The significance of Continual Enhancement of Teachers' Skills at Research Procedures Application in Primary Education

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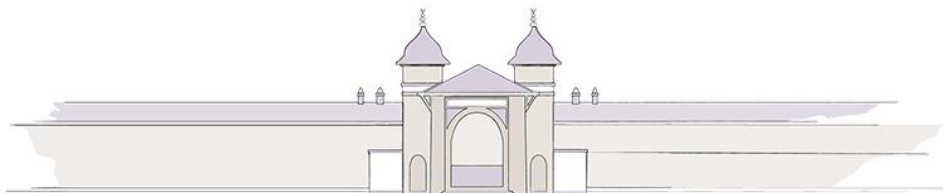
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THE SIGNIFICANCE OF CONTINUAL ENHANCEMENT OF TEACHERS' SKILLS AT RESEARCH PROCEDURES APPLICATION IN PRIMARY EDUCATION

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Abstract

Schools developmental curricula have to respond to the necessity for continuous skill enhancement with teachers, particularly in the sphere of such a highly complex segment as the teaching methods and methodology training of teachers on research procedures application and their methodological modelling is in the pursue of the goal of imbedding the concept of learning via research as a daily activity of pupils.

In this sense, the objective set in this paper is to highlight the significance and the role of the research procedures[4] in the educational and character-building process and the importance of teachers' skills enhancement for the said procedures to be effectively applied.

Key words: research procedures, skill enhancement of teachers, active learning

1. INTRODUCTION

Teachers' skills enhancement is the most significant segment of a comprehensive and systematic reform[5] in the educational process due to which, schools in their developmental curricula have to bear in mind the necessity for a permanent teaching skills enhancement of the teachers, as a continual process which in fact is never to stop. Therefore, by organizing courses for permanent teaching skills enhancement, which would directly reflect on the teaching in class in all segments of the education, the institutions of Republic of Macedonia competent for these issues, that is the Ministry of Education and the Beuerau of Education Development, show serious efforts in putting the permanent teaching skills enhancement into effective realization in the Republic of Macedonia. The steps taken thus reflect the vision of an education as a crucial segment and support column of every modern society the goal of which is an education founded upon its own specific values, i.e. an educational system compatible with those of the highly developed countries; education which will be recognizable by the spirit of the European and world trends.

In line with these trends, corresponding methodological approaches as well as teaching methods and didactics competences of teachers are extremely significant in the implementation of the primary education teaching process in R.M., which will make the active learning effective and lead to development of practical competencies of students. Thus, it is the foundation of the idea of making a programme for training teaching staff in primary schools who will effectively apply research procedures (further in the paper – RPs) in class and ensure students' active participation both in class and when learning by the RPs application[6]. The program contents reflect the tendencies to promote all segments of the teaching process and the efforts to continue the process of teachers' professional development by didactic-methodological class modelling and application of research techniques. In that sense, this paper is an attempt to emphasize the significance of the practical implications of the *Learning Through Research Programme* conducted within the Macedonian project *Modernization of Education*, as part of the teachers' permanent specialization for acquiring and widening the teachers' knowledge and competencies in RPs effective application in class. The attitudes of teachers in the initial phase of the project indicated that they still needed methodological development and enhancement of skills in RPs application when teaching; this condition resulted primarily from the fact that the educational

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[4] The research procedures (RPs) mean setting specific issues or problems that need to be answered; by RPs students encounter authentic situations similar to those in real life, and later find it easier to handle them; RPs put into action all the intellectual capacity of students by exposing students to real-life situations, students learn to think critically, to explore, to seek answers to their questions, to cooperate, to work in teams, etc.

[5] s. Talevski, Janusheva, Pejchinovska. 2011: 44-57.

[6] Workshops within the Programme encompass real class teaching situations which are necessary to train the teachers regarding the realization of the research process and RPs when teaching in class, and then to incorporate the said procedures and the research itself in the students' learning styles. The purpose of the aforementioned is that learning through research become one of the primary approaches in knowledge acquisition in class, particularly in the filed od Natural Sciences in primary education.

background of most of the teachers did not include methodology research courses nor any course in learning and teaching strategies, and secondarily from other system and program failures and flaws.

2. RESEARCH METHODOLOGY

To meet the objectives, empirical research of a descriptive nature has been applied. This paper presents the qualitative analysis of teachers' standpoints and views regarding the significance of the *Learning through Research* Training Programme in improving the educational practice. The research procedures and instruments used in the data collection are these: survey with a survey questionnaire – conducted twice within each of the training workshop, and unstructured interview.

The sample of the research consisted of 87 class and subject teachers from seven elementary schools from R.M.[7]. The analysis of the questions given in the survey questionnaire and in the informal interviews with the teachers is supposed to obtain us with a true state of affairs regarding the benefits of the teaching skills enhancement of the said type; the results obtained this way may latter serve for future research in this field.

3. THE CONCEPT AND AN OUTLINE OF THE PROGRAMME *LEARNING THROUGH RESEARCH*

Teaching by means of RPs entails a set of corresponding procedures which have research characteristics and enable the teacher to purposefully navigate students' learning, who have to find a solution to the set problem. The aim of the said is to make the learning process effective by active involvement of students. Therefore, RPs, are an essential segment of the research process[8]. In the sense of methodology of the teaching practice, an individual use of RPs is more frequent with the younger students[9]. RPs for class use that teachers were trained to are: class observation, class survey and interviews, and case study of classes[10].

Learning through research (LTR) is an approach in learning which consists of RPs and students' (and teacher's) activites when conducting those RPs such as observing, comparing, experimenting, etc. In methodology literature, LTR is treated only as problem – solution finding. The research paper suggests that LTR comprises an organization of the class which is conducted in gradual methodological steps, designed by the teacher in order to introduce a problem situation to the students who have to participate actively and cognitively in the solution finding by taking up activities such as: problem source study, student's individual research work towards solution of the problem / giving a solution/answer to the problem situation introduced by applying (simple) scientific methods, research procedures (observation, experiments, case study, and survey, etc.), instruments, and resources. LTR includes logical cognitive operations for the collected data (analysis, synthesis, generalization, abstraction, induction, deduction, etc.) and interpretation of the results gained with those operations, followed by their statistical processing upon which research conclusions are drawn, judgments are made, and decisions are reached upon the types of publication and presentation of the results.

The programme *Learning Through Research* is realised in both the theoretical and practical work of the primary school teachers who follow these procedures: research process, research characteristics and application, the objectives of the research procedures in class; teachers' and students' tasks in the research procedures in class; a review of the mentor's role in the research procedures; the meaning and the role of the teaching forms in the research process – individual and group approach in the RPs application; observation of the class – components, stages, and types of observation; survey and interview and their application in class; case study – who, when, and why using the case study; taking up roles; experiment and application of the experiment in class. The more the class is modelled in accordance with the didactics and methodological standards, the more satisfactory the results will be and it is precisely in this sense that the significance of these procedures is emphasized.

It was obvious that the teachers included in the training needed their knowledge on the application of the said contents in class to be expanded, with a special attention given to the practical implementation of those contents. The group discussions and the sharing of experience and ideas proved particularly useful for the teachers the teachers as they could come to answers to methodological and theoretical problems that they encountered in the daily teaching practice, especially in the defining the phenomenon and the problem of the research, as well as in defining the hypotheses and the dependent and independent variables. The project was a

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[7] s. Talevski, Pejchinovska, Janusheva. 2012.

[8] Research process in six steps involves the following: 1. *Identifying, defining and specifying the research problem (phenomenon, problem, subject, objective/s, tasks, hypotheses, variables); Design of a research plan or project (who, what, how, and when); Implementation, conduct and application of research methods, procedures, and instruments; Data processing and hypotheses testing; Analysis and interpretation of the results and drawing conclusions; Writing up and publication of a research report and presentation of the research results.* s. Talevski, Pejchinovska, Janusheva. 2012: 85-86.

[9] s. Kolondzovski. 2001: 38-75.

[10] s. Talevski, Pejchinovska, Janusheva. 2012: 87-89.

possibility to convey the scientific theory and practice knowledge of the Faculty of Education to the target groups, i.e. the teachers who graduated from this faculty or related ones.

The principles and the methods used for the realization of the contents of the LTR programme are applicable when teaching adults – everybody learns from everybody because everybody has some knowledge (a cooperative learning), the contents were elicited from everyday life situations significant for the participants and altered through their common experience, developing self-confidence and respect with the participants. Adults have strong internal motivation to learn something new and thus, those were encouraged to use their own experiences as learning resources. Problem situations were set before them to take active roles in.

The adult teaching procedures that were used are as follows: experiential procedures (group discussions, simulation exercises, activities directed to problem solving, study cases). The training techniques encompassed the following: presentations, brainstorm, demonstration, small group discussion, large group discussion (reflection, analysis and application), simulation, role-play, work in pairs, work in small groups, walk-in-a-circle; the teaching methods were as follows: dialogue, method of working with text, method of problem solving, method of oral presentation, etc.

The dynamics of the project spanned two stages. The first one encompassed the preparation for the theoretical and the practical part of the LTR training programme, whereas the second one encompassed the field work of the LTR training programme in the period between 23 January and 7 May, 2010.

4. THE SIGNIFICANCE OF THE *LEARNING THROUGH RESEARCH* PROGRAMME FOR PERMANENT TEACHING SKILLS ENHANCEMENT

Why teaching with RPs application? The objectives of the Programme proceed from the major aim of the Training Programme to improve classroom teaching as one of the most significant segments of the educational process in R.M. The Programme gives priority to authentic situations with specific problems and changes, and points out the importance of encountering such situations in the learning process.

The need for permanent enhancement of teaching skills in this field proceeded from the benefits of teaching gained with RPs application in LTR, as well as from the fact that the initial background knowledge of the teachers on this aspect was not addressed with all the attention it deserved, though a significant segment underlying the modern learning concepts such as learning through problem solving, learning through discoveries, learning through project conduct, etc. The benefits that teachers gain are as follows:

1. They expand and deepen the knowledge of RPs in class teaching as learning strategies and are trained to teach by active inclusion of the students in the learning process.

2. They apply the variety of RPs in everyday practice.

3. They are trained to use didactics and methodology when modelling the daily classes with RPs in use (observation, survey, interview, experiment, case study, taking up roles, research project conduct, etc.), and to make quality contribution to the educational process, primarily in the field of Nature Sciences.

4.

5. ANALYSIS OF TEACHERS' STANCES ON TEACHING WITH APPLICATION OF RESEARCH PROCEDURES AND DISCUSSION

Group discussions, individual opinions of teachers stated regarding the purposiveness of this Programme as well as of other programmes of this type, teachers' reflections recorded in the Training Programme analysis and assessment lists show teachers' stances positive on this type of skills enhancement. A large number of teachers pointed out the level of competences, acquired with this Programme, for achieving better results as teachers. Teachers feel highly motivated to enrich and advance their educational practices by expanding the knowledge on the contents offered with the Programme. They show their readiness and willingness to use RPs in their everyday educational practice and are becoming more and more convinced that with the use of RPs they will manage to motivate their students as well. In this sense the efforts of the Ministry of Education and those of the Beuerau of Education Development to enhance the teaching skills and embed the permanent learning system into the overall education system are assessed as more than satisfactory.

The insisght in the above said is presented here with some of the statements reflecting teachers' stances regarding the benefits of the Training Programme

Table No. 1. Benefits from the *Learning through Research* Training Programme

Teachers' statements	Frequency
Better results in class teaching	2
Enriching the knowledge of solving problems in the EP[11]	4
Enriching and expanding the knowledge necessary for the use of RPs in class	5
Offering possibilities for teacher's creativity and inclusion of all of the students	2
Enabling easier and more familiar learning by means of research	3
Higher class quality and more interesting classes	1
Bringing the research to mind as a learning method	1
New teaching aspects	1
Bringing to mind the knowledge of research as a practice method, especially with reference to the stages of the research process	2
The necessity for a more frequent use of the research in the learning process	1
New knowledge acquisition through the research process	1
Professional development of this subject	1
Expanding and deepening the knowledge on this subject од оваа тема	10
Higher quality of class teaching, more motivating	5
Correlation of theory and practice	5

The viewpoints that the teachers stated in informal interviews confirmed the necessity RPs application in the learning process. Their use is of particular importance in the field of the Natural Sciences, in which teaching should rely upon performance of students in practice. All of the interviewed teachers answered that the training (significantly and highly) improved their knowledge and teaching skills at using RPs in class helping them achieve greater success in the realization of the objectives set with the lessons. Furthermore, the analysis of teachers' stances suggests that their inclusion in the Programme for continual enhancement of their skills at practical use of RPs produced better results in all of the segments of class teaching (improved learning motivation, interaction, communication, quality class teaching) which yields bettered students' achievements. It is quite significant that the teachers were aware their teaching methods and methodological competences were being expanded and deepened, which enabled them to solve the problems of the educational process more easily and effectively.

Another benefit of the teaching skills enhancement with the new methodologies and approaches in teaching and learning is that the use of RPs in class creates a positive and productive environment, and good communication among and with the students.

Further on, in the informal interviews, the teacher pointed out the significant improvements in motivatiing students to work, arousing their interest as well as capturing their attention when when teaching by means of RPs application in class, and none of the respondents expressed a stance or an opinion that the RPs application in class made no improvements in stimulating and maintaining students' motivation and interest. This state of affairs confirms the efficiency and effectiveness of LTR and RPs in the realisation of the class teaching, especially with reference to stimulating students' motivation and maintaining and increasing their interest in learning.

Teachers' stances after the enhancement of skills at RPs application in class also suggest that they have gained a greater insight into the problems of realisation of teaching contents which could be learned through a research process i.e. LTR. A larger number of teachers respondents make more frequent use of the research process in class teaching after they have realized the new possibilities that LTR offers.

6. CONCLUSIONS

The conclusions proceed from the points stated above. Namely, the educational process is dynamic and subject to changes, thus it has to follow the social trends and innovations. In that sense there is a need for continual efforts to make the class teaching and learning effective as they are the core segments of the educational process; in line with this, the commitments to effective, efficient and quality teaching skills enhancement should be the imperative among the activities of all who are involved in the teaching process. The same course is followed by Ministry of Education and the Beuerau of Education Development in their commitment for implementation of the offered teaching in the everyday practice, thus preserving the continuity of the professional teaching staff specialization in the new methodologies and strategies of teaching and learning. Especially encouraging is the fact that most of the teachers find the Training Programme contents useful for their further teaching work. Most of the participants pointed out the relation between theory and

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[11] Educational Process

practice as highly significant component, which confirms the tendencies of Ministry of Education for giving the respectable space to the training programme in practice and purposefulness to this kind of teaching skills enhancement. The Training Programme contents contributed to expanding teachers' knowledge, which supports their new abilities and readiness to use the acquired knowledge in the everyday educational work. Thus, the motivation of the teachers for modelling the class in accordance with corresponding didactics and methodology, that is the use of RPs in various segments of their daily educational work. In general, the Training Programme met the expectations of the participants.

7. REFERENCES

1. Angelevska-Galevska, N. (1996). *Planiranje na naučno iztražuvanje,* Skopje: Filozofski Fakultet.

2. Herman, Achbacher, Winters. (1992). *Select or Design Assessments That Elicit Established Outcomes*, Retrieved March 2010, from http://www.ncrel.org/sdrs/areas/issues/methods/assment/as7sele2.htm.

3. Janusheva, V., Pejchinovska, M. (2011). "The Teacher - a Succesfull Comunicator and Promoter of the Students Achievements", *Int'l Journal of Arts & Sciences (IJAS) Conference*, Gottenheim, ISSN: 1944-6934: 4(16): 437-449 (2011).

4. Kolondzovski, B. (2001). *Deteto – istražuvač na prirodata*, Bitola: Fakultet za učiteli i vospituvači. pp. 38-119.

5. Research Methodology: *AnIntroduction*, (2012). Retrieved May, 24, 2012, from:

 http://www.newagepublishers.com/samplechapter/000896.pdf.

6. Stefanovič, M. (2001). *Didaktika,* Rijeka: Express digitalni tisak.

7. Smilevski, C. (2006). *Metodologija na iztražuvanje*, Bitola: Pedagoški fakultet.

8. *Sumaren izveštaj od sledenje i vrednuvanje na ponuduvačite na obuki i uslugi,* (2010), BRO, Skopje, Retrived, March, 15, 2012, from: http://www.bro.gov.mk/?q=sumaren-izvestaj-od-sledenjeto-i-vrednuvanjeto-na-ponuduvacite--na-obuka-i-uslugi.

9. Talevski, D. J., Janusheva, V., Pejchinovska, M. (2010). "Learning through Research, a Possibility for Permanent Professional Improvement of the Teaching Staff in the Elementary Education", *Educational Technologies*, Sliven, Vol. 17, pp. 251-255.

10. Talevski, D. J., Janusheva, V., Pejchinovska, M. (2011). "Teacher's development in relation to evaluation – Learning teams as a possibility for more effective assessment process of student's achievement", *Journal Plus Education* – ISSN: 1842-077X, E-ISSN (online) 2068-1551, Vol. VII (2011). No. 1, pp. 44-57, Retrieved June 11, 2011 from http://www.uav.ro/en/journals/educatia-plus/volumes.

11. Talevski, D. J., Pejchinovska, M., Janusheva, V. (2012). "Teaching in Classes with Research Tehniques – Case Study in the Elementary Education in Republic of Macedonia", published in the Journal of International Scientific Publications: *Educational Alternatives*: ISSN 1313-2571, 10 (2): 81-94 (2012). prezented on the 3th International Conference: *Education, Research & Development*, Sunny Beach, Bulgaria.