmen Ediciones

Gallwey, W. Timothy (1974).The Inner Game of Tennis. New York: Random House.

Garrison, D. R. (1997). Self-directed learning: Toward a comprehensive model. Adult Education Quarterly, 48(1), 18-33.

Hair, J.F., Anderson, R.E., Tatham, R.L. y Black, W.C. (1999). Análisis Multivariante, 5° ed. Prentice Hall, IBERIA, Madrid, España.

Jonsson, A., Svingby, Gunilla. (2007).The use of scoring rubrics: Reliability, validity and educational consequences [On line] Educational Research Review 2   p.130–144. [Retrieved on May 26, 2012] http://uncw.edu/cas/documents/JonssonandSvingby2007.pdf

Knight, J. (2007) Instructional Coaching: A Partnership Approach to Improving Instruction. Thousand Oaks, CA: Corwin Press.

Lebart, L., Morineau, A., Fénelon, J.P. (1981). Traitement des données statistiques. DUNOD, París, Francia.

Martínez, M., Raposo, M. (2011). La evaluación del estudiante a través de la rúbrica. [On line] V Jornada de Innovación Educativa en la Universidad. Vigo. p.1-7. [Retrieved on May 25, 2012] webs.uvigo.es/xie2011/Vigo/XIE2011-077.pdf

Peñalba, O et. al (2012). A teaching method based on Dialogical Coaching for developing the self-learning competence. Proceedings of the International Conference on Education and New Learning Technologies. Barcelona, July 2012.

Thorn, A., McLeod, M., Goldsmith M. (2007). Peer coaching overview. Retrieved from http://scripts.cac.psu.edu/dept/it/connects/coaches/pdf/Peer-Coaching-Overview.pdf. [2012-5-17].

Wagennar, R., González, J., (2003). Tuning Educational Structures in Europe. Universidad de Groningen-Universidad de Deusto, RGM, S.A. Bilbao, España.

Whitmore, John K. (2002). Coaching for Performance: Growing People, Performance and Purpose. London: Nicholas Brealey Publishing. p. 10.