The development of Human Capital in the global crisis context

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Abstract. The method is “the way to follow in the joint work of educator and students in order to achieve the goals of education, i.e. education and information of students”, believes the reputed teacher Constantin Cucos (1998). Modern strategies of teaching-learning-evaluation put great emphasis on interactivity. This gives students the opportunity to demonstrate what they know as a set of understandings, skills and abilities (competencies). This paper tries to compare the teaching – learning – assessment traditional methods with the modern methodology in Economics learning. This paper will highlight the advantages and disadvantages of conventional and modern methods used in the study of Economics based on their application on various topics. I’ll try to find an answer to the question: Are the modern methods complementary to traditional ones?

Keywords: assessment, competence, learning, method, teaching

JEL Classification: A21, I21, I25.
REL Classification: 4A, 4B, 5A.
1. Introduction

This paper contains a description of some traditional methods of teaching-learning-assessment, as well as some modern methods. It also tries a comparison between traditional and modern methods of Economics learning. It has been used traditional and modern methods in teaching – learning process for the “Unemployment” theme, as well as in the evaluation process, for “The cost” theme. This paper includes: in section two – the state of knowledge in the specialised literature, in section three are traditional methods of teaching-learning-assessment, as well as modern ones, and finally the conclusions are presented.

2. Literature review of teaching - learning – assessment methods

The specialised literature has addressed over time the teaching – learning – assessment methods. Etymologically, the word comes from the Greek word “method”, which means “the way to” (Jinga and Istrate, 1998: p. 257). Teaching methods can be defined as “ways of action by which students, independently or under the guidance of the teacher, acquire knowledge, develop their skills and abilities, attitudes, their view about world and life” (Ionescu and Chiş, 2001: p. 126). The method is also defined as “road or way to follow in the joint work of the educator and the educated ones, to achieve the goals of education, i.e. for the information and the training of the educated people” (Cucoş, 1998: p.143). “The method is the path chosen by the teacher and implemented by lessons or extracurricular activities with the students help and in their benefit, and in all cases requires cooperation between teacher and student” (Văideanu, 1986: pp. 3-4). We can find approaches to teaching methods also in the Pedagogy manual, where the method is “a way the teacher follows to enable its students to often find themselves their own way to follow in the learning process” (Cerghit, 1980: p. 10). Based on these definitions I think it is very important how the working method is selected. Given the reforms that took place in the Romanian education system, the current trend is to create skills and abilities (competencies). To do this, there is a need for some changes also in the activity of the teacher. George Văideanu makes clear these changes. “The move from a school with one actor (or a main actor) to a bipolar, two actors, a process that gives students the right to learn through participation, is about to become a reality throughout the school.

The teacher is and remains the leader and organizer of teaching and learning, but it fulfills its educational role only in so far as it helps students to discover their latent resources, to acknowledge their errors and shortcomings, to assimilate the techniques and rules of intellectual work, to participate in the search for truth, to learn individually and in groups, making efforts and achieving success and satisfaction” (Văideanu, 1988: p. 210).
The methods used in teaching-learning-assessment process can be classified according to several criteria. Given the teaching aim pursued, the methods can be divided into teaching-learning assessment methods and evaluation methods. By the degree of the learner participation in his own training action, the methods are expository methods and active methods.

Teaching and learning methods:
- a) Traditional: didactic exposure, teaching conversation, demonstration, observation, working with the manual, exercise.
- b) The more recent (modern): problem-solving, case study, discovery learning

Assessment methods:
- a) Traditional: current oral check, current written verification, periodic review
- b) The more recent (modern): check at the end of the chapter, docimologic verification tests (current or periodic).

Depending on the nature and content of training objectives, we distinguish three types of methods:

I. Methods of transmitting and knowledge acquiring

1. Oral communication methods:
   - Exhibition: - story teaching
   - description
   - explanation
   - lecture
   - Dialogue (conversation): - conversation
   - Debate kind seminar
   - Problem-solving

2. Written communication methods:
   - Explanatory reading
   - Independent reading

II. Methods of exploration and discovery

1. Methods of direct exploration of objects and phenomena:
   - direct observation
   - research documents
   - experiment
   - Case Study

2. Exploration methods by reality substitutes:
   - demonstration
   - modeling
   - algorithmic
III. Methods based on practical action (skills training):
1. Active methods:
   - academic year
   - Case Study
   - The lesson
   - I know / I want to know / I’ve learned
   - cluster
   - Phillips 6-6

2. Simulative methods:
   - Role play
   - modeling
   - simulation

3. Methodology
In this paper we try applying both traditional and modern methods in the study of Economics and the comparison between the two types. Based on the comparison made, it will be identified a number of advantages and disadvantages of these methods.

A. Methods of teaching - learning:
   a) Traditional:

   Lecture - is a systematic exposition of information. Communication is uninterrupted, systematic and coherent content of ideas that fit within a theme in the school curriculum. Lecture resort to scientific methods of presentation and interpretation of knowledge (hypotheses, theories, logical arguments).

Unemployment
1. What is unemployment?
   - Definition
   - What is the unemployed?

2. Elements that characterize unemployment
   - Unemployment level
   - Duration of unemployment
   - Structure of unemployment
   - Intensity of unemployment

3. Processes that generate unemployment
   - Job losses
   - Increasing the supply of labor force
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4. Measures to reduce unemployment
   ▪ Creating new jobs
   ▪ Retraining
   ▪ Securing jobs

Advantage: usage of scientific methods of presentation and interpretation of knowledge;

Disadvantage: providing large amounts of information.

b) Modern (alternatives):

Method “Phillips 6-6” - is a method that helps to express the student personality. The teacher has the role of directing the learning.

Steps taken:
1. The class is divided into heterogeneous groups of 6 students.
2. Announcing the theme / subject.
3. The teacher briefly explains the purpose and conduct of the activity, specifying the duration (4 minutes - organizing, 6 minutes - discussion group, 2 minutes - presentation the report of the each group by a student delegate).
4. Every group designates a coordinator and spokesman.
5. 6 minutes of group discussions take place, sharing ideas.
6. It is drawn (after 6 minutes) a report showing the result reached.
7. Group spokesman submit the report to other groups.
8. Teacher and rapporteurs present a synthesis of reports setting out the final solution.

The learning unit: “Unemployment”
1. The class is divided into heterogeneous groups of 6 students.
2. The teacher announces the topic: “Unemployment - a necessary evil?”.
3. Teacher explains briefly that this work will help to identify the market in which the imbalance occurs, correlations between macroeconomic imbalances. It also presents the conduct of activity, specifying the duration (4 minutes - organizing, 6 minutes - discussion group, 2 minutes - presentation of the each group report by a student delegate).
4. Each group shall designate a coordinator and spokesman.
5. 6 minute group discussions take place, sharing ideas.
6. It is drawn (after 6 minutes) a report showing the result reached.
7. Teacher and rapporteurs present a synthesis of the reports, setting out the final solution i.e., unemployment is bad, but necessary as it leads to increased competition in the labor market, which is reflected in increasing the quality and quantity of goods on the market, reduce inflation.
Advantage: obtaining many ideas by stimulating the imagination of all participants

Disadvantage: failure to comply within the time limit imposed (6 minutes) and non-involvement of all students.

**I know / I want to know / I’ve learned**
1. Professor announces the topic: “Unemployment” - 2 minutes.
2. He divides the class into pairs - 3 minutes.
3. Students are asked to make a list of what they know about the topic - 10 minutes.
4. During this time the teacher makes on the board a table with the following columns (*I know / I want to know / I’ve learned*).
5. Students present what they wrote, and the teacher completes the first column of the table - 5 minutes.

<table>
<thead>
<tr>
<th>I know</th>
<th>I want to know</th>
<th>I learned</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Unemployment is a sum of money.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Unemployment affects people.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Unemployment appears on the labor market.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Unemployment payment is received by the people without a job.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

6. Students are asked to complete a list of what they want to know about this topic - 5 minutes.
7. Teacher completes the second column of the table - 5 minutes.

<table>
<thead>
<tr>
<th>I know</th>
<th>I want to know</th>
<th>I learned</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Unemployment is a sum of money.</td>
<td>1. What is unemployment?</td>
<td></td>
</tr>
<tr>
<td>2. Unemployment affects people through job losses.</td>
<td>2. Who affect unemployment?</td>
<td></td>
</tr>
<tr>
<td>3. Unemployment appears on labor market.</td>
<td>3. Are we unemployed?</td>
<td></td>
</tr>
<tr>
<td>4. Unemployment payment is received by the people without a job.</td>
<td>4. When a person is declared unemployed?</td>
<td></td>
</tr>
<tr>
<td></td>
<td>5. What’s the number of unemployed in Romania?</td>
<td></td>
</tr>
<tr>
<td></td>
<td>6. How high is unemployment?</td>
<td></td>
</tr>
<tr>
<td></td>
<td>7. How long are granted unemployment benefits?</td>
<td></td>
</tr>
</tbody>
</table>

8. Students are asked to read from the manual the first part of the lesson Unemployment. – 5 minutes.
9. Students return on answering questions while the teacher completes the third column. - 5 minutes.
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<table>
<thead>
<tr>
<th>I know</th>
<th>I want to know</th>
<th>I learned</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Unemployment is a sum of money.</td>
<td>1. What is unemployment?</td>
<td>1. Unemployment is a macroeconomic imbalance affecting the working population by losing their jobs or by not finding a job.</td>
</tr>
<tr>
<td>3. Unemployment appears on labor market.</td>
<td>3. Are we unemployed?</td>
<td>3. Students who do not search for a job, do not want to work, are not unemployed.</td>
</tr>
<tr>
<td>4. Unemployment payment is received by the people without a job.</td>
<td>4. When a person is declared unemployed?</td>
<td>4. A person is unemployed if:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Is able to work;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Has the legal age of employment;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Is willing to work;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Is looking for a job and can not find it;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Has applied to the Bureau of Labor Placement.</td>
</tr>
<tr>
<td>5. What's the number of unemployed in Romania?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. How high is unemployment?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. How long are granted unemployment benefits?</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

10. Students are not answered questions 5, 6 and 7.
11. Students compare what they knew of what they learned in that time - 5 minutes.
12. Students have the task to consult other materials and answer questions 5,6 and 7. Next class the discussion about Unemployment will continue, based on these answers.

Advantage: involving students in completing the table using personal knowledge; Disadvantage: difficult to formulate relevant questions about the topic under discussion.

B. Assessment methods:

a) Traditional:

**Written verification** - is achieved by an assessment test. It consists of several items. Items used may be objective (dual choice, pair type, multiple choice), half-objective (short response/completion, structured questions) and subjective (problem solving type, essay type items).

**Test of continuous/formative assessment**

Economics, class. XI
Learning Unit: producer behavior

Topic: The cost

Skills assessed:
- Analysis of the factors of production efficiency- Designing a rational and efficient conduct of the manufacturer / developer, adequate to supply-demand ratio, consumption – production.
- Comparison of specific economic dynamics phenomena and processes.

All subjects are compulsory. 10 points are granted automatically.

Working time is 50 minutes.

I. For each of the items 1 to 3, write the answer of corresponding letter on worksheet:

1. As production increases, the difference between CTM and CVM:
   a) increase;
   b) decreases;
   c) is constant;
   d) can not be determined.

   5 points

2. Total cost function is:
   \( CT = 400 + 2Q + 2Q^2 + Q^3. \)
   When production is 5, CFM:
   a) 80;
   b) 100;
   c) 400;
   d) can not be determined.

   5 points

3. Participate in the formation of variable costs:
   a) rent of the unit costs;
   b) raw material costs;
   c) heating unit costs;
   d) depreciation of fixed capital.

   5 points

II. Show, using numeric values, the development of average total cost, where production is growing faster than the variable cost.

   20 points
III. Assign the correct terms in column A with data in column B.

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. CFM</td>
<td>a. CFM + CVM</td>
</tr>
<tr>
<td>2. CVM</td>
<td>b. (CT₁ - CT₀)/(Q₁ - Q₀)</td>
</tr>
<tr>
<td>3. CTM</td>
<td>c. CF/Q</td>
</tr>
<tr>
<td>4. Cmg</td>
<td>d. CTM - CFM</td>
</tr>
</tbody>
</table>

10 points

IV. Be the following formula:
   a) CTM = CT/Q;
   b) Cmg = (CV₁ - CV₀)/(Q₁ - Q₀);
   c) CT = Cmat + Csal.
   - Define indicators whose formulas are mentioned in points a, b, c

15 points

V. Marginal cost is 25% higher than CTM₀. CF represents 25% of CT₀ and 20% of CT₁. Knowing that Q₀ = 10,000 pcs, CV₀ = 2, 25 mil, calculate the marginal cost and absolute change of production.

30 points

Advantage: allows an objective assessment;
Disadvantage: students are asked to reproduce certain concepts and use them mechanically.

b) Alternative:

The Project

The project is an active-participatory methodology that encourages transfer of knowledge, skills and abilities, interdisciplinary approaches, strengthening the social skills of students.

A project implementation involves the following steps:
1. Identification of a problem/issues/subject;
2. Collecting, organizing, processing and evaluation of information on the topic chosen;
3. Developing of a set of possible solutions to the problem;
4. The solutions assessment and choosing an option for “the best solution”.

After completing each stage in the project, it is useful to have a discussion/debate in which students are encouraged.
At the beginning of the chapter “Manufacturer”, I present its content to the students and how they will be evaluated. They will be evaluated in the traditional way and using one of the alternative methods of assessment (the Project).

The project to be realized: **A cost analysis in a commercial company**

Students will be informed about the project they have to achieve it. Also, data will be presented about when the parts of the project will be discussed.

Students will work along the way on the project and will complete a certain part of the project only after they learn about these concepts (e.g. costs will be calculated once they learn the Cost).

The project contains:

1. **General profile of the Commercial Company**…

   Students will choose a company from which they will collect information (the set up form, capital, activity, production and so on - based on knowledge gained from Entrepreneurship education).

   Students will present available data collected and organized to date.

2. **Analysis of the level, dynamics and structure of cost**

   They will calculate the production costs, based on data collected up to a date announced.

   Students will present production costs of firms analyzed and the cost per unit of product.

3. **Ways to reduce the costs of the Commercial Company**...

   They will identify specific ways to reduce the cost of the firm and will calculate again the cost in order to compare its current level to previous level.

   They will present the results obtained and the final conclusion.

   Each part of the project will be checked and evaluate along the way by the teacher. If necessary, the student/students will be helped, guided to do homework. The mark obtained will be composed of notes received for each part of the project (what they worked and their presentation).

   Advantage: emphasizes practicality/application of learning but is also an assessment tool;
   
   Disadvantage: the emergence of discussion among students about the contribution of each one to the project (in the case of group projects).
The cluster is a graphic organised method of the students learning by which are highlighted new associations of concepts and ideas.

Applying this method involves the following steps:
- Write a word in the middle of the board.
- Note around the word chosen the ideas the students come to mind about the topic discussed, then pulling the lines between them and the original word; lines highlight the connections between ideas.

This method can be applied to the discipline Economics at the end of the lesson Cost to emphasize the understanding level of concepts by the students.

The Cluster that can be achieved is shown below.

**Figure 1. Graphical representation of the Cluster method applied on the topic “Cost”**

Advantage: allows the ideas structuring and fixing;
Disadvantage: lack of all students involvement in a class.

**4. Conclusions**

It is noted that the in the traditional method “Lecture” is transmitted information on the subject under review, while in the method “I know/I want to know/I’ve learned”, some information comes from students and all students ask questions about what they do not know. Among evaluation methods we used “written verification” as traditional method, but also the modern method the “Project”. The first assessment method requires the student the information he has learned,
requires the definitions of some indicators, while the “Project” stimulates the student “to do”, “to identify”, etc.

Analyzing the two categories of methodology we can draw the following conclusions:

- traditional methodology aims the informative side of education, while modern methods aim the formative side;
- traditional methods are focused on teacher work while modern methods lie the student at the heart of the action, thus developing participatory spirit;
- traditional methods allows students to retrieve information as it is, without connecting it with practice, while modern methods focus on learning through discovery and develop critical thinking. Modern methods also develop self-assessment and inter-assessment.

Taking into account that the modern strategies of teaching - learning - assessment focus on interactivity, which allows students to show what they can do, while the traditional methods offer information, I believe that the traditional methods should not be replaced but used in conjunction with modern ones. Modern methods are a viable alternative to traditional ones, being complementary to them. Complementary methods have a formative role and a great capacity to motivate students by engaging them in the teaching-learning-assessment activities.

References

Văideanu, G. (1988). Education at the border of the millenniums, Politică, Bucharest