

# A PLANNING PROPOSAL FOR THE CREATION OF ROOMS ON THE VIRTUAL LEARNING ENVIRONMENT (VLE) - MOODLE: ADAPTED ACTIVITIES MAP

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## **Category (contents and Abilities)**

### **Educational Sector (Undergraduate Education)**

#### **Nature (Planning Models)**

#### **Class (Innovative Experience)**

### **SUMMARY**

*The production of the instructional material has been shown as one of the key-spots of success in Distance Courses. However, consolidating a work team and methodologies that make possible the production of these materials is not a simple task. Qualified people that have abilities inherent to this teaching modality are necessary, and also well established methods that allow the planning and the construction of a quality product. This article describes a planning proposal used for the production of instructional materials by the Distance Education Center of the Federal Institution of Espírito Santo - DEC/Ifes. The proposal explains a model (or a way) of planning for the creation of rooms on the (VLE) - Moodle by the use of the Adapted Activities Map.*

**Key words:** Planning, Instructional Materials, Virtual Learning Material, Adapted Activities Map.

## **1. Introduction**

In the last years, it happened a proliferation of several types of distance courses. But some institutions have been focusing only in this massive availability when it should prevail the offer of courses with quality, not only the simple offer of places. And the quality of the distance courses is intimately connected to several factors, as the training of the team who is involved in it, the professors' educational background, the political pedagogic project of the course, the physical structure and the instructional material to be used, among others

The production of instructional material has been shown as one of the key-spots of success in distance courses and it brings particularities that aren't usually found in the courses in attendance. It means that the production of materials in distance courses is a different activity that needs strategy, techniques and professionals with specific knowledge to reach the desired results.

As Moore e Kearsley [1] mention, a distance education course requires not only the content specialist, but also professionals from the instructional area, that might organize the content according to what is known about the theory and practice of the information management and learning theory. Besides, they also need to be elaborated by specialists that know how to make the better use of each available technology.

In this context, it is presented a strategy used for the production of instructional materials by the Distance Education Center of the Federal Institution of Espírito Santo - DEC/Ifes. This strategy is based on a process that involves many professionals, with different specialties, which the consolidation happens by the use of a resource called "adapted activity map", this article's discussions main focus.

## **2. Planning of the Virtual Room Production Process**

The project management in distance courses is indispensable due to the several areas involved with different tasks necessary to the implantation of a distance course. One of the project management stages is the planning. In a DEC's project, planning in advance is necessary, considering the specificities required by the instructional material.

The planning is the wire conductor of DEC, because in this teaching learning modality, the student is the center of the process forcing a detailed planning of the stages of pre-production, production and post production of the course [2].

Another stage of the DEC's project is the elaboration of the instructional material, that has as a great challenge: changing the teaching staff culture. It is known that teaching in distance is different from teaching in attendance, even for professors with a lot of experience in education. For the professors that already use collaborative pedagogic practices and medias, this difference presents itself as a simpler way

According to Moran [3], we're learning how to develop different pedagogic proposals for different learning situations. It realizes that in DEC, the classroom universe doesn't belong only to teachers and students. It has the use of a Virtual Learning Environment (VLE), where it is recorded all the participations, interactions, performance of proposed activities, content presentation and other functionalities according to the used LEV. The contents are reviewed and evaluated by the instructional designer, text reviewer and pedagogue. It observes that opening the "classroom universe" demands time. It is noticed certain resistance by some professors in making the adequacy of the material used in the education in attendance for the distance modality.

At DEC/Ifes, it was created a model of Activity Map with basis in others already existent, with the purpose of making the professor to diversify his way of planning and not influence the student only with reading and exercises.

The Picture 1 presents the suggested model:

S	Tema principal	Subtemas	Objetivos específicos	Atividades	T	P	Recurso do Moodle	Grau de Dificuldade*	Nota	%	Observações
01											

**Picture 1** – Activity Map Model

**Subtitles:**

Tema principal: Main theme

Subtemas: Subthemes

Objetivos específicos: Specific Goals

Atividades: Activities

Recurso do Moodle: Moodle Resource

Grau de dificuldade: Difficulty level

Nota: Grade

Observações: Observations

Each item is created to attend the methodology of the DEC/Ifes' courses. Visualizing the Picture 1, it presents each item (column) from the left to the right:

- **S (weeks)**

The courses offered in the distance modality can be distributed by classes, weeks, modules, etc.

- **Tema Principal – Main Theme**

The unities or main themes of the disciplines/ courses are the given contents. In the courses that offer the printed material, the group of themes must form its summary. It is important to highlight that the chapter must last more than a week.

- **Sub-temas - Subthemes**

The subthemes are the topics in which the main theme will be separated according to each chapter

- **Objetivos Específicos – Specific Goals**

In this field, the educational purposes of each subtheme and of the activities that will be planned in the map, must be defined.

- **Atividades - Activities**

In this column of the map, it writes about all the activities that will be proposed to the student. It is important that the professor tries to diversify the activities, creates activities that involve reading, Forum discussions, questionnaire filling, group work, lab experiment, among others.

- **T and P**

The T column must be marked for the theoretical activities, it means, the ones which involve only reading. The column P must be marked for the activities that have practice characteristics (exercises, experiments, group work, etc).

- **Recurso do Moodle – Moodle Resource**

In this column, it must be informed the Moodle resource that will be used to do the proposed activity

- **Grau de Dificuldade – Difficulty Level**

The difficulty level was divided into: low, average and high, according to the demanded effort and time to do the activity. This column will be suitable for the instructional designer, together with the professors, to reorganize the activities according to the number of disciplines offered at the same time.

- **Nota - Grade**

In this column, it will be informed the grade related to an activity.

- **% (Percentual) - Percentage**

The % column presents how much of the percentage related to the working hours of the discipline, will be reached with the proposed activities. In DEC, it is complex to determinate a specific number of hours to attend a particular content because each student works in a personal rhythm.

- **Observações - Observations**

They work to indicate the instructions that must be repassed to the facilitators. Example: software install, table of activity correction, necessary resources, auditory scheduling, among others.

After the delivery of the Activities Map, the instructional designer evaluates the material with the aim of creating instructions that favors the student's learning. After the activity map approval, the professor begins the process of writing the printed material, which passes under the instructional designer and text reviewer's reviews.

Finished the printed material, the professor begins an adequacy to the initial Activities Map, later called as Adapted Activities Map (Picture 2), that aims to adjust the contents and to detail the proposed activities to insert them in the (VLE).

In a previous experience, it was realized that it wasn't that simple to let the professor to edit his class on the VLE because many professors, even the qualified ones, had difficulties with the editions and it took a long time to solve technological matters that wouldn't lead to any improvement of the teaching-learning process.

By the experience obtained with the professors editing their classes on VLE, the DEC/Ifes' team decided to increase and qualify the Material Production Team, so this one was responsible for the materials edition on the environment. Even though, it was noticed that the professor needed to know about the material edition on VLE to manage his discipline. Without this knowledge, the

professor wasn't able to do simple activities such as, for example, moving tasks and modifying dates in his room on VLE, during the course of his discipline.

**Picture 2** – Example of an Adapted Activities Map

During the whole planning process and material elaboration, the professor is encouraged to use animations, videos and tutorials. The instructional designer together with the professor evaluates the activities map and checks the contents that might be better presented as a media.

### 3. Forms for the creation of activities on the VLE - Moodle e Medias

In the beginning, there were created forms for the following resources of Moodle: Task, Forum, Questionnaire and Wiki. In the forms, besides the compulsory information for the creation of the resources on Moodle, there were created some items to improve the organization of titles and proposed activities. In the first course offered by DEC/Ifes, we had some student's questionings about the activity layout, for example, type's size, number of pages, evaluation methods and others.

Some forms present the necessity of inserting the desired layout for the activity and the correction matrix to help the distance facilitators to evaluate the students in a more homogeneous way and also for the students know what will be evaluated.

The picture 3 presents a screen on Moodle for the creation of a task and the proposed form for the creation of the task. It observes that, concerning to data filling, the Moodle is simpler. Now, the form asks for more data to expand the titles' details. The processors' familiarity with the text editor made the form more attractive than editing the room directly on Moodle.

**TAREFA ONLINE**

- Qual o tipo da tarefa? (Clique abaixo para escolher)  
Tarefa Online
- Quais as datas de início e término da tarefa?  
De dd/mm/aaaa até dd/mm/aaaa
- Qual o título da tarefa?
- Formule um enunciado para a tarefa.
- Indique qual será o valor atribuído à tarefa.
- Descreva o objetivo da tarefa.
- Defina a metodologia a ser utilizada pelos alunos ao realizar a tarefa.
- Fornecer, em arquivo separado, a grade de correção para avaliação das tarefas.
- Descreva a formatação padrão para envio da tarefa.

**Nome da tarefa:** [ ]

**Descrição:** [ ]

[ Trebuchet ▼ | 1 (9 pt) ▼ | Lino ▼ ]

[ B I U T A ↺ ↻ ⌂ ]

Caminho: [ 2 imgs ]

**Nota** [ 100 ▼ ]

Disponível a partir de [ 1 ▼ | maio ▼ | 2010 ▼ | 15 ▼ | 30 ▼ ] ☐ Desabilitar

Data de entrega [ 8 ▼ | maio ▼ | 2010 ▼ | 15 ▼ | 30 ▼ ] ☐ Desabilitar

Impedir envio atrasado [ Não ▼ ]

**Picture 3 – Resource on Moodle versus Proposed Form**

The DEC/lfes' Material Production team elaborated several forms for the media creation requirement. They are: illustrations, photos, animations, videos and tutorials. In the beginning, this requirement was elaborated by the instructional designer together with the professor and it wasn't contemplated in the Adapted Activities Map. Later, to improve the incentive, the organization and the elaboration of the medias, it was decided to also insert these forms of medias used in the Adapted Activities Map. The picture 4 presents an example of animation and the form for medias requirement.

**Formulário de Pedido de Produção de Animação**

Nome: \_\_\_\_\_ Data: \_\_\_\_\_

Objetivo pedagógico: \_\_\_\_\_

Título do Roteiro: \_\_\_\_\_

Enredo: \_\_\_\_\_

Personagens (humanas e/ou não humanas):

Nome	Descrição Física	Descrição Psicológica	Função na Animação

Gráfico simplificado de navegação:

Quantidade de cenas previstas: \_\_\_\_\_  
 (Repetir o quadro para cada cena e ou fase da ação)

Título da Cena: \_\_\_\_\_  
 Tela # 001

Texto	Imagem: (story board)

Explicação sobre a ação: \_\_\_\_\_

**Picture 4 – Animation and an example of form**

The necessity of an area of media production inside the education institutions increases with the offers of distance courses, demanding a specialized team who produces and uses medias that make the teaching-learning process easier. For this, it needs an effective work to integrate the

discipline planning to its offer on the virtual environment. So, it highlights the importance of the instructional designer, the professor and the pedagogue, working systematically.

#### **4 – Adapted Activities Map *versus* Planning Room on Moodle**

At CEAD/Ifes, all the courses have a specific room on Moodle for the disciplines planning. All the Adapted Activities Map are inserted in the planning room, allowing a better visibility among the professors that work in a particular course, about the presented contents and the adopted pedagogic practices.

The activities Map are added in the room and it is created a link for each form according to the chosen resources or a link for some kind of file.

After the planning of all the disciplines, the instructional designer creates an integrated activities map to check if a particular week has many activities with high level of difficulty and also to check if it's possible to promote the interdisciplinarity in some contents or proposed works.

In the planning room it is available: tests schedule, distribution considering the discipline organization, explanations about the forms to be filled and other information concern to the discipline planning.

#### **5. Advantages of the Adapted Activities Maps Use**

It's important to highlight the importance of having a virtual disciplines planning room for each course. Each professor will find in the planning room, a web page with his Activities Map. From that, he will make the Map enlargement. So it has the necessary adaptations for the materials construction and starts being called as Adapted Activities Map.

There are inserted by the professor in the adapted activities map, links for forms, filled by the professor with the activities details previously described in the activities map. The activities map makes possible a description of an activity in a larger context, instead of an isolated one, providing a better comprehension and reducing, considerably, the possible inconsistencies and/or redundancies.

Among the advantages obtained with the adapted activities map, it is possible to refer:



- Bigger collaboration between the production team, instructional designer and content teacher of the course;
- Bigger interaction between the Moodle editor and the professors;
- Storage of activities forms in the virtual planning room in a systematic and organized way;
- Shared repository for all the information related to the course, such as course project, tutorials, forms, schedules, etc;
- Easy follow-up for the instructional designer of the activities details, made by the professor;
- Significant reduction of the required time for the planning of virtual rooms;

In general, it can affirm that the use of adapted activities map make possible an increase of productivity and competence in the virtual rooms planning and edition.

## 6. Conclusions

According to Mattar [4], the several resources used by the distance education go against one of the modern educational theory basic principles: "The human being progress in learning in particular rhythms and, many times, very different from each other."

But to efficiently use theses resources, the institution must have a team of specialized professionals and a strategy for the production of instructional materials for its courses. This is CEAD/Ifes' case, that counts with a diversified team which, in this article, was emphasized the material production team, responsible for the systematization and the concretion the material production of the Ifes' distance course.

As it is shown, the strategy used by DEC's material production team - through the creation of adapted activities map - has been very efficient and effective, as in creating higher quality contents as in the team integration, each one with its different specialties.

But, it's still possible to glance improvements to be done. So, it is suggested, as a future work, the construction of a tool to automate the adapted activities map. This way, the forms will start being filled in the own tool and not

anymore by using annexes published as links, as it happens nowadays. The tool will be also able to check inconsistencies as, for example, having more than one activity with a difficulty level considered as high in the same week or a test to be given on the same date.

## 7. Referencies

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