

People evaluation in Distance Education through a process and a system of competence management - experience report in the distance facilitators evaluation at Ifes

Serra, May/2009

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Category (Methods and Technologies)

Educational Sector (College Education)

Report Purpose (Description of a Rolling Project)

Class (Innovative Experience)

SUMMARY

In the Distance Education we have several actors involved in the teaching learning process. The importance of the evaluation and follow up of this multidisciplinary team competence becomes indispensable to establish an excellent course. The present text discusses about of people follow up and evaluation in Distance Education through a process and a system of competence management, based on a well defined process. It is specifically about the distance facilitators evaluation under the specialist teacher's perspective. It will be presented the results obtained in the evaluation of the distance facilitators in the discipline Logic and Discrete Mathematics from the course Degree in System Analysis and Development, in the project UAB (Universidade Aberta do Brasil – Open University of Brazil), using the system of competence management developed by one of the CEAD team members.

Key-words: Distance Education; Evaluation; Competence Management, Guidance.

1. INTRODUCTION

Instituto Federal do Espírito Santo (Ifes), former Centro Federal de

Educação Tecnológica do Espírito Santo (CEFETES) began in 2006 the implantation process of the first graduation course in the distance modality, through the Open University of Brazil (*Universidade Aberta do Brasil - UAB*) project. It is the course Degree in System Analysis and Development (*Tecnologia em Análise e Desenvolvimento de Sistemas - TADS*) that has 2400 hours and three years long (6 semesters). The classes began in 2007. In this same year, it was created the Distance Education Center of Ifes – CEAD (*Centro de Educação a Distância*). A multidisciplinary team was formed to support the Center, counting with several professionals, among them: Course Coordinator - Responsible for the course management; Guidance Coordinator - supports the course coordination regarding the communication and interaction with the facilitators; Specialist Teacher - plans and manages the process of learning development in determinate discipline; Distance Facilitator - guides and follows the student's activities through the collaborative environment of learning, solving doubts and correcting activities, Classroom Facilitator - contributes with the student in the academic time planning and management, looking for intellectual autonomy.

But so the TADS course can have its necessary quality, it is important that several aspects be often evaluated. Evaluating is important to discover where the problems are and correct them in time. It highlights that the multidisciplinary team's evaluation, which has an important value in the teaching-learning process. The great difficulty is, in the Distance Education case, in the big amount of people involved and in the complexity of the interactions among the different actors of the process.

One of the ways mentioned in the literature for people evaluation is the competence management. So, this paper discusses the people evaluation and follow up regarding Distance Education through a system of competence management, based on a well defined process. The article focus is distance facilitators evaluation under the specialist teacher's perspective. In this paper are presented the results obtained in the distance facilitators evaluation in the discipline Logic and Discrete Mathematics comparing them with the performance obtained by classes where this facilitators worked.

2. COMPETENCE MANAGEMENT

Competence is an important concept to be understood in people management, integrating it to the strategic management and institutional culture, promoting a bigger knowledge of people's potentials and their development (SANTOS, 2001).

In this paper it was used Gramigna's (2002) definition, which says that competence is a group of knowledge, abilities and acts. Knowledge is a group of information that the person saves and uses when it's necessary. The abilities measure the capacity of act with talent and technique, solving problems and having positive results. On the other hand, acts are values, believes and principles obtained with life experience. In order to manage efficiently the competence of the people that form the multidisciplinary team, the institution needs a definition of a process that makes the people evaluation possible and, then, define properly the quality of the available workforce.

2.1. Process for the Competence Management

The competence management has, as a referential, the institution strategy and orients several of its actions, as recruitment and selection, training, career management and development evaluation among others. Some implantation models were proposed in literature, as Gamigna's (2002), it was developed from those in Costa Junior (2008), in the ambit of Ifes, the process proposal for the Competence Management, which consists the following stages:

Stage 1: Schedule Definition - The course coordination will be the responsible for defining the beginning and end dates for each phase of the process.

Stage 2: Sensibilization - Consists in the process divulgation in order that everyone be moved about the real function of the competence evaluation.

Stage 3: Profiles Definition - Each position in Distance Education demands a group of different competences. The course coordinator must decide which positions need which competence and in which level. In case of this paper, the competences determitated for the position of Distance Facilitator will worked for their individual evaluation made by the Specialist Teachers. There will be expected levels of determitated competence, for example: for the competence X, the expected situation is "Excellent". It may specify a competence relating it to a

knowledge group, abilities and attitudes.

Stage 4: Competence Evaluation and Goals Definition - In this stage, it makes the search of the competences defined for the Distance Facilitator profile and the goals definition for the people involved in the process. Individual competence forms about facilitators must be available for Specialist Teachers. They will have a space where the specialist will fulfill with the real level of the facilitator's competence. After this search, the course coordinator must generate the Work Plan for each distance facilitator. The Work Plan is constituted by the goals to increase competence related to the evaluated profile. A specific goal for some competence may be defined based on the acquisition of one or more required abilities and/ or attitudes.

Stage 5: Capacitance Actions and Following of Goals – In this stage, the facilitators have the chance to improve their competences and fit them in the profile of the course they guide, so they can improve their work in the following semesters.

Stage 6: Results Evaluation - To generate the evaluation result, the expected levels and the real levels, they must be transformed in number values, beginning by 1 to the lowest level and incrementing 1 till the highest level. For example: bad is equivalent to 1 and "Excellent" to 5. The value of an evaluated competence must be the ratio between the real level and the expected level multiplied by 100. The evaluation values must be an average of all competences.

2.2. System of competence management

The system was projected according to the Software Engineering principles and developed to work by web. Through the developed tool, it is possible to register the professional positions of the multidisciplinary team, the necessary competences to each position and their respective levels, the team members and then evaluate. At this moment it is attributed a level for each competence of the evaluated person. In section 4 this use will be verified through Picture 1.

After the evaluations, it is possible to visualize a report in which the facilitators are classified in a decreasing way regarding the result obtained in the evaluation. These results are a consequence of the comparison between

the informed levels (real) and the expected levels regarding the professional position. There is still the option of filtering by semester and by course. This functionality has fundamental importance for the course and facilitator coordinator, providing a practical view that will help to identify the most talented facilitators. Later, an example will also be seen in section 4, by Picture 2. There still is the Plan Work screen, in which happens the goals edition. However, the screen wasn't used in the initial experience reported in this paper.

3. THE IMPORTANCE OF THE DISTANCE GUIDANCE EVALUATION

Nowadays, it discusses about an evaluation perspective that opposes the traditional practice, having an innovative, critical and reflexive evaluation as a perspective and as a closing and interrogative inclusion act. It proposes the creation of a "evaluative culture), an attitude change face the evaluation, that includes the regular, flexible and democratic evaluation (OLIVEIRA et. al, 2007).

In this sense, the evaluation must fulfill, basically, three didactic-pedagogic functions: diagnostic (regarding the identification of the initial knowledge level of someone), formative (aims to inform about someone's accomplishments, about his/her deficiencies and the possible necessary alignments to achieve the goals) and the summative (that aims to classify according to pre-established levels) (SANTOS, 2006). By this mean, the formative evaluation of all the disciplinary team involved in the course is relevant, once that by it, it is possible to indentify and follow the deficiencies, so they be treated before becoming serious problems. This is a reality, especially for the distance facilitators, as they perform a mediator role and evaluate the students' learning process, clarifying their doubts about the subjects and evaluate their assignments. Besides, they also have to stimulate, encourage and guide the students to develop their academic activities and the self-learning.

Besides the reason for evaluation mentioned before, that works as much for distance facilitator as for any other members of the multidisciplinary team, is the importance of the distance facilitators reuse, due to they are already prepared and have experience in guidance using the methodology adopted at Ifes. The matter is in establishing criteria in order to reuse them. For

this, the important competences were identified in the distance facilitator according to the specialist teacher.

3.1. Competence List for the Distance Facilitator position

So it was possible to evaluate a follow the distance guidance work, under the specialist teacher perspective, it was elaborated a competences list considering several aspects. We highlight bellow some evaluated competences.

About the Academic Support: Dominates the discipline contents; Knows the goals, the teaching methodology and other significant aspects referred to the discipline and to the course; Stimulate the students, in a pleasant way, by complete and constructive comments; Stands for helping and even encouraging a student in trouble.

About the Evaluation: Evaluates, classifies, and gives students feedback about the assignments; Provides a fair feedback within the deadlines and helpful to the students regarding the assignments; Tells the students the strengths and weaknesses of their assignments and routes the students when it's necessary, with the aim of attending their specific needs.

About Communication and Interaction: In the beginning of the course, communicates with the students in a suitable way; Keeps often in touch with the student during the whole course; Talks to the students in a clear, useful and grammatically correct way; Solves immediately the student's doubts.

4. LOGIC AND DISCRETE MATHEMATICS' DISTANCE FACILITATOR EVALUATION

The discipline Logic and Discrete Mathematics is offered in the first semester of TADS. The choice of this discipline to be evaluated is due to the fact it is considered hard by most of students. In this case, the distance facilitator becomes essential to guide the students in their knowledge construction.

For the evaluation, it were followed the stages defined in the process of competences management. First of all, as the evaluation would be made by only one person (the specialist teacher), the stages of schedule definition and of sensibilization were performed in a simpler way, by e-mail. Next, for the profile definition, it were searched the necessary competences for the distance

Facilitator Position and those definitions were registered in the competence management system, with their respective expected levels. The Competence Evaluation and Goals Definition stage was only partially performed. All the distance facilitators of the discipline were registered in the system. In the following, the specialist teacher makes the vacillators evaluation, attributing them a level for each competence previously registered. However, as the evaluation was just made after the discipline conclusion, there wasn't the necessity of the goals definition.

The Picture 1 shows the distance facilitator evaluation, whose name was omitted. We can realize that this facilitator presented a regular result, due to the real level was attributed to the competences by the result 68%.

SISTEMA DE GESTÃO DE COMPETÊNCIAS

Colaboradores Períodos Competências Disciplinas Função Relatório

Período > Grade > Editar Atuação > Editar Avaliação

Atuações

Período: 2018/01
Disciplina: Lógica e Matemática Discreta
Colaborador: [Omitido]
Função: Tutor de sala de aula
Status: Encerrada

Resultado da Avaliação: 68%

	Nível Esperado	Nível Real	Resultado Atual
	Excelente	Bom	80.0%
	Excelente	Bom	80.0%

Competência	Nível Esperado	Nível Real	Resultado Atual
1 - Domina o conteúdo da disciplina.	Excelente	Bom	80.0%
2 - Conhece os objetivos, a metodologia de ensino e outros aspectos significativos referentes à disciplina e ao curso.	Excelente	Bom	80.0%
3 - Fornece informações sobre os recursos pedagógicos para os alunos que buscam aprender conhecimento sobre a disciplina.	Excelente	Médio	60.0%
4 - Estimula os alunos, de forma agradável, por meio de comentários completos e construtivos.	Excelente	Médio	60.0%
5 - Coloca-se a disposição para auxiliar, até mesmo encorajar, um aluno em dificuldade.	Excelente	Médio	60.0%
6 - Esclarece pontos que não foram entendidos ou constantemente aprendidos anteriormente.	Excelente	Bom	80.0%
7 - Realiza as atividades e faz seu planejamento.	Excelente	Regular	40.0%

Picture 1 – Competence evaluation of a distance facilitator.

In the list of results (Picture 2), which is in decreasing order, the first four facilitators were considered excellent, the two next had a good result, the five in the sequence had a regular performance, while the last four were below the expectations.

SISTEMA DE GESTÃO DE COMPETÊNCIAS

Colaboradores Períodos Competências Disciplinas Função Relatório

Relatório de Avaliações

Período: Todos Disciplina: Todos

Tutor	Avaliação
Tutor 1	99 %
Tutor 2	99 %
Tutor 3	99 %
Tutor 4	91 %
Tutor 5	88 %
Tutor 6	88 %
Tutor 7	68 %
Tutor 8	68 %
Tutor 9	67 %
Tutor 10	67 %
Tutor 11	58 %
Tutor 12	49 %
Tutor 14	38 %
Tutor 13	38 %
Tutor 15	22 %

Picture 2 – Result of the distance facilitators competence evaluation.

In the Table 1, we have the result of the guided classes showed here in the same order of the previous picture, to make the visualization easier.

Table 1 – Results of the classes guided by the evaluated distance facilitators.

Distance Facilitator	Total of students	Aproved Students			Failed Students			% Failure
		Good Grades (over 70)	Regular Grades (from 60 to 70)	Total	By grade	By absence	Total	
Facilitator 1	30	14	7	21	4	5	9	70
Facilitator 2	18	5	6	11	5	2	7	61
Facilitator 3	19	3	6	9	4	6	10	47
Facilitator 4	19	7	2	9	4	6	10	47
Facilitator 5	28	1	2	3	12	13	25	11
Facilitator 6								
Facilitator 7	20	11	0	11	5	4	9	55
Facilitator 8	29	5	0	5	24	0	24	17
Facilitator	30	0	5	5	17	8	25	17
Facilitator 10	29	7	9	16	6	7	13	55
Facilitator 11	20	0	0	0	9	11	20	0
Facilitator 12	30	12	3	15	6	9	15	50
Facilitator 13								
Facilitator	13	0	1	1	10	2	12	8
Facilitator 15	19	4	8	12	5	2	7	63

The discipline Logic and Discrete Mathematics frequently presents a high failure level, even in the classes in classroom. Considering this fact and the results of Table 1, it realizes that the four well evaluated facilitators had classes with regular to good results. However, the two following well evaluated facilitators presented classes with bad results. This exception is attributed problems inside the unit that directly affected the students development, leading the evasion of many students.

The facilitators evaluated with regular performance showed classes with a even worse result, comparing to the previous facilitators. In spite of having two classes with regular performance, it realizes that in one of them the bigger part of the students were approved with regular grades instead of good ones.

In the end, when we analyzed the result of the four facilitators that were bellow the expectations in their guidance activity, we realized a fact that may be tricky in the beginning. We have two classes with regular to good performance and other with bad performance. It is interesting to highlight here, that one of the classes was formed, in its majority, by students that already had a degree and for this reason, they were more mature and autonomous students, that were the ones who achieved good grades. By this reason, the distance facilitator bad performance didn't harm that much the development of these

ones. The other class that had an apparently good result had, in fact, only four students approved with good grades. The great majority of the students didn't have grades enough to be approved and only achieved the minimum grade in the final test. Besides, the classroom facilitator, that had degree in the area supplied, in several moments, the absence of the distance facilitator. Thus, the these two classes results show the true reality. If there weren't the personal issues that happened, it is really probable that these two classes had presented so unsatisfactory results like the other one.

6. FINAL CONSIDERATIONS

This article had the aim of showing the distance facilitator evaluation happened in the discipline Logic and Discrete Mathematics of the course TADS from Ifes, offered in the distance modality. It realized the impact of the facilitator performance in the final results of the classes guided by them. Well assisted classes tend to achieve better results than those where the facilitator presents deficiencies, such as absence, few encourage, long time to answer the students, late evaluations among others. Thus, the evaluation is necessary detect and correct these problems.

Part of the functionalities of the competences evaluation system developed was used, once that the aim was to have a first use of the too in Distance Education evaluations and of having a comparative between the distance facilitators performance and the classes results.

There still is a lot to do, so we can have more trustful results and a more efficient use of the evaluation systems and its results. In a first place, in this evaluation it is only investigated the specialist teacher perspective. The other perspectives are also extremely important, as the classroom facilitators and students perspective. It is also important to make a comparison using the self-evaluation tools to make it possible the identification of the real perception of the facilitator about his practice.

A second issue to be considered is the evaluation way. It was performed a summative evaluation, but there is also interest in the evaluation in its formative senses. It is necessary to highlight where the problems are and solving them before it's too late. For this, other process stages and tools must

be used, looking for diagnostic evaluations, goals attribution, follow up and later, final evaluation.

Finally, the last consideration to be made is that it's only evaluated the distance facilitators. However, obviously, they aren't the only ones to impact the teaching-learning process and the consequent classes result.

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