EXPERIENCE OF CREATING CROSS-DISCIPLINARY MODEL OF PEDAGOGICAL TECHNOLOGY OF STUDENT-CENTERED EDUCATIONAL SYSTEM OF EFFECTIVE THINKING AND BEHAVIOR OF STUDENTS BASED ON THE METHODS OF NEURO-LINGUISTIC PROGRAMMING

TEMERKHAN BERDIMURATOV
Professor, President of Kazakh-Russian International University, Aktobe, Kazakhstan

ABSTRACT

From our point of view the article states the main aspects of the content of cross-disciplinary model of pedagogical technology of student-centered educational system of effective thinking and behavior of students based on the methods of neuro-linguistic programming in the form of procedural technological map of operation by operation description of teacher and student’s actions to provide the achievement of the predictable goal of the class in unit time in the pedagogical practice. The presented in such form model creates maximal conditions for qualitative management of psycho-pedagogical methods of coordination over psycho-physiologic, physical and mental activities of the pedagogical process’ subjects aimed at reaching the desired results in terms of time constraints, fixing the beginning and end of the classes. As a core of operating mechanism of management, we elected for the first time methods of neuro-linguistic programming (NLP) (John Grinder, Robert Dilts and others) as the main method of pedagogical stimulation of students and teachers’ activities at practically all stages of pedagogical technology.

The presented model is cross-disciplinary and can be successfully used in teaching the majority of university’s disciplines irrespective of specifics of their content.

KEYWORDS: Model, Technological Map, Matrix, Graphs of Educational Information, Assessment Systems, Control and Correction of Educational Process, Student-Centered System of Education, Neuro-Linguistic Programming, Didactic Units, Technological Operations, Comfortable Environment

INTRODUCTION

As a tool of pedagogical technology creation, the development of a model in the form of technological map regarded as a procedural model, which describes teachers and students’ actions, operation by operation is recognized to be useful. [12 p.127], Uman A.I. [15 p.341], Monakhov V.M. [18 p.17-22], Serikov V.V. [14 p.272].

Most of these experts believe that in the technological map of the model should be stated:

- Goals and objectives of the class (courses, discipline);
- Creating a comfortable learning environment during the class;
- The content of the learning material in the modular and structural forms (matrices, graphs of educational information, schemes, technological maps, pictures, symbols, etc.).
- The complex of pedagogical objectives and communicative situations;
- Forms, methods and means of teaching;
• Systems of evaluating, monitoring and correcting the learning process;

• Intermediate and final results.

Thus, on the basis of the above mentioned basic requirements to the ultimate model of pedagogical technology we developed “Cross-disciplinary model of pedagogical technology of student-centered educational system of effective thinking and behavior of students based on the methods of neuro-linguistic programming” published as a print publication in 2 books with wordage 850 pages. (As an example it is presented the content of one of the pedagogical objectives model solution. Annex 1).

The presented in the book model meets the parameters of pedagogical technology as goal-oriented, deliberate, pre-designed and implemented step by step sequence of actions carried out by the pedagogue to implement the set of methods, techniques, tools, procedures and operations at the instrumental level, ensuring the achievement of the anticipated goal in unit time in terms of pedagogical practice [Bespalko V.P.[3 p.178], Talyzina N.F.[17 p.321], Simonov V.P. [11 p.430], Slastenin V.A.[13 p.224], Pidkasistiy P.I.[16 p.335] and many others.

The presented model for solving one objective of the pedagogical technology consists of 9 didactic units and 21 technological operations that are forming basic structure of technological process and providing the achievement of intermediate and final pedagogical results by teacher.

In pedagogical technology, first of all, the primary role is played by the psychological and pedagogical methods, management of coordination over psycho-physiological, physical and mental activities of the subjects, acting in purposeful movement to the desired results in terms of time constraints, fixing the beginning and end. As a main “lively” operating mechanism of pedagogical technology control, we elected for the first time methods of neuro-linguistic programming (NLP) (J.Grinder, D.Deloze, R.Dilts and others) as the sum of methods of educational impact on the student as the core mechanism in the system of psychological, general pedagogical, didactic and particular methodical procedures of teacher-student interaction.

NLP presents the educational (upbringing) process in the form of information movement through human nervous system and studies in particular subjective human reality.

These peculiarities were the reason for choosing this method as the leading method of practical activity of subjects’ control (teacher and students) as the main method of pedagogical stimulation of students’ activity at all its stages.

We turn our attention to the main stages, phases, presented here in the form of didactic units and technological operations.

The Stage of Designing Goals and Objectives of the Class (Didactic Unit #1)

As befits in complex structures of pedagogical technological process the goals and objectives are presented multi-vectored and form a whole “tree of goals and objectives”.

Such multi-vector nature of goals is connected with those 5 main directions of the whole cycle of classes to achieve final outcomes:

• Creating a comfortable learning environment by teacher;

• Achieving teacher’s productive personal psychological state;

• Achieving effective message transmission;
Experience of Creating Cross-Disciplinary Model of Pedagogical Technology of Student-Centered Educational System of Effective Thinking and Behavior of Students Based on the Methods of Neuro-Linguistic Programming

- Displaying flexibility in meeting students’ needs.
- Reinforcing learning outcomes.

Following major condition of proper goal setting at this stage is defining in goal itself the ideal model of result which forms a certain super task in the consciousness of the student that will force him/her to act in a certain way, not deviating aside.

As it is seen from the above-mentioned, the goals of the described by us pedagogical technology, apriori “fix” the desired results, and according to stringent quality requirements and the existing constraints (time, fixing the beginning and the end of the class, etc.).

The presence in technological chain such didactic units and technological operations as:

- Didactic unit of the model #3 “Preliminary assessment, control and correction of learning before tactical pedagogical objective solution”;
- Didactic unit of the model #5 “Assessment, control and correction of learning according to the results of tactical pedagogical objective solution contributes to this “fixing”.

Thus, the desired goals and objectives are being achieved in the process of technology constantly before transferring these results to the professional context.

Creating a Comfortable Learning Environment during the Class (Didactic Unit #2)

Creating teacher’s productive personal state during the class through the system of special exercises, teacher’s activation depending on the different personal states during the class and use of relaxing exercises normalizing teacher’s state during unbalancing of psycho-physiological state and creation students’ heightened expectations from class outcomes are included in the content of this didactic unit.

The Content of the Learning Material of the Class

The phase of the project development itself starts with the development of the content of the model’s learning material.

As a rule, the content of the learning material is constructed from determination of the difference between the necessary and factual levels of knowledge. Research results of the lead sensory representational systems of perception, the lead style of thinking, the lead hemisphere of the brain, lead type of intellectual activity allow estimating teaching and learning paths, on the one hand, and making strictly individual selection of assignments for students by teacher on the other.

The formation stage of learning material content of the model passes through all didactic units of technology: from the stage of designing – formulation of goals and objectives during the class (Didactic unit #1) till “Assessment, control and correction of learning process of the future class” (Didactic unit #16) through implementation of relevant data didactic units and considerable number of technological operations.

This is the basic structure of the model’s technological process, characterized by stability, (immutability, rigidity) of its parameters, which is characteristic of strictly regulated, well-developed technologies. Deviations may be allowed in case of errors of quality during control.
The Complex of Pedagogical Objectives and Communicative Situations and their Solutions (Didactic Unit of Model #4)

These technological operations are included in the complex of pedagogical objectives model: “Objective topic conception and mental maps of its pedagogical solution”, “Axiomatic apparatus of objective: theorizes, terms, notions”, “Pedagogical objectives and communicative situations solution by NLP methods on initial and intermediate levels” and “Effective ending of the class and obtaining of learning outcomes by NLP methods till transferring to the professional context. (Didactic units # 4, 5, 6)

Pedagogical objective solution is management, planning and coordination of psycho-physiological, mental efforts of the subject in a technological process aimed at effective management to achieve qualitative results taking into account time units and getting satisfaction of the participants.

Forms, Methods and Means of Teaching (Didactic Unit #4)

Method as a mean to achieve any goal, an organic part of the technology, helps to explain the solution of this functional problem. Methods of problem solving in this section are scientific, methodological and informational support: objective topic conception and mental maps of its pedagogical solution, graphic means, presentations, topic conceptualization, etc.

Methods of actions: exercises, games, methods of effect, organization, monitoring, regulation and stimulation are selected from the subject level of methods in a model.

The technology is based on the method of neuro-linguistic programming, which determined the leading name of the technology because there is the substantial filling of the technology by this method.

As it is known, the method tools are the means. Means of the method of joint activities in the process of any pedagogical objectives solution in the model among the means of pedagogical process are means, which are specific to NLP, e.g. methods of rapport establishing (immersion into the world of student; careful mirroring of his physiology, as well as non-verbal and language patterns). Among the means of pedagogical activity used to influence the student and group by words, action, example are the technique of using "specializations" of the cerebral hemispheres (appeal to both hemispheres) through methods of visualization, future pacing, etc.

System of Evaluating, Monitoring and Correcting the Learning Material (Didactic Units of Model # 3, 5, 6, 7, 8, 9)

At this stage, first of all, we check and monitor the achievement of stated goals, define what we actually got from the selected technology of learning activity in the form of developed personal and professional pedagogical qualities that is the result.

Intermediate and Final Results (Didactic Unit of Model # 6)

The result fixes the things we plan to get at the "output" of the process of pedagogical technology implementation. Implementation of the selected technology of the learning activity is embodied in the final product – the professional knowledge itself, as well as in development of personal qualities.

At the same time, it is possible to talk about the success of management activities only if we know real results and consequences of the technological process for all participants of interaction in the form of quantitative and qualitative assessments. The model described in the book is cross-disciplinary and can be successfully used in teaching the majority of university’s disciplines by filling them with the specific content.
Experience of Creating Cross-Disciplinary Model of Pedagogical Technology of Student-Centered Educational System of Effective Thinking and Behavior of Students Based on the Methods of Neuro-Linguistic Programming

REFERENCES

15. Simonov, V.P. (1994). The system approach is the basis of the pedagogic management. Pedagogics #1.

APPENDICES

Annex # 1

Example of one of the objective solution of “Cross-disciplinary model of pedagogical technology of student-centered educational system of effective thinking and behavior of students based on the methods of neuro-linguistic programming”

Content of the objective solution model #1:

Didactic Unit # 1: Monitoring skills formation for achievement the course goals, plan of actions adjustment, check lists use, self-evaluation on training results, planning the further goal of training.
Didactic Unit #2: Creating a comfortable learning environment during the class.

- Creating monitoring the teacher’s productive personal state by NLP methods through the exercises choice if necessary depending on the situation or teacher’s personal state during the class.
- Using activating and relaxing exercises and rules by choosing exercises if necessary depending on situations or teacher’s personal state during the class.
- Creating and using heightened expectations by NLP methods by choosing exercises if necessary depending on situations or the teacher’s personal state during the class.

Didactic Unit #3: Preliminary Assessment, Monitoring and Correction of Learning before Tactical Pedagogical Objective Solution

Technological operation #1. Revelation of students’ desires for such changes in their behavior.

Technological operation #2. Correctness verification of students’ goal setting to implement the changes.

Technological operation #3. Defining students’ goals in changes.

Didactic Unit #4: Forms, Methods and Means of Tactical Pedagogical Objective Solution

Technological operation #1. Defining topic conception, mental maps of its solution and axiomatic apparatus.

Technological operation #2. Defining additional outcomes obtained during the training by virtue of different reasons.

Technological operation #3. Defining achievement of all intended goals of the training.

Technological operation #4. Verification of outcomes and revision of the goal according to its outcomes, using such skills as perception acuity, reframing, etc. and full range of appropriate NLP skills.

Technological operation #5. Creating the final checklist and graphical scheme of the goal movement towards the final outcome according to A. Bandura.

Technological operation #6. Defining the goal for further study on the basis of reverse tests.

Technological operation #7. Analysis of teacher and students’ opportunities.

Technological operation #8. Learning path estimation by selecting NLP techniques.

Technological operation #9. Training exercises.

Didactic Unit #5: Assessment, Monitoring and Correction of Learning According to the Tactical Pedagogical Objective Solution

Technological operation #1. Control table “Goal realization in obtaining results of the pedagogical objectives solution by NLP methods” (on a 10-point scale)

Technological operation #2. Revelation of students’ desires for such changes in their behavior.

Technological operation #3. Correctness verification of students’ goal setting to implement the changes.

Technological operation #4. Defining students’ goals in changes.
Experience of Creating Cross-Disciplinary Model of Pedagogical Technology of Student-Centered Educational System of Effective Thinking and Behavior of Students Based on the Methods of Neuro-Linguistic Programming

**Didactic Unit # 6: Effective Ending of the Class and Obtaining Learning Outcomes of the Tactical Pedagogical Objective Solution**

Technological operation #1. Obtaining learning outcomes by NLP methods before transferring into professional context.

Technological operation #2. Defining the level of problem solution skills acquisition by NLP methods up to the level of professional competence according to Bandura’s scale system on the basis of studied material.

**Didactic Unit # 7: Assessment, Monitoring and Correction of Learning**

Technological operation #1. Creating a comfortable learning environment at the end of the class.

**Didactic Unit # 8: Assessment, Control and Correction of Learning Process of Future Class**

Technological operation #1. Discussion, comments and assessment of teacher’s work by students using reverse tests-1 (E. Jensen)

Technological operation #2. Discussion, comments and assessment of teacher’s work by students using reverse tests-2 (E. Jensen)

**Didactic Unit # 9: Discussion of Reaction to the Test Results: Development of Readiness for Behavior Changes, Flexibility (1-10 Points)**