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## INTERACTIVE TEACHING-LEARNING METHODS WITHIN THE ACADEMIC COURSE

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## Abstract

This article presents methods for organising and conducting such a course, entitled 'Forms of organising the educational process. The lesson. The main types of lessons', for the students specializing in the Pedagogy of Primary and Pre-school Education, second year of study, subject of Theory and Methodology of Teaching. The aim of this course, specifically, is for the students to reflect more on pedagogical knowledge, to reference information from other courses, to ask others and themselves relevant questions that raise problems, to process the information creatively and individually, to make observations and critical comments with regard to the information presented, to logically relate and integrate information into their own cognitive system, to make connections between pieces of information while recalling previously gained knowledge, to relate and interrelate key pedagogical terminology in a descriptive way, to restructure ideas by means of cognitive organizers, to practically illustrate pedagogical knowledge with examples, to synthesize as well as organize information in an accessible manner, to maintain a positive attitude towards the subject, and especially towards the teaching profession. The development of the course had a logical, unitary structure. To determine the efficiency of the course, we analysed the students' notes. This study presents some conclusions drawn from analysing the students' notes: we focused on observing if notes taken during the class reflected their theoretical knowledge gained throughout the course, and especially if we have succeeded, during the course, to develop the students' ability to reflect and to help them make connections between pedagogical knowledge.

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Keywords: Academic course, methods, students, pedagogical knowledge, students' notes.



## 1. Introduction

In order to successfully teach university courses, we strongly advocate for the use of energizing training strategies aimed at the active intellectual participation of students in the teaching-learning process that would support the development of efficient intellectual activity skills (problem solving, critical thinking, active reading) (Deese & Deese, 1979). Generally, the course should focus on the development of the following competencies in students: accumulation of extensive knowledge (Chiş, 2005), especially the ability to understand the ideas presented in the course, planning and organising, the ability of synthesis and abstraction, problem solving, critical thinking, interpersonal abilities, group-work abilities, ability to apply knowledge to practice, to adapt to new situations, to think and act autonomously, to take initiative, (Bocoş & Jucan, 2017), etc.

## 2. Problem Statement

The planning of the course that aims to make use of interactive teaching methods requires the teacher to prepare the subject/content to be addressed in advance, depending on the level of education/knowledge of the students and the nature of the teaching methods to be used (Entwistle, 1983). A sketch of the lesson needs to be made, summarizing the key points, constructing the examples to be presented to the students using various presentation methods (drawings, diagrams, demonstrations, case studies) in order to increase the students' interest and to stimulate their intellectual development.

There are multiple ways of conducting an interactive course (Ertmer, 1996): formulating one or more questions at the beginning of the course to be answered at the end of the course or formulating a problem or problem situation. The difference between this technique and the formulation of a question is that the question involves a single sentence, while the problem or problem situation consists of 1-2 phrases detailing the idea. Examples of the phenomenon to be presented can be given, a summary of previously taught information can be provided, information that is directly related and essential to the understanding of the material that is being taught (Fleming & Mills, 1992). It is important to provide an overview of the material to be presented (Vintanu, 2001), and it is imperative that the goals to be achieved within the course are stated. The presentation of the sketch at the beginning of the course (on the blackboard, on paper, on handouts) is also considered necessary. The teacher will refer to the sketch as he progresses in the presentation of the material. The teacher constantly emphasizes the main ideas and generalizations that can be taken from the material (research shows that these are best remembered by the students), the ideas are rephrased in two or three different ways (to be understood as well as possible and by as many students as possible). We include here any concrete examples as well. The important ideas are emphasized (through paralanguage- by raising the tone or even by explicitly indicating - 'Write this down; This is important; This can come up in your exam'). During the course, small breaks for everyone to catch their breath or between different ideas can be included to give students time to write everything down and reflect on the content. At the end of the class, the conclusions will be accentuated, new examples may be used, or students may be asked to summarize the main ideas and to ask questions.

By asking questions during the course, the teacher-student information flow turns into an interactive process that intellectually challenges the student. Explanations and debates are inserted and used whenever the opportunity arises. Students are explicitly told to ask questions when this is desired, the teacher expects

and approves the students' contribution. If the teacher asks a question at a certain time, he expects to receive an answer immediately. The question is repeated, rephrased, modified.

#### 3. Research Questions

In the present study, the question we are concerned with is whether the interactive way of conducting a university course proposed by us is an effective way to facilitate the learning process of the students.

## 4. Purpose of the Study

Our goal is to propose different ways of conducting courses through which interactivity during the classes could be achieved (Jucan, 2009): questions and debates are used throughout the 50 minutes of the class, we use brainstorming to solve certain problems left unresolved from the last class; we ask questions pertaining to previous lessons or work tasks. We also take breaks of two or three minutes in length throughout the class in order to allow the students to put their notes in order and to ask themselves questions about the content that they were just presented. In case of a short lecture, the time left can be reserved for questions that would challenge the students to apply, to analyse, or to make connections between the information that they received and the knowledge that they have already acquired. Asking questions during the class has the purpose of challenging the students to explain the important aspects/concepts through examples or analogies (Fleming, 2001).

## 5. Research Methods

In what follows, we will describe, as an example, how the lesson 'Forms of organising the educational process. The lesson. The main types of lessons' was conducted. The lesson is part of the course Theory and Methodology of Teaching. This course is meant for the second-year students of the Pedagogy of Primary and Preschool Education specialization, and this method of working has been practiced with 110 students enrolled as full-time students.

It is important to note that the students were taking notes throughout the entire class using the Cornell system.

## 6. Findings

#### 6.1. The lesson objectives

We presented the objectives to be pursued during said class to the students:

O1: to define the key terms: forms of organising the educational process, forms of organising the students' activities, the lesson, types of lessons;

O2: to analyse the advantages and disadvantages of the educational system organised in classes and lessons;

O3: to learn the classification of the different forms of organising the educational process, based on the given criteria;

O4: to learn the different types of lessons presented;

O5: to identify the methodical aspects involved in efficiently teaching a lesson;

O6: to learn the specific stages of each type of lesson;

O7: to write down the information presented during the class, using the Cornell note-taking system.

We suggested that the students take notes in the following manner: they were to write down the key terms in the relevant column, and the actual notes taken during the class in their respective column. We also used the blackboard to note down what the students were writing down in their notebooks, using the Cornell system.

#### 6.2. Key words

Together with the students, we proceeded to identify the key terms: forms of organising the educational process, forms of organising the students' activities, the lesson, types of lessons.

#### 6.3. Implementing cognitive organizers

Each student realised their own cognitive organizers, establishing connections, in an individual manner, between the key terms and the existing relations to concepts that they previously learned. The diagrams created managed to entail the personal, individual analysis of the new content, including explanations, characterizations, highlights, both from a theoretical and practical perspective.

## 6.4. The analysis of the new content

The forms of organising the educational process refer to the organisational structure or organisational framework in which the didactic activities take place.

The forms of organising the students' activities refer to the specific methods for planning and implementing the interactions between the teachers and students.

The classification of the forms of organising the students' activities

1) Frontal instruction - implies guiding and controlling the activity of all the students in a classroom, simultaneously, in a specific time period, in accordance with certain shared educational objectives. The teacher transmits the information from the front of the classroom, gives explanations, demonstrations, arguments, formulates questions, directs the activity of all the students, etc., while they complete the assigned learning tasks, simultaneously and in the same rhythm.

2) Individual work applies to the following situations:

- When the teacher is instructing one single student;
- When each student accomplishes the learning tasks individually, separate from his classmates, with or without help from the teacher;
- When the student is self-teaching. (Bocoş, & Jucan, 2017)

3) Group work refers to the cases in which the teacher guides the learning activities of a class of students divided into different groups, all following certain educational objectives, either identical between the groups or distinct.

The groups are comprised of a minimum of 2 and maximum of 8 students and can be homogeneous (if they are formed based on well-established criteria, with a precise structure) or heterogeneous (if they are not criteria-based but left to the preferences of the students).

4) Pair work, where the pairs are either established by the teacher according to certain criteria, or randomly, left to the students' choice.

5) Mixed organisation of the students' work refers to organising the educational process by using a combination of the aforementioned forms.

We consider the lesson to be a fundamental didactic unit, a form of the educational process through which a quantity of knowledge is assimilated by the students in a predetermined amount of time, through intentional, systematic activities.

Furthermore, the lesson represents a unitary didactic and educational programme, a system of knowledge, intellectual abilities, practical abilities, operational objectives, material and methodological resources (methods, techniques, processes, actions and operations) meant to engage the students.

The lesson type refers to the way in which the lesson is designed and realised, determined by the fundamental objective pursued by the lesson, which represents the constant element of the lessons in the category. Lesson types are useful when planning and teaching lessons, as they are sufficiently flexible models. We note, in what follows, the main types of lessons attested by the various bibliographical sources and validated by educational practices:

- Lessons centred on transmitting and receiving new knowledge the type of lesson where the sequences in which the teacher is communicating new content take up most of the allotted time for the lesson, the students appropriating new knowledge and behaviours, unfamiliar to them before this moment. This type of lesson usually takes place at the beginning of the school year, at the beginning of the semester, or at the beginning of a unit of content.
- Lessons centred on acquiring new content In approaching the new content, the teacher relies
  on the previous knowledge of the students and guides them in the construction of new
  knowledge, with the foundation for this being the information the students already possess.
- Lessons centred on developing intellectual skills, habits or abilities the type of lesson in which the students practice intellectual processes, organize and carry out independent activities, developing their intellectual activity techniques and capacities.
- Lessons centred on developing practical skills, habits or abilities the type of lesson in which the students are accustomed with organising and carrying out practical activities, where they apply their acquired knowledge and skills, developing and practicing their behaviours.
- Lessons centred on the revision and systematization of skills, habits or abilities the type of lesson in which the teacher aims to improve and perfect the students' knowledge and intellectual and practical competencies by emphasizing the existing correlations between different knowledge and skills. This is usually achieved through a revision plan.
- Lessons centred on controlling and evaluating knowledge the type of lesson meant as an assessment, highlighting the differences that took place in the educational process. This type of lesson has an observational and prospective value, as it shows the level to which the students and their teacher achieved the objectives pursued and what they should pursue in the future, towards this end.
- Mixed or combined lessons imply activities corresponding to all the fundamental objectives (acquiring new knowledge, developing intellectual and practical skills, revision and systematization, control and evaluation).

### 6.5. Asking questions

The questions that we devised together with the students at this point in the lesson were:

- 'What are the forms of organising the educational process?'
- 'What are the forms of organising the students' activities?'
- 'What is a lesson?'
- 'What are the main types of lessons?'

#### 6.6. Reflection

The students reflected further on the following aspects:

- The importance of the forms of organising the educational process.
- Analysing the relations between the forms of organising the educational process, the educational objectives, the content taught, the didactic methodology and educational means.
- Exemplifying a particular type of lesson.
- Drafting a guiding didactic structure, namely the stages for each type of lesson.

## 7. Conclusion

At the end of the class, we checked the notes of all the students (Appendix 1) and we analysed the manner of approaching this lesson. The majority of the students stated that the notes taken in this manner help them, first of all, in learning the new content. Furthermore, the students will retain the information, reflecting on the didactic structure of the lesson. If they mentally project the general structure of each type of lesson, they will manage to learn the content more easily. Using examples and practical illustrations will facilitate acquiring the new knowledge and will help the students establish deeper connections between all the components of the learning process.

We consider this method of conducting a class to be most useful and we recommend that it be employed by other teachers as well.

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## Appendix 1

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