Application of Podlasy technology in the teaching and educational process of the rural school

Danna Naurzalina\textsuperscript{a*}, Aktota Umbetova\textsuperscript{a}, Maira Sutyeyeva\textsuperscript{a}, Sabira Alimbekova\textsuperscript{b}, Asan Tuksanbayev\textsuperscript{c}, Marat Utepov\textsuperscript{a}

\textsuperscript{a}Aktobe Regional State University named after K.Zhubanov, 34, Moldagulov str., Aktobe, 030000, Kazakhstan
\textsuperscript{b}H. A. Yassawi International Kazakh-Turkish University, B. Sattarkhanov avenue, Turkestan, 161200, Kazakhstan
\textsuperscript{c}JCS «Orleu», 78, Turgenev ave, Aktobe, 030000, Kazakhstan

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Abstract

According to scientists and methodologists, technologies in the teacher’s work very soon will affect on 80% of success, and individual excellence on 20%. Therefore, the actual problem is the task of mastering by teachers of comprehensive schools promising pedagogical technologies offered by pedagogical science and progressive pedagogical practice. The purpose of the experimental research is application Podlasy productive technology usage in teaching and educational process of the rural comprehensive school. Methods of research are analysis of psycho-pedagogical, social, philosophical and methodological literature on the experiment’s problem compilation of the best pedagogical experience analysis and study of school and pedagogical documentation, a number of special techniques: methods of pupils’ personality’s studying, determining the level of need-motivational, cognitive and intellectual sphere, the sphere of interpersonal relationships, questionnaires, tests, etc. Podlasy productive pedagogical technology is an effective way of providing quality’s training’s for all pupils in any school subjects. A team of teachers and experimenters accumulated and enriched unique experience combination of several advanced educational technologies’ interrelated elements in a single integrated system of education aimed at

\* Corresponding author. Tel: +7 747 721 2560
E-mail address: dannulya@gmail.com

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achieving of best outcomes. Using of learning productive technology revealed improvement in the quality of pupils' knowledge on the 5-7% overall and there is a tendency of final point’s increasing of the external certification - United national testing.

**Keywords:** Pedagogical technology; rural schools; teaching.

### 1. Introduction

According to the Podlas (2004) the productive pedagogical technologies (PPT) better adapts graduates to the life difficulties in a complex and constantly changing world. In the PPT a child becomes the central figure of the teaching educational process (TEP) and all teachers' concerns sent out to create him maximum conditions for the development and self-realization in accordance with his vital strategy. Productive are knowledge and skills possessing which graduate acquires a solid foundation for his future life. Productive - means necessary, durable, constantly present knowledge.

Productive technology allocates important, gives the necessary, programs a success and guarantees the quality therefore it becomes the most demanded in mass school. With technologies serving yesterday's school guaranteeing no proper range or quality of knowledge and skills, in the market pedagogical services nothing to do. There will be in demand technologies maximally contributing meeting needs of the pupil’s personal fulfillment.

Productive technology is designed for heavy computer support, as in step of preparation of lessons, so at the stage of practical activity in the classroom. This corresponds to the modern requirements of Kazakhstan's education changes.

### 2. Problem Statement

Principal cause of occurrence the concept “productive learning” is that in market conditions people look at education and training mainly from a pragmatic point of view and want a productive learning from which could have a real and immediate benefits. Productive learning, in contrast to the traditional, understood as providing a real connection with life, opening perspective to young people using their knowledge to find a job. Productive upbringing means conferring by personality products of human culture. But first of all - it demanded by a man of knowledge, skills, his expertise and professionalism as basic conditions for ensuring an independent life.

### 3. Research Questions

Realization of the experiment’s program replenished the rural school teachers’ experience in scientific and pedagogical researches on problems of schoolchildren’s effective teaching and education, expanded methodical arsenal of experiment’s participants with new techniques, methods and means of education, contributed to the growth of teachers’ professional competence.

### 4. Purpose of the Study

The studied positions and theoretical bases of Podlas productive pedagogical technology, as well as the above-mentioned advantages of the Productive technology in comparison with the traditional system of education, its conformity to the provisions of the current requirements of national education’s model oriented on result in the conditions of transition to the 12-year education cause the natural tendency and desire to explore and test innovative technology in the...
practice of teaching activity of the secondary school (Podlasy, 2004). This striving and this task constitute the content of the innovative activity’s further development’s school gymnasium for the near perspective (Bashmakova, 2000; Batishev, 1990).

Subject of the research: activity of the teaching staff in the development and realization of the scientific and pedagogical research’s program on phased introduction in the teaching and upbringing process of the Podlasy innovative pedagogical technology (PPT).

The purpose of the research is to study the feasibility of innovative pedagogical technology usage in the TUP - Productive pedagogical technology of Podlasy.

5. Research Methods

Methodological basis of the chosen problem research are existing theories and concepts in the pedagogical and psychological science: general philosophical theory of knowledge, education and training, a concept of the personally oriented approach, works of scientists - psychologists, philosophers, methodists.

Research methods:
- comparative historical analysis of literature;
- general theoretical and heuristic methods of research;
- pedagogical supervision;
- conversation;
- pedagogical council;
- study and analysis of product documentation activities;
- study of the advanced pedagogical experience.

6. Findings

Grammar school of Khromtau of Aktobe region was not chosen randomly, as this organization of education is an innovative platform for the implementation of different kinds of teaching experiments:
- in 1997-1998 - under the guidance of the scientific consultant, candidate of pedagogical sciences Zhanpeissova M.M. conducted the experiment on modular training’s introduction technology in teaching and upbringing process;
- 1998-2004 - a district experiment "Improving of technology of training", the result of which was developed by teachers an innovative combinatorial technology of training;
- 2005 - 2008 - pilot testing and introduction of teachers’ professional associations’ new forms in inter subject research chairs and subject-methodical groups of teachers;
- 2009 - 2013 period was opened the innovative marketplace on "Approbation in teaching and upbringing process productive pedagogical technology of Podlasy”.

Scientific and pedagogical research work was conducted in the framework of created inter subject research chairs. Teachers in such associations have opportunity comprehensively and consistently to conduct scientific and pedagogical researches on different directions.

In order to identify the teaching staff’s general level’s creative potential at the initial stage of the experiment by school psychologist was conducted test "Assess their potential”. Questions of the test diagnosed borders of inquisitiveness, self-confidence, persistence, visual and auditory memory, the desire of teachers to independence, the ability to abstract.

Analysis of the testing’s results revealed the following: the average point on the school - 36.1; though this period corresponds to the average level of creative potential (Babanskyi, 1987).The high level of creative potential did not show none of the teacher participated in this test. It should be noted the indicator marked by teachers - feeling of fear for new activities, especially by teachers
focused on compulsory success in their professional activities. Elements of social fear – social condemnations are shown and this display of can be considered the norm in the transition to new, more complex types of professional activities.

For the purpose of monitoring teacher’s progress we created a special journal which contains following sections:

1. Introductory texts (theme of the experiment, a single methodological problem of the collective, the problem of subject chair, individual methodological problem of the teacher, product description of pedagogical activity).

2. Summary of Podlasy productive technology’s theory, structure of the lesson on this technology, ratio of the traditional structure with the proposed lesson.

3 Methodological reflections for the previous period of pedagogical activity, a brief description of individual didactic system’s features at the start of the research work on the subject of the experiment.

4. Description of the research work in the form of tables, on the following graphs: date, subject, class, theme of the lesson. Step lesson on productive technology, conducted type of work, results, conclusions, and suggestions.

5. Conducting monitoring of pupils’ level’s training and displaying data in charts and graphs.

6 Reports on research work by semester and per academic year, conclusions and recommendations, prospects for further work on the experiment. The main attention is paid to the disclosure of the advantages and disadvantages of the new technology in comparison with the previously studied and tested. Materials presented in journals on research work of teachers are a source for tracking the status of introduction of Podlasy productive technology. Thus, from the analysis of the primary research material by school Methodist were developed recommendations to assist the teacher in the following areas (step lesson dedicated Podlasy): "Propaedeutic practice", "Orientation", "Presentation", "Practice examples" "Guided practice", "Independent practice in the classroom", "Independent home practice" (Podlasy, 2003).

In general, the experimental work on the introduction of all lesson’s sequential seven steps in the learning process did not present any difficulties for teachers of grammar school №2 Khromtau Aktobe region. These steps assume the use of already habitual, previously studied and proven forms, techniques and training methods. Element of novelty consisted in the fact that teachers were required by the strict observance of the succession’s principle of increase of pupils’ independence’s degree in the process of new material’s practical mastering, i.e. series connection inclusion in the lesson several kinds of "practices": practice of the examples, practice-driven, independent practice in the classroom, home independent practice.

The main problem at the data stages’ approbation is that it is difficult to cover all types of enshrining the practice in one lesson. Some of the planned on the lesson tasks of practical character were often failed by teachers to perform. For working off this skill, as showed practice, is required repeated testing of lesson’s entire structure completely. For resolving of identified problem were held two training seminars on themes: "Modular add-on Podlasy Productive Technology" and "Preparing a training lesson on Productive Technology". These seminars were of great practical importance as were leaned on records held by teachers-experimenters in their tracking logs.

Having passed the theoretical part of the experimental work, teachers participated in psychological testing by definition the achievement needs. Results of diagnosis revealed a high (73%) need school teachers in the achievements that show great creativity experimenting team.
Fig. 1. The average results of experiment

For the entire period of the experimental program the scientific-methodical center of Grammar school conducted a detailed analysis of the studied technological advantages and disadvantages, and was tested by a number of psychological and pedagogical diagnostic tools on identification the technological efficiency used for all participants in the experiment - pupils and teachers.

Fig. 2. Pupils achievement before and after experiment
Using learning productive technology revealed improvement in the quality of pupils' knowledge on the 5-7% overall and there is a tendency of final point increasing of the external certification by United National Testing.

The usage of productive technology in combination with elements of other technologies and techniques supports and encourages a constant search for pedagogical, professional creativity and self-subject teachers. New research makes each teacher constantly to improve their knowledge, to test various types and forms of lessons to improve their structure, diversify the types of work.

7. Conclusions

In general, an experiment on introduction in the learning process Podlasy productive technology through changes in the structure of the lesson allowed identifying the following conclusion:

1. Podlasy productive pedagogical technology is an effective way of providing quality training of all levels schoolboys in all school subjects. It is available to different levels 'teachers' professional competence - both experienced and creative work, as well as beginners. Overall, 80% of teachers were involved in this experiment.
2. A team of teachers and experimenters accumulated and enriched unique experience combination of several advanced educational technologies with interrelated elements in a single integrated educational system aimed to achieve best outcomes.
3. The usage of Podlasy innovative technology contributes to the improvement of the didactic system of each teacher and the teaching staff in general, has a charitable impact on quality of pupils' knowledge and their level of personal development.
4. Inter-subject research chairs of grammar school №2 of Khromtau of Aktobe region developed unique object-oriented models of productive training, which is a new educational experience that requires further empirical research and scientific and theoretical basis.
5. As the results of the experiment, as well as the data of some diagnostic tests, most teachers have steady demand for the transformation and continuous improvement of teaching activities, looking for work in self-expression, self-assertion, tradition preserved in the collective ownership of each to the overall goals and objectives. All of this is the key for successful implementation of the tasks of continuous innovation process, carried out among teaching staff.

References

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