Study on the identification of educators’ perception over the selection, structuring and optimal combination criteria of didactic strategies

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Abstract

Purpose of Study implies the identification of the primary school level teachers’ perception over the manner of understanding and interpreting the learning process and explicitly, of the didactic strategy and over the selection, structuring and optimal combination of methods, means and forms of organization which define the structure of an efficient didactic strategy.

According to their perception over the possibility of using modern didactic strategies, the teachers will select, combine and use them in the actual didactic activity.

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1. Introduction

The teaching strategy previews the most logical and efficient methodical course that is about to be followed in approaching a chain of educational circumstances. In the constructivist vision, the teaching process is not carried on at chance, but presumes the application of a succession of strategies, needs a strategical approach that should make possible the successful achievement of instruction circumstances, with economies of effort and maximum effects. Thus, strategy becomes a “working plan” of the teacher.

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with the students, implies “adopting a directing line of action”, in order to efficiently solve a teaching circumstance (Neașcu, 1999; Cerghit, 2008; Potolea; Neașcu; Iucu; Pânișoară, 2008).

The development of modern technologies opens new dimensions to the achievement of the educational activity – combining traditional strategies with interactive strategies. „(...) these new instruments have a significant pedagogical potential”. (Tardif, 2000) The traditional strategies are revigorated by the new techniques, developing them according to the new requirements. Miron Ionescu affirms that „the dichotomy classical (traditional) and modern methods is wrong and even harmful. Those from the first group should be reconsidered and used in a new form, combining them with the latest” (Ionescu, 2003). The authors draws the attention on the necessity of a combined use of traditional strategies with those based on modern technologies, as concomitantly with emphasizing the advantages of new technologies. (Wolfs, 2001).

In the achievement of the study we have started from the assumption that the construction of a didactic strategy becomes possible insofar as the educators have a clear and updated perception over the educational process and over the understanding of the didactic strategy concept. Then, they will be able to construct this one according to the selection, structuring and optimal combination of methods, means and forms of organization which define the structure of an efficient didactic strategy. In this case, within the framework of our research intercession, the independent variable is given by the manner in which the subjects perceive the didactic strategy (as a notion and as a working device), and the dependent variable is represented by the strategical construction (combination of methods, means and forms of organization).

2. Design of Research

2.1. Purpose, Objectives and Hypothesis of Study

Purpose of study implies the identification of the primary school level teachers’ perception over the manner of understanding and interpreting the learning process and explicitly, of the didactic strategy and over the selection, structuring and optimal combination of methods, means and forms of organization which define the structure of an efficient didactic strategy.

Working hypotheses: It can be assumed that there are significant differences among teachers’ perception about the didactic strategy (in aspects regarding the significance of the concept, its functions, defining features and structure) according to their didactic experience (measured in years of experience in the educational system). The existence of significant differences of perception can also be assumed as regards the selection, structuring and combination criteria of methods, means and forms of organization which define the structure of a didactic strategy. According to their perception over modern didactic strategies and over the possibility of using them, the teachers will use them as such or in different combinations.

One of the objectives of research was the identification of the perception and of the differences of perception within the primary school teachers over the way of understanding and interpreting the educational process and implicitly, the didactic strategy. Another objective was the identification of the differences of their perception over the selection, structuring and optimal combination of methods, means and forms of organization criteria which define the structure of an efficient didactic strategy.

2.2. The Methodology of Research

The applied research has been performed on a sample of subjects including a total amount of 91 primary school teachers from the Argeș, Olt and Vâlcea districts. Thus, in regard to the place of residence, 56% subjects belong to the urban background, and 44% to the rural one; the sample includes
16.6% educators of masculine gender and 83.4% feminine gender persons; for the dependent variable *didactic experience*, 28.47% have little didactic experience (0–10 years), 36.46% have an average didactic experience (10–20 years), and 35.07% have a broad didactic experience (over 20 years).

The methodology of research. With a view to achieve the study, we have used a written questionnaire based survey, having as instrument a questionnaire elaborated by respecting the methodological principles. The questionnaire has two dimensions: first dimension refers to teachers’ perception over the manner of understanding and interpreting the learning process, namely of the didactic strategy; the second dimension refers to the selection, structuring and optimal combination of methods, means and forms of organization which define the structure of an efficient didactic strategy.

Data analysis and processing have been performed using the SPSS programme, the results being presented under the form of percentage incidences and distributions.

3. The Analysis and Interpretation of Results

We have correlated statistically the variable experience with the rank teachers grant to certain attributes which characterize their own didactic activity. Between experience and the attribute *traditional* we observe a correlation coefficient $r = -0.25$, significance threshold $p = 0.01 (<0.05)$; between experience and the attribute *modern* the correlation coefficient is $r = 0.26$, significance threshold $p = 0.01 (<0.05)$; between experience and the attribute *efficiency* there is a correlation coefficient of $r = 0.20$, although the significance threshold is minimum $p = 0.05$; between experience and the attribute *adequate* the correlation coefficient is $r = 0.27$, the significance threshold $p = 0.01 (<0.05)$. In virtue of these data, we can affirm that teachers’ perception over their own didactic activity is influenced by their experience, as it follows: the more experience they have, the more they appreciate their activity as being less traditional, less modern but more efficient and adequate.

As regards the selection, structuring and combination of the component elements of the strategy, we present the data obtained for each item of the questionnaire.

At the request *Please, enumerate at least three factors you respect when choosing a didactic strategy!*, teachers with little didactic experience achieve the selection of strategies according to pupils’ characteristics (training level, psycho-individual and age features, interests, likes and aptitudes) - 40.8%, didactic objectives - 30%. Teachers with broad didactic experience enumerate the following determinant factors in selecting didactic strategies: characteristics of pupils/form (level of previous training, pupils’ experience, psycho-individual and age features, learning capacity, likes, interests, the homogeneity level of the form) – 38%.

For another item of the questionnaire (*In the selection of didactic strategies, which of the following factors you consider to be the most important? Please rank them according to their attached importance*) they had been asked to rank the prominent factors in choosing didactic strategies from a list. Teachers with little experience select the components of a strategy according to the following factors: didactic objectives, the nature and the specific character of the didactic contents (rank 10), pupils’ interests, likes, and aptitudes (rank 9), their learning capacity (rank 8). The educators having an experience of over 20 years achieve the following hierarchy: didactic objectives (rank 10), the nature and specific of the didactic contents (rank 9), the available didactic means and materials, the pupils’ learning capacity (rank 8).

Another category of items in the questionnaire refer to the detection of the manner in which the structuring and the combination of the didactic strategies component elements are performed, in terms of the following subdimensions: the manner of intervention, the manner of monitorizing activity, stimulated learning forms, the manner of structuring tasks, the manner of organizing the group of pupils.

Being asked to appreciate the manner of intervention in the didactic activity, the distribution of answers is relatively close (*point out the manner of intervening in pupils’ activity (only one variant is...*)
34.1% state they intervene in the activity only when they need teacher’s intervention in order to continue their tasks correctly. The manner of intervention in pupils’ activity means to help them in solving their tasks, to stimulate their commitment and initiative, to monitorize the activity.

Being asked to appreciate the working manner with pupils („point out what is your working manner with pupils (only one possible variant)?”), teachers emphasize pupils’ implication in the coordination of the didactic activity. 58.2% of them affirm that they stimulate a permanent collaboration with them. The working manner represents the type of permanent collaboration pupil-teacher, having the emphasis laid on the stimulation of independence and initiative.

According to the manner in which they structure the learning tasks („How do you structure the learning tasks given to pupils (only one possible variant)”), 73.6% of the subjects give different tasks according to the pupils’ development level; 12.1% give pupils different tasks according to their wishes and interests. The manner of structuring tasks is given by their differentiation according to the pupils’ development level.

According to the manner of organizing the collective of pupils („point out the manner you organize pupils frequently (only one possible variant)”), most subjects (49.5%) choose the achievement of interactive activities under the form of cooperation or competition.

For the item („To which extent you consider possible the use of modern didactic strategies (which stimulate the pupil’s activity, use modern means and interactive instruction forms) in the concrete didactic activity?”, the subjects appreciate as possible the use of multimedia and interactive strategies. 67.7% of the educators with broad didactic experience, 48% and 48.6% of those with little and respectively average are in favor of this point of view.

In order to identify the attributes for which the subjects consider as necessary the combined use of group interrelation based strategies and of multimedia based strategies, they have been asked to rank these attributes from 1 to 10 (1- the least important, 10 – the most important) („Select an attribute which should express the necessity of a combined use of didactic strategies (traditional and modern – based on group interrelation and multimedia).”)

The analysis of data reveal the following efficiency indicators of combined modern and traditional didactic strategies (group and multimedia): ensures the efficiency of learning (rank 10), develops creative, lateral and critical thinking (rank 10, respectively 9), rises the pupils’ interest for learning (ranks 8, respectively 9), socializes pupils and favors familiarity in the form (rank 7).

Statistical interpretation through Spearman correlation emphasizes statistically significant correlations among teachers’ experience and the following attributes: ensures the efficiency of learning ($r = + 0.22$, $p = 0.03$), develops creative, lateral and critical thinking ($r = + 0.19$, $p = 0.04$), increases the pupils’ interest for learning ($r = + 0.27$, $p = 0.00$). Thus, the broader the experience, the more they choose efficient combined strategies in the following directions: increases the efficiency of learning, (degree of achieving the objectives), develops creative, lateral and critical thinking and increases the pupils’ interest for learning.

In order to identify the attributes which restricts the combinative use of strategies („Select an attribute which restricts the use of different didactic strategies (traditional and modern – based on group interrelation and multimedia) they have been asked to rank these attributes from 1 to 10 (rank from 1 to 10 (1 – the least important, 10 – the most important)”.

Statistical interpretation through Spearman correlation emphasizes statistically significant correlations between teachers’ experience and the following attributes: difficulties in achieving the objectives ($r = -0.39$, $p = 0.00$), difficulties of adaptation to the pupils’ characteristics ($r = -0.90$, $p = 0.04$), difficulties of systematization and approachability of the didactic contents ($r = -0.25$, $p = 0.01$). These data show that the broader the experience, the less they appreciate that the use of combined didactic strategies is limited
by difficulties in achieving the objectives, of adaptation to the pupils’ characteristics, of systematization and approachability of the didactic contents.

4. Conclusions

The differences of perception over the didactic strategy are obvious. Young educators perceive strategy as being an ensemble of didactic methods and means, they define their activity in terms of the degree they use the available pedagogical resources. The experienced ones have a different perception over the strategy, based on a plan, mode of action, means of achieving an efficient lesson, the ensemble of didactic intercessions used to achieve the objectives and tasks. In their perception, strategy means the selected methods, the available means and the most efficient forms of organization used for the lesson.

Both young and experienced teachers appreciate as possible the combined use of didactic traditional and modern strategies (which stimulates pupil’s activity, uses multimedia means and interactive forms of organization). This point of view in favor of such combinations does not depend on the didactic experience, but on the manner in which educators perceive them as necessary in order to obtain didactic efficiency. The more teachers perceive the use of modern strategies as possible, the more they consider that these strategies will increase the pupils’ motivation, interest and cognitive capacities.

The differences of perception over the didactic strategy are obvious. The educators having an experience of over 20 years have a different perception over the strategy, based on a plan, mode of action, the ensemble of didactic intercessions used to achieve the objectives and tasks. They achieve the following hierarchy in optimal combination of didactical strategies: didactic objectives, the nature and specific of the didactic contents, the available didactic means and materials, the pupils’ learning capacity.

As a conclusion, according to the perception they have over the possibility of using modern didactic strategies, teachers will select, combine and use them in the concrete didactic activity. They will choose efficient combinations of strategies with respect to the following indicators: the fulfillment of the didactic objectives, the development of the critical, lateral and creative thinking, the rise in pupils’ interest for learning, pupils’ socialization and the favoring of interrelations. The statistical data show that in proportion as they have broader experience, teachers appreciate that the combined use of didactic strategies is not restricted by difficulties in achieving the objectives, in adapting to pupils’ characteristics, by difficulties of systematization and approachability of the didactic contents.

As regards the identification of certain advantages of using combinations of strategies, in our opinion, we consider that subjects do not grasp qualitative aspects (the rise in the degree of intelligence, the development of the communication capacities etc.). Irrespective of their experience, teachers consider that the use of combination is not adequate to all disciplinary contents or types of information; equally, in their opinion, combinations do not favor school performances which confirm the fact that subjects have in view their pupils’ performances (which is an aspect of effectiveness, if we define performance in relation to the degree of attaining didactic objectives).

References

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