DISTANCE LEARNING IN CREA-MG's CORPORATE EDUCATION PROGRAM

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ABSTRACT

This study reports on the experience CREA-MG – Conselho Regional de Engenharia, Arquitetura e Agronomia de Minas Gerais had in implementing its Distance Learning in Corporate Education Program. The project began with the "Distance Training Program" through which a corporate course was held on the distance learning system that was aimed exclusively at employees rendering services and assistance. The process evolves on through to the implementation of the Council's Corporate University which caters to a more specific public such as the Confea/Crea System's Counselors, Inspectors and Professionals. It is based on a Situated educational approach, which supports learning in a context that is very close or identical to that in which the student will be applying the knowledge

acquired, with the utilization of the "being together virtually" approach in the virtual learning environment (VLE) Moodle web application.

Keywords: Crea-MG, Distance Learning, Corporate University, virtual learning environment (VLE), Moodle.

1. Introduction

The *Conselho Regional de Engenharia, Arquitetura e Agronomia de Minas Gerais* (the Regional Engineering, Architecture and Agronomy Council of Minas Gerais) – Crea-MG and all other Professional Councils are proxy bodies for the federal public administration with which every respective Professional must be registered. They are juristic personalities legally created by a specific Law and established for the undertaking of specific and characterized public activities. The *Conselho Regional de Engenharia, Arquitetura e Agronomia* - Crea-MG is an integral part of the federal Confea/Crea System and is regulated by Federal Decree 23.569 of December, 1933.

On April 23rd, 1934, the Confea was established. At the same time the entity's bylaws were instituted and approved by decision *Resolução N° 002,* which also regulated the organization of all regional engineering and architecture councils.

Since the official establishment of Crea – *4ª Região* on June 15th, 1934 until this date, Crea-MG has had 17 (seventeen) Presidents.

2. Beginning of the Distance Training Program at Crea-MG

At the beginning of 2006, in order to achieve one of the goals of the Management Plan developed by the Council´s current President, Civil Engineer Gilson de Carvalho Queiroz Filho, which is, more specifically, to promote

Professional Enhancement, the End-Goal Activities Superintendence identified the need to hold a corporate course aimed at the area of rendering services and assistance to professionals registered with the Confea/Crea System and to society at large. Planning was then started to implement the above-mentioned course. All data relevant to the rendering of services and assistance to the professionals and to society at large were then updated and organized as per the following topics: Individuals, Copyrights, Legal Persons, Technical Responsibility Note – ART and Technical Knowledge Collection. Therefore, the material was organized and structured into a Manual – the Standard Procedure Manual for Services and Assistance. Each of the above-mentioned topics corresponded to a chapter and, in each, all activities related to the services rendered were described in the following manner:

- What is it? – explains what the service is;
- Required documents – all documentation required for each service request;
- Be Aware – important items employees must observe in order to render flawless services.
- Check – all items that must be verified in the corporate system.

While developing the material, the team in charge focused mainly on presenting the information in an easily understandable language so as to facilitate the rendering of the services.

The Manual was originally created for an on-site corporate course just as they had traditionally been held at the Council. However, as the work evolved, the impossibility of bringing together 98 (ninety-eight) employees, scattered throughout 63 (sixty-three) different service rendering posts throughout the State of Minas Gerais became clear, as this would hinder the services rendered by the Confea/Crea System to society at large. A greater challenge was then to be faced: to develop a course which would reach all employees without drawing them away from their work posts.

With support from third-party consultants, the web application MOODLE - Modular Object Oriented Distance Learning was adopted and implemented. Moodle was chosen as the virtual learning environment (VLE) in which to make the content of the General Procedure Manual available as it features tools that allow for both synchronous and asynchronous access, in addition to being freeware. Asynchronous access was opted for, using a forum for answering questions. Concurrently, all necessary changes were made to standardize all information and procedures at all Crea-MG service posts.

The course was structured into 5 modules, following the chapters of the Standard Service Procedure Manual. During the first module of the course an extra week's time was given to allow employees to familiarize themselves with the Distance Learning platform and, correspondingly, with the services dealt with in the fourth module as they posed a greater level of complexity and difficulty. At the end of each module, a formative evaluation was conducted and a summative evaluation was held at the end of the course. As the main goal in this inaugural distance learning course was to garner the employee's support, those who were unable to take part in the formative evaluations, or even in the summative evaluation, were given a second or third chance to perform them. Finally, the first corporate education course held totally through distance learning amounted to 09 (nine weeks) of training in a "being together virtually" approach[2]. With this course, the "Distance Learning Program" was launched at Crea-MG. Training then became an online and part-time reality, through which the employee would not have to leave their work post, thus allowing them to undertake their routine activities and also take part in the corporate course with all their colleagues. A goal had then been accomplished – the transmission and standardization of information with no interruption of services, or that is to say, without causing any inconveniences to Professionals assisted by the Confea/Crea System or to society at large.

Every change generates a little discomfort. While implementing its first corporate distance learning course, dissatisfactions were noted. However, the

greatest dissatisfaction of all was implicit in the process itself as it required a rupture with the traditional onsite corporate courses, for which employees were kept away from their work posts and routine activities. There was thus a rupture with a 72-year-old culture (Crea-MG was founded in 1934, to this date in 2006) through which all courses held were full-time *in loco* courses. But not all was dissatisfaction. While some employees were opposed to the distance learning training, others supported it and praised the initiative. In addition to the thorough support given by the upper management, a relevant fact of the utmost importance is the effectiveness of the course.

The evaluation tool utilized during the course was a table for monitoring the services rendered by each employee. Any service presenting flaws or deficiencies was monitored and it was properly executed. At no moment were the data gathered used to punish or even discourage anyone. Following the end of the training program, the table was incorporated into each manager's monthly report with the goal of being part of a post-training evaluation.

The target public determined for this first corporate distance learning course was 100% reached with 90% of employees achieving an average performance level of above 75%.

It cost nearly five times less to conduct this first corporate distance learning course than it would have cost to promote an onsite course, which requires consulting contracts and overtime pay whenever there is the need to conduct any evaluations.

3. Other corporate courses held through distance learning

In 2007, another set of three new corporate courses were held through distance learning.

The first one was prepared to meet requirements of Resolution 494 of July 26th, 2006, which governs the re-registration of professionals in the Confea/Crea system.

The second corporate course was a recycling of the former program, which was deemed necessary due to a delay in the re-registration timetable.

The third course, held during the third and fourth quarters of the same year, was about Provisory Professional Registration with the Confea/Crea Information System – SIC.

Taking part in all these three corporate distance learning courses were service and assistance employees, in addition to all employees that were responsible for the execution of the service. The target public was increased by 45% in relation to the first corporate distance learning course, held in 2006.

All three corporate distance learning courses that were held in 2007 featured a shorter timetable. The first course lasted 5 weeks, the second one, two weeks and the third, only three days. Additionally, the contents presented were not as complex as those in the course content presented in 2006. Employees who at first had been resistant to the distance learning modality thereby gave in to this type of methodology.

No distance learning courses were held in 2008, as the deadline for re-registration in the system was extended, which led to a considerable increase in the service load. The opportunity was taken to review and undertake improvements in the methodology adopted for the distance learning courses.

4. The Crea-MG Corporate University

As the distance learning courses evolved, it became ever clearer that there was need to promote the continued education of employs at Crea-MG. With that purpose, the Planning, Management and Technology Superintendence devised a strategic project for the Corporate University. The Educational and Political Project was developed by a third-party consulting company. The Basic Implementation Project for the Corporate University was developed internally and is aimed at the creation of an instrument which will centralize and coordinate all training, qualification and continued education activities with respect to Crea-MG's value chain, in consonance with the institution's strategic objectives. Following the

development and approval of the Corporate University Project, the Human Resources Executive Office was put in charge of its application and execution.

Also within this objective, five new corporate courses have been structured and conducted. In the third and fourth quarters of 2009, two courses aimed at the employees were held:

- Financial Administrative System at Crea-MG, and

- Service Instruction GFI 2010 which deals with annual membership fees for Individuals and Juristic Personalities, Infraction Notices, Technical Responsibility Notes – ARTs and services, as of January 01st, 2010.

Three courses were held in the first and second quarters in 2010 targeting a more specific public, Counselours[5] and Inspectors[6] and one for employees:

- Counselor and Inspector Manual;

- Orientations for holding the VII CEP – State Congress of Professionals, and

- Resolution 1025/09 which governs the Technical Responsibility Note – ART and Technical Knowledge Collection

In the courses held in 2009, a reaction evaluation was conducted for the first time. Despite the expectation of an evaluation loaded with criticism, that is not what resulted. Among those employees taking part in the Financial and Administrative System in Crea-MG, 51% responded to the evaluation, which was not compulsory, and the distance learning modality was given unanimous approval. The quality of the material was praised, as was the trainers' performance. With respect to the 2010 GFI Service Instruction corporate course, which received the largest attendance of all the corporative distance learning courses held by the Council with 180 (one hundred and eighty) participants, 53% of them responded to the non-compulsory evaluation. Once again, the approval of the distance learning modality was unanimous and trainers' performance was praised.

In 2010, the reaction evaluation was applied exclusively in the course aimed at the employees – Resolution 1025/09 which governs the Technical Responsibility Note – ART and Technical Knowledge Collection. Once again, 65% of participants responded favorably to the distance learning modality.

5. Educational Approach

In all corporate distance learning courses held the main concern was always to deal with situations that are present the day-to-day activities, in other words, to discuss in the forums how to properly perform services and/or procedures.

All questions or experience reports from employees published in the forums during the course contributed towards constructing knowledge of other colleagues. Therefore, the knowledge and experience shared provided important contributions to group learning.

The application of the Situated Approach should then be noted. According to Filatro (2008, p.15), in the Situated Approach people learn while participating in communities of practice, progressing from one position of beginners to the position of experts through observation, reflection, mentorship and actual peripheral participation. In the same manner as with socio-constructivism, the situated approach stresses the social context of learning, with the difference that, for the situated theory, this context must be a lot closer – or identical – to the situation in which the student is to opportunely apply the acquired learning. Learning based on actual work and continued professional development are typical examples of situated learning. Here, the authenticity of the learning environment is just as significant as the support it provides, with less formal activities.

6. Final Considerations

The undertaking of these activities has allowed for important reflections regarding the corporate learning accomplished in a socio-constructive manner that furnishes more than just standardization, which is a goal for any

institution/company. It provides for the construction of new knowledge that is effectively based on daily difficulties and framed, as is the case presented here, by the ample legislation that comprises the Confea/Crea System.

The rupture with an old culture and the conquering of a new culture influenced the organizational strategy and provided the basis for the establishment of the Corporate University, which demonstrates the institution's commitment to and respect for not only its employees, but also its value chain and society at large, the Council's most valuable client.

Distance learning, which was initially rejected by some, is now a friendly tool of corporate education. There is no longer the illusion that distance learning is easier than an onsite educational program. Learning is produced continuously and is adapted to strategic needs.

Notes

[1] The author of this article is has a post-graduate degree in Distance Education. Has a degree in Business Management, with a focus on the Environment and Natural Resources. Has been an employee of Crea-MG for 13 years. Is coauthor of the Basic Project for the Implementation of a Corporate University (UC) at Crea-MG, and currently coordinates the Corporate University.

[2] The "Being Together Virtually" approach: enables both tutor and apprentice to have a high degree of interaction over the web, though physically separated. In this approach, the tutor is expected to create those circumstances that will aid the student in the construction of his own learning.

[3] Service Instruction: internal administrative instrument providing norms for the performance of services.

[4] Situated Approach: stresses that people learn when participating in practice communities, evolving from a position of beginners through to the position of experts. This process involves observation, reflection, mentorship and "actual peripheral participation" (by means of which beginners gradually come closer to participation in practice communities). In the same manner as in socio-constructivism, the situated approach stresses the social context of learning, but this context must be very close – or even identical to – that in which the student will be opportunely applying the knowledge acquired.

[5] Counselors are delegates elected by Trade Entities and Universities existing within the CREA's jurisdiction for a three-year term and are entitled to be reelected only once.

Mandates are considered honorable civil duty and declared by Law # 5.194/66 a "relevant service rendered to the Nation".

[6] Inspectors: are representatives elected by direct ballot from among each region's respective professionals. Mandates are considered honorable civil duty.

[7] Broadcast approach: There is no interaction between apprentice/tutor in this approach. This Distance Education approach consists of organizing information according to a sequence that a set of professionals understands to be the most adequate for promoting learning. The information is sent to the student, via technological means such as printed matter, radio, television or digital media such as CD-ROMs and the web. However, it is highly efficient for the dissemination of information to a large number of people, as the organized information may be delivered to a large number of people simultaneously.

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