



FORMULATING THE SKILLS OF TEACHERS ON MAKING RESEARCH WORK – IS AN IMPORTANT FACTOR OF PROVIDING EFFECTIVENESS OF THE PROCESS OF INNOVATION

Mukhayo Tojievna Jumaniyozova

Associate Professor of the Department of Pedagogy and Psychology of Uzbek State World Languages University,
Candidate of Pedagogical Sciences

ABSTRACT

While making strategic plans for developing Education the main attention should be drawn to the teachers' creative activities basing on vary actions. This gives an opportunity for teachers to widen their professional interests, so that to make psychological-pedagogic and fundamental researches in the methodological, theoretical directions plays an important role for formulating innovative activities of teachers. In this article depicted the new trends of teacher education for the purpose of increasing, enriching and enlarging effectiveness of Education.

KEY WORDS: *innovation, the process of innovation, research activity of teacher, creativity, problem solving method, heuristic method, teacher's portfolio.*

INTRODUCTION

While making strategic plans for developing Education the main attention should be drawn to the teachers' creative activities basing on vary actions. This gives an opportunity for teachers to widen their professional interests, so that to make psychological-pedagogic and fundamental researches in the methodological, theoretical directions, plays an important role for formulating innovative activities of teachers.

Self-development of teachers through research activities has made positive impact on acceleration of innovative processes in the system of Education.

Researching has its special place in the innovative activities of a teacher. The skills of researching have been formulated by the influence of the objective and subjective factors. Objective factor included as the new policy of the government in Education, fundamental and practical researches and global changes. Social-regional needs, the development of educational process at the Educational establishments or institutions, scientific-methodological knowledge of the pedagogic staff, their skills and abilities, development of their scientific competency, development of capacity of the institutions or Educational Establishments,

changes the specifics of management and etc to be included to the subjective factors.

The innovative changes in the process of Education, entering different type of new trends in the system of Education can be implemented directly by renewing and changing teachers' activities.

Renewing the content of Education, using new information-communication technologies and advanced pedagogic technologies and also new teaching methods, changing the requirements on planning, organizing and management in the process of Education according to the demands of time, required that the teacher who work at the Educational institution should formulate and develop his/her scientific-research competency. The researching competency of teachers has been basically formulated during the process of conducting pedagogic Piloting. In this field analyzing, developing the content of Piloting materials, using information correctly and appropriately plays very important role of education.

Addressing to the problems of formulating research skills of teachers appeared as a result of recognizing the developmental process of the innovative dynamics in the society. The aim of formulating teachers' skills on researching activities not only implementing the new modern achievements of science and technology in the process of



Education, but to teach them seeking the news, creating, adapting, applying and reviewing the taken results.

THE SPECIFIC FEATURES OF TEACHERS' RESEARCH ACTIVITY

Contemporary society, which is called Information technology and postindustrial is demanding us to be active, to make independent decisions and adapt the changing conditions of life. In turns such kind of lifestyle demands that the person should have some special qualities, as:

- to gain necessary knowledge independently, professionally using the gained knowledge for solving problems;
- working with information valuable (to know how to collect necessary facts for researching on special issue, analyzing them, to offer the hypothesis regarding to the solution of the matters, define the law, define the new issues and solve);
- know definitely where and how can be used the gained knowledge and understand using field of this knowledge;
- Independent critical thinking, understanding the difficulties which are appeared in real world and seeking the feasible way of eliminating the problems;
- Creative thinking, have a chance for creating new ideas;
- be sociable in different social groups, knowing to work together or how to rid off non standardized situations;
- working at on his/her educational, intellectual and cultural competency independently.

Here the researching activity plays an important role, For formulating teachers abilities on making research the following factors to be considered very important:

- Teachers can be gained the philosophy of creative activity;
- Knowing the pedagogic research methods and use them in the process of Education (For example: Work sheets, Questionnaire, Pedagogic Piloting, pedagogic diagnostics and etc.);
- Ability of creating authorship conceptions;
- Planning and implementing Piloting process;
- Using other scholar-pedagogue's experience;
- Cooperating with colleagues;
- be able to change opinions and give methodological support;
- seeking, finding news and adapt it to his own condition;

The main features of teacher's creativity and activity are the following:

- ability of thinking independently;
- ability of unity for the benefit both people and state;
- ability of dedication to the strategic way of the country, being consentient of time;
- responsible and being professional in his field;
- ability of showing the love for Motherland deeply;
- clearly define the forces of the world which are made to be moved;
- ability of seeing the process of social events in advance.

CREATIVITY IS THE MAIN TERMS OF RESEARCH ACTIVITIES

According to the Educational characteristics of human personality by Abu Nasr Forobi (who lived in 873 – 950 Central Asian great scientist) human is social with his own essence, so he became a human in the process of interaction, system of inter attitude and in the process of interrelations,

Socially active teacher express oneself by deeply feeling his duty and responsibilities before the society, socially-morally recognizing himself, level of readiness for great creations and great aims. New social needs caused to develop person's creative competency in the process of education. Changeable educational paradigms put the new requirements for today's teacher. Today teachers should define his own direction among the different situations of innovative technologies, innovative ideas and innovative schools and practically be ready for accomplishing the tasks regarding to chosen Innovative Education technologies.

Developing of science and technology, innovations in the world of science, today's development of the subjects as psychology, pedagogy and methodology demands teachers work hard and enrich and enlarge their skills and abilities. The main goal of In-service and Retraining teachers is to develop their creative opportunities, develop their professional knowledge and general competency, in the end, to develop the content of teaching and educating up to date young generation basing on the new technologies.

Subjective sides of creative and active teacher to be included the following:

- the teacher should know his prestige (through this he is able to respect the others);
- the teacher should keep his own position, honestly approach to his started work;
- be kind- polite;
- feel gratefulness achieved results and hope future;



- be confident and punctual;
- be an exemplary person and lead the others for the purpose of achieving goals.
- Have a spirit of equality both in life and pedagogic activity;
- Be able to unite and involve others for the benefit of Motherland and nation;
- Defining unique theory, by renewing, social attitude, changing lifestyle, provoking and consolidating democratic dignity.

For formulating teachers' creative features, his behavior, outlook, dedication to his profession, his and the institutions' true attitude to work plays very important role.

According to the ideas of scientists on pedagogy the rules of the behavior of the teacher made up his attitude to the Educational Institutions and it consists of 4 steps:

First: the attitude of teacher to the Educational Institutions (dedication, satisfaction with his work, profession);

Second: the attitude of teacher to his work place and profession (action, responsibility, be proud of his profession);

Third: the attitude of teacher to his colleagues, staff and authorities (co operation, attention, treatment, punctuality)

Fourth: the attitude of teacher to himself (health, morally confidence, the level of self management)

The creative features of teacher formulated during the above mentioned process of relations. Coming out of this, the objectives of the Teacher Training system should be drawn for developing teachers' individual abilities.

In turns the creativity helps teacher to form high qualified effectiveness, discipline, logics, the quality of implementation, innovation, enthusiasm, attitude to the creative talent, dedication to his institutions, dedication to his staff and administration and etc.

THE ROLE OF PROBLEMATIC EDUCATION FOR DEVELOPING TEACHER'S RESEARCH ACTIVITY

S.L. Rubinstein stated: "Thoughts – is a problem stood before the human and it is the wisdom which leads to solve the problems, thoughts came out of the problematic situation and it has referred to solve the problem"

By this the following logical meaning has been formed. It's very important for the society to be creative, independent thinker of the person. The process of thoughts are begun with the problematic situation and in this process the methods of problematic teaching has its own place. Problematic

teaching methods include the following: the method of project, the method of heuristics and the method of making problematic situations. For teachers for the purpose of developing the activities on research work, knowing above mentioned methods is very important and demandable.

During the process of using the method of project a teacher can:

- On making up non-standardizing problems;
- Asking non-formulating questions;
- Use extra information;
- Generalizing basing on his own practical, independent observation;
- To explain the essence of some objects without using manuals;
- Define the edge of using selected results;
- Define the level of usage selected information.
- Define the mechanism of appearing the event;
- Creatively think and find the tasks like "in a moment" and can be given to the students by adapting appropriately to their age and ability.

Heuristics (The origin of this word belongs to Juno and means – searching, finding, inventing) is a subject which is learnt the creative activities of people, and also learnt the methods which are used to create new inventions, as a subject it is developed in the range of the subjects like Psychology, Cybernetics, Structural Linguistics, Theory of Informatics

Each of us has met with the people whose thoughts are unusual, developed imagination, specific and unexpected opinions. Such kind of people we usually call creative people who are able to form new ideas.

Unfortunately at school the development of the talents which created new ideas through the image assimilation are not paid enough attention. The teachers mainly draw their attention to use the methods referring to do logical sums. Sometimes they are under the influence of restoring the new generation according to the former traditions and normative documents

The role of is not only to set up cultural traditions, but it consists of creating new ones. It's known that the nature has been created the human and gives him a chance and talent as imagining, guessing, building and creating. So each person has an ability which is called heuristics. Consequently, the heuristic methods increase the possibility of finding the solutions for the creative problems which are not always optimal but worthy to use in conditions that the early information is not complete and untruthful. Heuristic methods give an opportunity to find solutions even in a very complex



and unexpected situations. Heuristics indicated the techniques which are helped to achieve the goal.

Heuristic teaching is not aimed for recreating all the knowledge and experience of people. That's why the problem which is stand in front of a teacher is to find the most important points of the topic and to give an opportunity to the students for making early creative researches. The students are offered to get acquainted with the achievements of people regarding to the problems after creating their first products basing on their own understandings, knowledge and assumes. Here also students don't assimilate the ready materials, but they compare them with the results of their own experience.

The limits of heuristic teaching have been indicated and marked by the teacher himself, by the Methodological Council or School Pedagogic Council. Practice showed that it is possible to plan and organize learning as a creative search of students regarding to any subject, any issue and any age of them according to the syllabi. Usually students accepted with pleasure to demonstrate their own creativity and fulfilled higher than indicated measures and requirements.

THE TEACHERS' PORTFOLIO AND ITS CONSEQUENCES IN THE PROCESS OF RESEARCHING

Portfolio has a significant feature at the beginning of the researching activity of the secondary school teacher. The meaning of the word "Portfolio" is "collected folder of documents, collected folder of specialist", while translating from Italian. Portfolio is the complex of the documents and works which is aimed to demonstrate teachers own opportunity. Its main content is to give an opportunity for teacher to use all the chance and assist him to develop professionally and mentally.

There are several types of portfolio, the first type is – Teacher's achievements portfolio. It can be consist of 3 parts: 1. "Documents", 2. "The fulfilled activities", 3. "Opinions about fulfilled activities"

Documents. This part includes the private achievements during the time of study and the process of work(special merit awards, diploma, certificates. This gives an opportunity to evaluate teachers achievements.

Activities. This is the volume of teacher's creative, research and project works. Here is depicted the directions and trends of learning and creative activities of a teacher.

Opinions about fulfilled activities - here is compiled and collected written analyses of teachers relating to different activities (Summaries on tests, reviews, resumes and etc).

The second type of portfolio is – a Reflection portfolio, it is collected the professional development dynamics of teacher. It consists of self-

analyses and self-assessment of teachers for their own work, the results of their activities, analyses of the process and goals. Using observation diaries is considered as a very effective tools for developing skills on self-evaluation.

The third type of portfolio – is the portfolio of problems. It consists of the materials which are collected for the purpose of solving a certain problems, the process of solving problems and their results. This level of portfolio defined the teachers level regarding to analyses – syntheses – evaluation. Such kind of portfolio recommended to collect information to the following directions:

- The list of literature for studying the problem;
- Small topics, the area of the problem, the plan of the research;
- Point of views during the discussion;
- Quotations, aphorisms;
- Integration with other subjects;
- Summaries basing on the results of the research;
- The methods and techniques of the research;
- Predictions and future plan.

To collect materials and put them in the systematic order for such kind of portfolio not only give the teachers enough chance for doing appropriate work, but raise their interest up to the scientific level.

The fourth type of portfolio - is content based. It is created during the process of learning some large contents. Such kind of portfolio consists of information taken from additional literature, additional resources, problematic situations concerning to the topic.

Teacher can make a portfolio on the following themes: "Summary about the conducted lessons (session)". (In this portfolio is placed the reflective summaries about conducted sessions); "Questions without answers"; "Statistical Information"; "Graphic organizers"; "Quotations and aphorisms"; "Laws, Principles, Rules"; "My inventions"; "My students' creative work"; "When and which lesson I can use this"; "Comparative analyses: how the students use, how I use during the lesson; " The Bank of Ideas"; "Divers ant: the arguments on the topic and the arguments against them"; "Success encouragement: the information which help professional development in the process of work"; "Parallel world: inter-subject and in-subject relations".

CONCLUSION

It is possible to say as a conclusion that revealing hidden knowledge of the people not only depends on the teaching technique but it depends on the whole Education methodology. Personal experience of the student has been created as a part of



his educational activity in the process of learning. The activity of the teacher as a researcher gives not only the opportunity of transferring his knowledge to the students but gives the chance of evaluating his own activities, the ways of assimilating learned subject and expressing the results of learning. The imagination is unlimited and its appearance specifically depends on each person himself. That's why, through the creative activity the matter making lessons more brighter, more interesting and heuristic, more dynamic in the teaching process are loaded to the teacher. For this matter the Teacher's Portfolio together having been the folder which is collected the teacher's personal achievements, evaluation tools and also special systematic information folder for monitoring teachers knowledge, ability and skills, the tool of self-analyzing, defining tool of relative development, measurement of the level of cognitive thinking and the report of the teaching and learning process.

THE LIST OF USED LITERATURE

1. Abu Nasr Farabi. *Fozil odamlar shari. (The city of wise people). (tanlangan asarlar). T.: 1993, - p.187*
2. S.L. Rubinstein. *O mishlenii I putyax ego isledovaniya. – M., 1958, - p. 147*
3. Ilinskaya I.A. *Problemmie situatsii I puti ix sozdaniya na uroke. – M.: Znanie, 1985. – p.80. – (Novoe v jizni, nauk, texnike. Ser. "Pedagogika I psixologiya", № 1)*
4. Lukyanova M.I. *Nauchnaya shkola pedagogov v sisteme povisheniya kvalifikatsii kak novaya forma aktivizatsii I razvitiya issledovatel'skoy deyatel'nosti pedagogov. // J. Innovatsii v obrazovanii. – 2008. № 5. – p. 31 – 41.*
5. Mahmutov. M.I. *Organizatsiya problemnogo obucheniya v shkole: kniga dlya uchitelya. – M.: 1977.-p.423*
6. Rodgers K., Fraiberg D. *Svoboda uchitsya. – M.: Smisl, 2002. p. 527*
7. Angelovski K. *Uchitelya I innovatsii: Kn.dlya uchitelya: Per.s.market. M.: Prosveshenie, 1991. p.159.*
8. Simonov V.P. *Diagnostika lichnosti i professional'nogo masterstva prepodavatelya. M., 1995. p. 230*