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**EDUCATION FOR HEALTH IN THE CONTEXT OF
EXPERIENTIAL PEDAGOGY**

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Abstract

The research aims to analyze the perception of the pre-university opinion of the teachers (from primary school, secondary school and high school) teaching “Education for Health” regarding the importance of the model based on experiential learning - Kolb`s model - within the discipline`s didactics. The objectives of the research were: to measure the importance level of using the Kolb`s model in the didactics of “Education for Health”; to measure the teachers` satisfaction level regarding the use of the Kolb`s model at the didactic of “Education for Health”. The methodology we used during the research was based on Delphy technique (the method of the expert group) and for analyzing and interpreting the results was used a bi-dimensional matrix Nice & Gaps type. The research reveal the fact that within the discipline Education for Health the valorization of experiential pedagogy by means of Kolb`s model is identified as a model of best educational practices which successfully support the cultivation and consolidation of general human values, educational and social values. The paper presents conclusions concerning the limits and implementation possibilities of the didactic strategies derived from the experiential pedagogy for the research group. The research report displays also the differences of perception regarding the importance and satisfaction degree (concomitantly approached) between the two main groups of trainees: teachers from rural schools compared to teachers from urban areas.

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1. Introduction

Many researchers were concerned to identify explanations for the correlation of different structures of learning. After Thorpe & Schmuller (cited in Neacsu, 2015, p. 51) “learning must start with



setting a goal and has a neurophysiological basis; learning is strongly influenced by emotional states arising from situations and conditions present in the deployment of the learning process; learning is more effective in going action”.

Experiential learning theory, perfected by Kolb, reveals that learning process should be seen in terms of individual process of adaptation to the environment and acquisition of knowledge through adaptation and experimentation. From Kolb's perspective is considered that the learning through experience is a determinant of human development, and more, critical to the effectiveness of activities carried out by each individual. Experiential learning is based on individual experience and appears as a response to memory-based learning and reproduction of information. But must be done a clear distinction between “experiential learning” and „experiential education”. The philosophy of experiential learning, draws attention on aspects of individual learning. Experiential Education focuses aspects of purpose and objectives of education, the relationship between student and teacher, teaching aids fund distribution in the learning process, the importance of acquiring specific skills sets necessary for normal social functioning. Discipline Health Education, with subdomain Healthy Food within the school curriculum implemented in Romania, may call for the most part in the educational process, methods and means suitable in experimental teaching context.

Kolb's experiential learning model is a four-stroke model, which describes itself thus: concrete experience, reflective observation, conceptualization, active experimentation. David Kolb (1984), considers that to be learning, a student must: want to play an active role in the experience; be able to reflect on the experience; use knowledge for conceptualizing experience; possess decision-making skills and problem solving so they can use new ideas derived from experience. In Jennifer A. Moon's conception (2004, pp.71-79) experiential learning involves: reflective learning, learning as a result of the actions inherent in experiential learning; learning from feedback. This model can determine changes in judgment upon the object of learning, in feelings or attitudes to the subject experienced, can influence decision-making in relation to reality. In this model of learning an important role is played by stimulation and encouraging the student to get involved in concrete ways in the experienced subject and to reflect on the results. In this way, the knowledge acquired is treated thoroughly and is long lasting. The rhetoric of this learning process focuses on the following sets of questions: „Have you noticed? Why was this so? Is this happening in real live...? Why....? How can you use it?”. These questions facilitate deepening learning within the group.

On the basis of practical experience are perception and reflection. How we see the reflection? The teacher can ask questions such as “what was good?, what was not good?”. Subsequently, the collected answers can be transposed in theory, if experience confirms. From this body of ideas can be born hypotheses that are tested in practice by experimentation. Ultimately, this results in a new experience. The advantage of the model is that it serves the areas of non-formal and informal learning.

2. Paper Theoretical Foundation

The research report „Know How 2 learn” surprise both explanations on dimensions of Kolb's cycle and on personality typologies. These are identified and described due to the dominance of a certain type of behavior manifest in certain phases/stages of the learning process. The steps are: concrete experience, reflective observation, abstract conceptualization and active experimentation. (Kolb, 2000).

The stages are describes as follows: *concrete experience* is characterized by focusing on student learning. In this case, the person prefers this style of learning to treat each situation as a unique case, learning best from specific examples. This person makes the most discussions and reactions of others. *Reflective observation* refers to an impartial and reflective approach to learning. The person with this style relies on careful observation in the thinking process and prefers learning situations such as lectures, enabling it to assume the role of objective observer and neutral. *Abstract conceptualization* involves an analytical approach and conceptual learning. The person with this learning style relies on logical reasoning and rational evaluation, he/she is object-oriented and learns best in situations that are impersonal and managed by an authority where the emphasis is on theory and systematic analysis. *Active experimentation* indicates an active approach to learning type, action-oriented and based on experimentation.

The person that has this learning style learns best when they can engage in activities such as projects, homework, or small group discussions. Dislike passive learning situations such as lectures, for example.

According to Kolb (1984), learning styles are guidelines adaptive of the individual. In the learning model based on Kolb's model, designing discipline teaching for Health Education can be described in the following steps: (1) achievement motivation activity; (2) learning experience (intuition/perception/discovery information; training in practical/concrete form); (3) reflection / analysis on experience; (4) conceptualization of experience / abstraction; (5) practical applications / validation / improvement of conceptualized model .

Every step of the design activity knows didactic elements of specificity but is not detached from the learning model based on actual experience. Thus, in the stage on achievement motivation activity, the teacher should take into account "student's assertion impulse" to achieve a maximum level of students' motivation to participate in the lesson. In this case it can be suggested several strategies: teacher arouses students' interest towards the lesson introduction to the subject based on questioning in relation to a life situation learning subject (Who? What? How? Why?. ..). The questions focus on the lesson topic. Also can be imagined ice-breaking strategies with motivation role. Successive questions technique generates a cognitive process of request in students. Satisfied curiosity leads to feeling of pleasure which will further contribute to the achievement of learning. Ausubel & Robinson (1981, p. 447) considers that "guiding motivation in the classroom is more than an art". All students are participating in the lesson this time. The atmosphere in the classroom at this stage should be a warm, affectionate impregnated yet secured. The success or failure in learning depends on this stage. The student must realize their own learning experience. Methods and techniques specific to this stage are the dialogue, brainstorming, role play, demonstration, etc. Also, these teaching methods could be used in the other stages.

In the stage „learning experience/intuition/ discovery information; training in practical / concrete form" the students are confronting with objective reality, they are offered specific examples of analyzed subject. At this stage all student's responses are valued based on the individual experiences. Also, in this stage, the learning style is active. As methodological suggestions are Phillips 66 method, problem-solving method, SINECTICA, the mosaic method etc. In this second stage of the Kolb's cycle we identify a reflective learning style, where students focus on theoretical issues, identification and exploitation of possible results. Teaching strategies that can be used are deductive and analogical. Teaching method most commonly used is the observation (systematic, independent).

Conceptualization stage is the stage of the learning experience in which students are reasoning and find explanation in connection with the subject of learning. It is time of „theorist” type of personality, who in the broad meaning of Kolb's cycle corresponds to the stage of learning generalization. Learning situations are managed by the teacher.

The step “practical applications/validate or improve the conceptualized model” is based on different aspects of the object learning experience students had before. Students are oriented towards achieving learning products. At this stage one can imagine a lot of learning products: from reports, essays, projects to actions objectified in concrete behaviors in social reality. Kolb's model is a model approved by the digital generation, permanently concerned with the practical dimension of learning.

Health Education topics is suitable for teaching strategies that fully capitalize experiential learning. Designing the learning contents must subordinate to the curricular perspective assumed at educational level. In this way, depending on certain skills-training strategies, the informational contents gain an instrumental, but also an axiological character. “That means, in the extent that these skills are related to the educational finalities that are pursued in the learning system and learning process, that the new paradigmatic openings legitimize the necessity of a reevaluation in terms of curriculum design.” (Esi, Postecă, 2014, p. 55)

3. Research Methodology

The research aims to analyze the perception of the pre-university teachers' opinion (primary, secondary and high school) who teach "Education for Health" regarding the importance of the model based on experiential learning - Kolb model - within the discipline's didactics. The research objectives were: to measure the importance level of using the Kolb model in the didactics of “Education for Health”; to measure the teachers' satisfaction level regarding the use of the Kolb model in teaching of “Education for Health”. The methodology we used during the research based on Delphy technique (the method of the expert group) and for analyzing and interpreting the results was used a bi-dimensional matrix Nice & Gaps type. The target group was represented by the teachers who teach Health Education in the primary and lower secondary level and who use teaching strategies based on experiential learning model. Target group distribution was as follows (Fig.1):

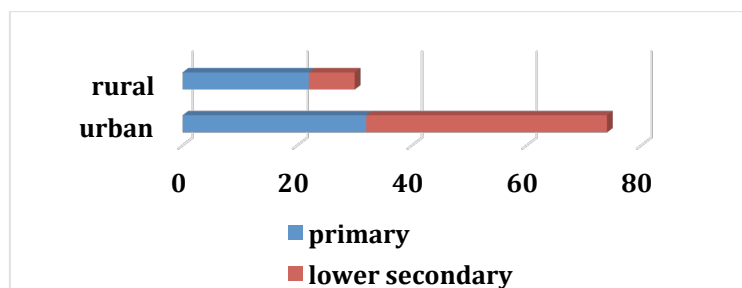


Fig. 1. Distribution of the teachers who implemented the Kolb teaching model

It was found that most teachers who adopt this model are urban teaching at both levels. This is explained in the context of access to educational resources that allow teachers the organize lessons properly. Measurement of importance perceived by teachers on the importance of using experiential pedagogy was done through a self-administered questionnaire using a Likert-type scales in seven steps.

Measuring levels expresses the mark given on a scale of 1 to 7 for each strategy used and identified in the analysis of curriculum documents and interviews with teachers. It was analyzed the positioning of teaching strategies according to their importance. Teaching strategies analyzed were drawn from the design of instructional projects. These are strategies heuristic, focusing on the subject of the lesson, strategies of manipulation where the teacher gives students the opportunity to work with physical objects (draw or build something), strategies based on media learning (text, use virtual instrumentation, appliances laboratory, etc.), the assessment strategies that change frequency, scope and level of cognitive assessment (granting immediate feedback and exploratory use of diagnostic tests, formative) enrichment strategy based on context (making the connection between knowledge and previous experiences or engaging pupils' interest in learning colleagues).

4. Analysis and Interpretation of the Results

According to teachers, the scores awarded to these types of strategies depending on the importance (Fig.2) and satisfaction (Fig. 3) in relation to learning outcomes is distributed as shown below:

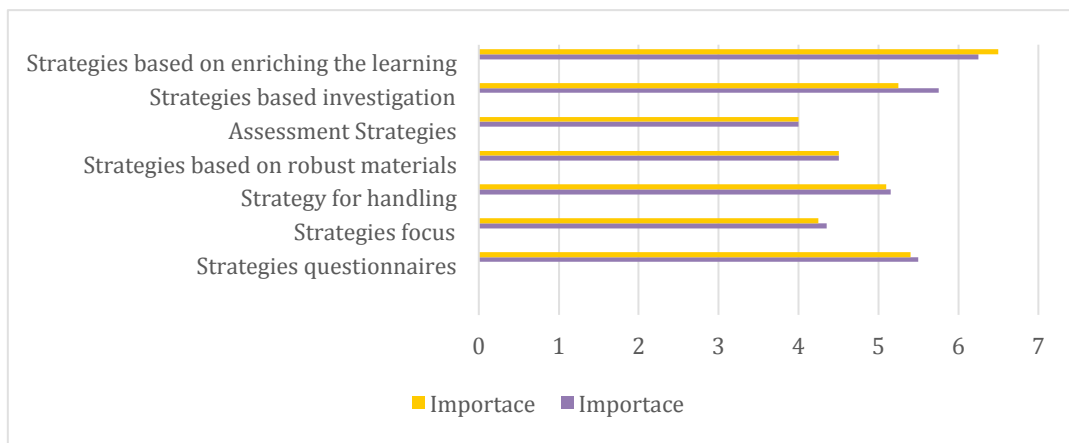


Fig.2. Distribution of scores on the importance of the strategies used

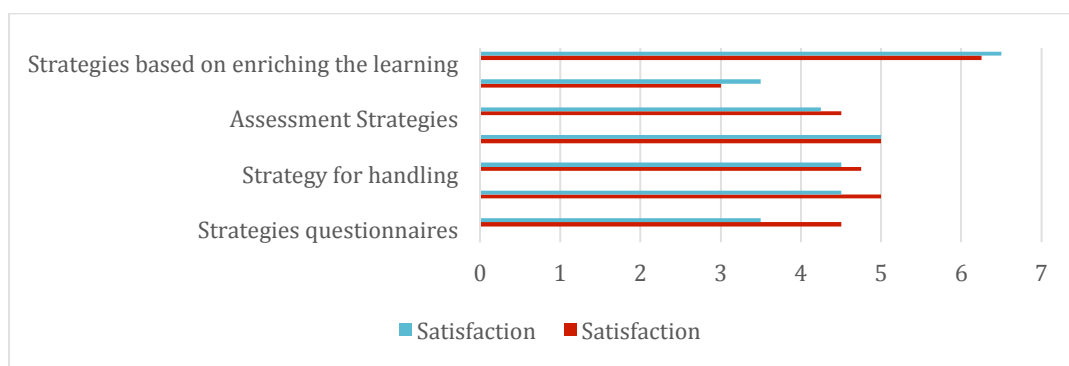


Fig.3. Distribution of scores on the satisfaction of the strategies used

The above figures show that all types of teaching strategies are found in experiential model pedagogy. This demonstrates once more the importance that teachers are aware of the importance of

using active teaching strategies for each moment of the lesson. It appears that both teachers in urban and in rural areas considered that enrichment context based strategies are being important and having the level of satisfaction increased the strategies (this strategy involves making the connection between knowledge and past experiences or engaging pupils' interest in learning colleagues). This demonstrates that in the context of "Health Education - Healthy food" discipline, experiential pedagogy register a success rate at educational process level. Active engagement of the student in the teaching process stimulates students' interest in relation to assimilate new knowledge and increase learning performance. Data obtained through interviews show that teachers believe that exposing students to a new context-based learning through experience accumulation of new knowledge help increase learning. With a relatively low score are positioned investigation based strategies. This is justified given that certain didactic contents invite both teachers and students to access additional material resources to ensure success in learning. On the other hand, this strategy involves a supplementary effort of both parties to the educational process. It signaled the need for supplementary training of teachers regarding acquisition of new knowledge in the field of nutritional health. Teachers consider that in today's context of progress in medicine and food technology, updating knowledge in the field is identified as a goal of sustainable education. In this context, both the scores for satisfaction and importance, given to investigation based strategies are different (for teachers in urban areas and for rural teachers). In terms of importance, the score is higher in teachers from urban areas compared to the rural areas. They feel more acutely the need to supplement informational luggage. Explanation lies in the fact that urban areas are registered an increased rate of consumption of processed foods and better access to their acquisition also increased. Also, incidence of obesity in children is higher in urban areas than in rural. These aspects contribute to increasing awareness of the role that should be played by teachers in education on healthy eating.

The fact that the investigational strategies are important, but have a low score of satisfaction regarding their use in class, lead us to the following conclusion: teachers should be well trained / informed on new developments in food processing so later they will be able to guide the correct design of investigational strategies. They subsequently have to mobilize students in educational approaches of investigative type, required for the accumulation of knowledge needed to develop healthy eating behaviors. According to respondents, the survey based teaching strategies recorded a high score on the importance of using them in the educational process. This suggests that effective learning in the context presented is justified through the actions of analyzing students' representations in relation to healthy eating habits, considering cultural and social factors. In this perspective, teaching strategies based on obtaining information on the perception of healthy nutrition are absolutely relevant: there are similar scores for importance and satisfaction regarding the teaching strategy based on the survey technique in both teachers in rural areas and urban teachers. Teaching strategies based on the use of different materials for teaching are considered equally important with a short increased level for the satisfaction in relation to the educational process. This demonstrates that transposition of the students in a learning environment based on direct experimentation stimulate their interest in the subject learning and active participation in the lesson. (Fig 4)



Fig. 4. Nice & Gaps two-dimensional matrix

5. Conclusions

Within the discipline Education for Health the valorization of experiential pedagogy by means of Kolb's model was identified as a model of best educational practices which successfully support the cultivation and consolidation of general human values, educational and social values. Teacher's perceptions on teaching strategies showed a general agreement that all the active teaching strategies are important in experiential pedagogy. These strategies provide a better way of teaching the discipline and facilitate successful training and skills development in relation to cognitive and attitudinal learning.

Nevertheless there are some limits of implementation possibilities for the teaching strategies derived from experiential pedagogy. These are mainly resulting from teacher's relatively low expertise in food sciences and health sciences, especially that in today, mostly in urban areas, are registered increased rate of consumption of processed foods.

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