Formation Of Information And Professional Competence Of Primary School Teachers

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Abstract: The Law "About Education" of Republic of Kazakhstan says that " the main objective of the education system is the introduction of new technologies in the training and education informatization , as well as access to global communication networks ." Problem of modern society is the education of an educated person who effectively plan their actions , uses appropriate knowledge in the functions of knowledge , and to achieve the desired result dialog effective communication with people from different groups. Only competitive, well educated, competent teachers can open the door of our future nation on the world stage and educate the younger generation as an educated , strong-willed and rich national consciousness .

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Introduction.

Different opinions often expressed on the formation of competence of future professionals in the education system last years. The term " competence " is usually used in a certain socio- professional status , and knowledge , skill , concept of making at work and resolution of certain problems . " Competence" (from the Latin competentis - adapted) - formation of knowledge and skills during training specific subject , as well as the ability of performing certain functions. The term «compete» from Latin means " to know ", " be able to do ", " to achieve the desired ". It helps to define the essence of competence. In order to determine the category of professional competence it is necessary to reform their different views, clarify and summarize in a logical order [1] .

American scientist N. Chomsky gave a definition of the term " competence" , and introduced in linguistics . The term stands for competence in dictionaries as the assimilation of knowledge, to know, to be an authority[2] .

The difference of knowledge and skills from the concepts of " competence" and “competent” are listed below:

a) The difference of knowledge - Due to productive forms of activity , and not in view of the information functions.

b) the difference of skill - conscious function , which includes materials studied , creative change.

c) the difference of skill - not for achievement or substituting skills in automatic consideration but rather the integration of multiple objects skills to realize the common database functions [3].

By the of example student- orientation purpose of education in the new paradigm is that teachers give students not only knowledge, but also knew how to use creativity to life situations and learning , forming substantive competencies through self-development, to understand the sincerity of the environment and feel individual and analyze their actions . Now scientists, educators around the world are exploring the process of learning. Because nowadays conditions of education is complicated and full of contradictions . Development of society goes ahead than education. Sometimes this difference can be measured in several decades. Every day human resource comes multiple streams of information . A content and teaching methods remain the same. Therefore, social needs and to meet those needs manifest contradictions between them, and they lead the field of education crisis .

And so the development of methodological creativity of school teachers , the ability of teachers in the system shows improvement of organizations need implementations based on the professional competencies.

The idea of competence is what knowledge society needs , personality and how it can satisfy needs of society . Formation of competence of teachers of schools in the education system is one of the problems . Improving the quality of competence in terms of solutions to improve the content of the traditional method of education manifested in the contradictions between them , which can be regarded as one of the ways of making crisis situations. Much attention is given to this method. Quality of knowledge is manifested not by the quantity, but by the ability to use

them . Then what should be a professionally qualified teacher ? Analysis of educational research shows that this problem has evolved from a historical point of view . This problem with the scientific side was little studied theoretically , the teacher was not given the opportunity to improve their competences and in our training system theoretically pose the problem of justification base of development from a professional standpoint of teachers methodical creativity.

In education, the concept of "competence" is introduced in foreign literatures of 1960-1970 , and Russian literature at the end of 1980. Need implementation of concepts of "professional competence , the ability to achieve " is manifested by its volume content , integrative character, unites concepts of " professionalism ", " qualification ", " professional opportunities " etc. In the Dictionary which is published under D.I.Ushakov authors try to prove the difference between the words "competence" . " Competence" means to be in the know , honor , and "compete" - professional and personal qualities of concrete set of functional nature .

In our time, the problem of the definition of professional competence of teachers opinion , philosophers and physiologists are different and contradictory and manifest new hidden thoughts . In many cases, the process of personal professionalism connects qualifications and professional competence.

If we consider the pedagogical study of Russian scientists V.A.Adolf, N.V.Kuzmina, A.K.Markova, E.F.Zeera ,V.A.Slastenina , T.F.Loshakova , etc. , then we can see how the problem of professional competence is interested in pedagogical frame.

And also, philosophers such as Dewey, U.Uoller, M.Mid, Carl Jung, Sorokin, F.Znanetsky considered the professional competence of human actions as human adaptation to environment. They say that the profession of a person lead to a general exchange of views , promotion to the target, the formation of opinion , expression of interest of a certain thing . Scientists D.L.Tompson D.Pristli defined professional competence as the systematization of the knowledge and high moral standards, and as a result of pedagogical code.

We know that the term competence means how many pronged and many sided . The concept of " competence" is similar in meaning "ready". Researcher L.V.Kuleva believes that the concept of " professional readiness " and "professional competence " similar in value , their difference shows the status of preparedness activities , competence - shows willingness on the matter, they changed the course of professional activities and perfected . And so in terms of quality professional training are particles of professional readiness , and in terms of professional activity can be considered as part of a seasoned professional competence [4].

Now it is adopted to use the concept of " competence " together with the concept of "competent ." Complies with the terminology of "competence " originates from the Latin (competentia - a combination of particles and complete, achieve) . And so the word "competence" has two meanings: 1) a collection of reference person , 2) on a particular issue have the experience , knowledge of man . In modern pedagogical literature the word " competence" is used with the second value.

Competence - in the environment of their competence has its rights, duties , Obligations and powers necessary for professional tasks of matches ability of independence and responsibility . It follows the word " competence " is a professional and pedagogical value[5]. Professor S.E.Shishova defines competence as the notion that there will be opportunities to solve problems and compliance which require the ability to realize the experimental activities. A.V.Hutorsky defining the main subject content of general competence , examines as personality competence is definite things and in processes which are connected with each other by quality.

Professor S.E.Shishov believes that the competence is - " due to training received knowledge , experience, values and based on the collected adaptation ability ." Talking communication skills and competencies, he still says that there is a difference between them , the ability actions in special situations.

In research we offer the following definition of "competence " it is - mastering the actions of the individual in the process of learning and knowledge , skills and abilities that are aimed at the professional activity[6] .

The concept of " competence" is associated with certain activities . When it comes to professional experts , we present before the eyes of the employee who performs his job competently . According A.K.Markova " Professional Specialist is a specialist in society who stimulates interest in the outcome of professional activity and in its place elevates the status of their profession." It identifies these types of competence : special - specific competence in the profession ; social - competence in the wake of the relationship and communication; individual personality and with the help of professional activities to improve the capacity of the work , competence in the field of increasing the productivity of labor; Many professional - competence, which is almost all the basics of labor as a broad-minded and intellectually ; extreme – competence of actions in stressful situations ; autocompetence - competence of the internal state of the person , the right look for themselves, for their

qualities, abilities , needs , features, goals, motives , value orientations.

Similar to the definition of competence we can found in the writings Dzh.Rovenna . According to this definition, of a scientist competence is – action for the effective execution of the action in concrete subject area , need special abilities , they consist of knowledge on a particular specialty , exceptional subject skills by ways of thinking , responsibility for their activities. But scientist N.A.Volgin writes that professional competence is not only expressed in the possession of experience and knowledge , but also the fact that at the right time to update the knowledge and skills , as well as the right to use them to their profession .

Scientist A.M.Novikov believes that the synonym of concept of competence is "professionalism" , and it is considered from two sides. First, it is relevant to the preparation process , and secondly , describe the contents of professionalism , the particles of which consist of " primary skill ."

In psychology, the concept of "competence" is regarded as a success and the achievement of individual groups in a particular area . According to the definitions of psychologists L.Hella and D.Ziglera , "competence" is - as the psychological qualities of the person , who is in interaction with the environment that recognize their abilities , starting with their feelings of success and usefulness , confidence and will. Well-known psychologist M.Kerst concluded that the problems of personality is a combination of personal qualities and abilities.

In psychology, on the concept of " competence " actions which are implemented by knowledge and skills are formed (A.N.Zhuravlev , N.F.Talyzina , R.K.Shakurova etc.). It means that in psychology "competence" can be viewed as a set of cognitive, practical experience. As one of the foundations of the educational upgrading advisors of competence offer their results. From the point of view of the Soviet psychologist B.D.Elkonina concept of " competence" is not only a cognitive process component, but also motivational , social and behavioral , which adopt learning outcomes , value systems orientations. Analyzing psychological perspectives , we came to the conclusion that knowledge competencies , behaviors and attitudes towards them is the ability to use knowledge in practice formed in the socio- cultural environment.

And so considering the concept of "competence" and "competence" we saw that they are wider concept of knowledge , ability and skills . Because they are grouped into properties such abilities as a personal orientation , the rush to change of stereotypes , awareness of the problems , the ability to show wit . The concept of " competent " and " competence" is a lot of partial and systemized. They represent high - quality professional activity and is used in other areas of human life . In the field of teaching this concept is used for the purpose of characterization of quality of training specialists of high educational establishment.

Competence in the first place puts the ability to correctly solve the problem, not the information knowledge of teacher. If the formation of competence of primary school teachers to consider in secondary vocational education system, then we can say at what level is the possibility of knowledge and skills, qualification of pedagogical activity. Professional competence is personal qualities of the teacher and his psycho-pedagogical and theoretical knowledge convergence on the same wavelength qualifications, skills and experience [7]. Future specialist should try to be a master of his craft, to master the necessary skills teacher and know the world culture, the culture of its people , culture, communication , culture, language, learn the integrative processes , trying to enter the world stage formations.

Methods of the research.

Teacher meets the requirements of society which should be engaged in self-education , to be able to establish contact with people , children, society, and must have a high ability to organize , have a wealth of experience and other qualities. Only then we can see a specialist with high professional competence .

Information is the main competence. Information competence is - systematic structure of information and communication technology knowledge , skills, and experience with using and development of the knowledge and skills in the volatile and crisis situations the ability to use a computer, printer , fax, modem and other new technological means by which to make decisions.

As a result, student-centered learning is considered from the point of view of competence as a specialist , who can act in the information society .

Thus, as a result of information competence education should be the main type of competence. It denotes search informations , sample business proposal , spreading facilities and planning processes.

We believe that information competence is very important because the information forms the physical environment of man, determines its socio- cultural life , a means of interpersonal realistic relation.

And it also has a high importance in training of primary school teachers and in the formation of personal qualities and characteristics. As a result, student-centered education system of knowledge and skills direction explains the formation of personality adapted pedagogical free communication , in practice, the ability to work creatively and express emotional state [8].

And therefore, special attention is paid to the special social and personal types of professional competence . Special - in the relevant knowledge and skills of their profession , learning new skills and knowledge , to be a qualified , able to assess the results. Social - Knowledge of speech , communicative culture , ability of communicating with others, be prepared for the environment. Personal - Availability training personality to the profession for improving skills , self-help skills . First, in any information society action of specialist is intensified, secondly, in the preparation of the formation of specialists of professional knowledge and skills , shows the need of development of methodological thinking, which is expressed in the change of the paradigm of education, thirdly, shows the need for the formation of a multicultural personality in the world and humane process of integrative tendencies.

If we consider the professional competence in a generalized form , then we can treat them as a set of professional characteristics , knowledge, skills and attitudes of the person .

Political and public training of primary school teachers gives the opportunity to learn high culture of dealing with people , be able to consider right , analysis of development of socio-economic problems , methodological recognition of phenomenon in public life, nature, the environment . As indicated in the concept of 12 years of education RK main aim is to develop professional and personal competence of teachers. In 12 years of teacher education should learn next competences :

- Special competence - the ability to plan the development of their careers.
- Social competence - the ability to do their job .
- Educational competence - the ability to use the basics of teaching and social psychology.

Thus, competence can be understood as the ability of teachers' self-development according requirements of the society. In education policy clearly expressed that a complete change must begin with daily tasks that are given in the learning process . Elementary school teachers are not keeping up with the information society which should be witty , strong , own special abilities of organization , to be able to channel and it is a requirement of our society. And so , the formation of primary school teachers competence begins with advanced training institutes , through the development of creative abilities it is possible to be in the highest level of intellectual activity and thinking, perception of the new , through the sense not grasp the knowledge of the expected results in the formation of orientation. Even this in its turn requires from teachers formation of personality with special competences .

These competences include the following types :

- Oriented competence (civic engagement and understanding of the political system , evaluation , patriotism itd);
- Cultural cognitive competence (to know national characteristics , the ability to comparing , analyzing the culture of people and others);
- cognitive competence (the ability to organize and plan their educational abilities , learning skills activities of the applicant , the ability to make a conclusion, analysis);

Communicative competence (to know the ways to communicate with people , communication skills in the Kazakh language as the state language , and foreign languages in international relations);

- Information technology competence (ability to observe objects with the help of technical , information technology , the ability to search for , select, interpret , make change);
- Social and labor competence (ability to analyze , decide in circumstances of social cohesion , the ability to operating under different situations);
- competence personal self development(the ability of the active knowledge and experience of family labor in the sphere of economic and political terms) [9].

Competence teachers should be versatile in the upbringing of the individual properties of the abovecompetence. If a primary school teacher can put your career in the right direction , loving his profession give assignments that can be used in life, then you form students' competence. And so , student- oriented education system in accordance with educational standard is aimed at multiple personalities . Teachers' competence due to the fact the level at which the student can use the knowledge gained in life situations .

As well as answering the questions of " How to teach a child? ", " How to teach thinking ? ", "How to be a manager of your life? " We are trying to solve modern problems . In the transition to a 12 year school education rests on three directions. These areas include personal abilities of pupils, social opportunities , Incorporation of domestic needs , to teach in the personality -oriented direction. To implement these teachers should read the direction of three components , which are shown below in this scheme .

Scheme 1. The main components of a teacher who should know .

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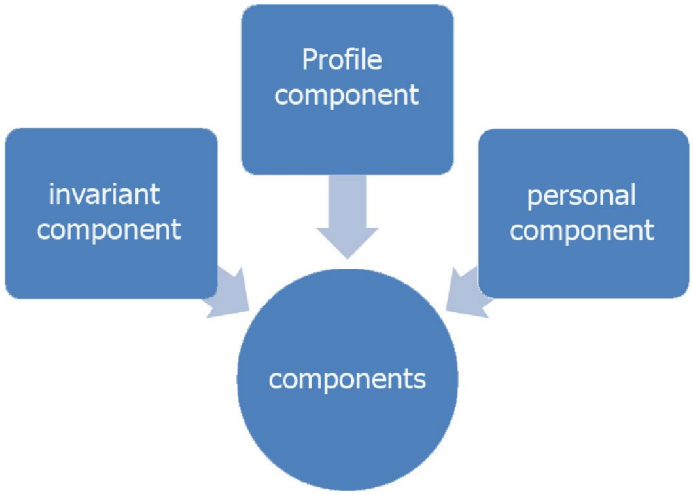


And now specifically focus on the above components.

- Invariant component - an appropriate level of educational content is a core component of educational content .

- The profile component - mastering the relationship between objects specified in the content of the state standard of school education .

- Personal component - provides new forms and methods of organizing the educational process, which provide research activities and elective courses .

Level of professional competence assessment in modern society :

Low (adaptation) - knowledge about the competence small, not enough desire for professionalism , very little ability to adequately assess and communicate with people .

Intermediate (reproductive) - have an interest in professional competence , feel the need to become a competent teacher.

Sufficient level (Heuristic) - a positive attitude toward professional competence , there didactic knowledge , the ability to use methods and techniques of teaching. Ready to work on information to achieve high results.

High level (creativity) - permanent interest in the development of professional competence , and it is very important in their work. High interest in the development of knowledge and skills . He knows how to solve problems , plan lessons and have high organizational ability . This specialist has its own organizational abilities .

The education system in the modern era of primary education teacher must be familiar with the functions of quality content . In a continuous process of socio- cultural environment the teacher should promote a positive personal development of the student, using the right tools, methods and forms of education. This is the main task of primary class teacher .

Since competitiveness of each state is estimated by knowledge that teachers give. Therefore , each state that wants to show off high achievements should work on the quality of the education system [10].

Nowadays, the development of quality of education based on the competence approach . In this approach, the focus is on learning outcomes and as a student uses his knowledge in problem situations .

Competence also defines creativity and system of value orientations . Trainee must use their skills in problem situations . At first it is formed in the learning process . Student competence - is the quality , the result of the knowledge gained . Since the competency-based approach provides a quality education , then we need to determine the node based on knowledge and skills and emotionally - value relations .

Formation of professional competence needs to develop creative abilities in the proper acceptance of pedagogical innovation and rapid adaptation to society.

Scientists divide the structure of university students competence in 2 parts :

General and professional competence;

Special professional competence.

General and professional competence to the willingness of its activities and knowledge and skill . Also , they include research activities , administrative and organizational abilities of student.

Special professional competence. It is the willingness of the student to perform the functions of their profession improvement. E.A. Klimov defines several human relationships with the profession : man-man , man-mark , a man - an artistic image , man - machinery , man - nature .

Communication skills, awareness, regulatory, intellectual and pedagogical competence is considered as professional competence.

Communicative competence of the teacher - is an integrative professional quality, which includes such kinds of abilities as emotional stability, extraversion ,

language skills , listening skills , the ability to promote and respect human interlocutor.

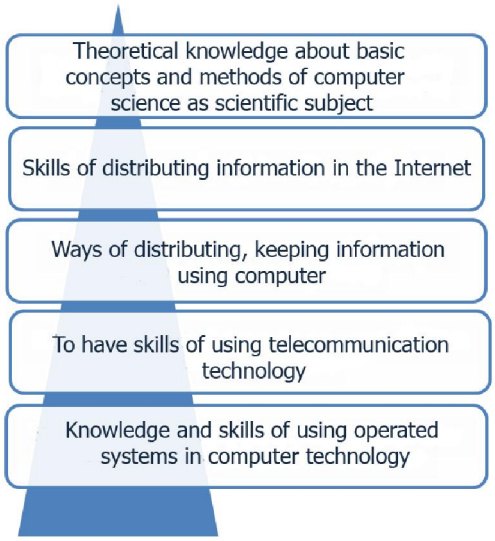
Communicative competence in the first helps to empowerment and personal development of man , and secondly , the rate sturcture , skills , objects, features and communication subject of teachers in the pedagogical relationship . The teacher should develop a communication activities , as it is a personal psychological , creative quality specialist.

Information competence . Using real objects and information technology , the ability to search for , analyze and select the information you need to organize , convert , save and send it . This competency provides the skills the student activity with the information contained in the school subjects and learning areas , as well as in the outside world .

Regulatory competence - is the possibility of the teacher related government. This includes planning, organizing , constant action and the ability to show themselves , in reflection and evaluation of their work. The main factor activity - it is a value and humanity .

Intellectual and pedagogical skills - analysis, synthesis, comparison , conclusions complex analogy , Imagination , a tendency to think logically . Information competence of teacher's professional activity consists of :

Scheme 2 . Professional activities of information competence :



For the formation of IC the following are needed:

- to do value- important conditions for the development of its future activities.
- Seeing profession holistically and systematically.
- Ability to use the knowledge gained in various forms of technology.

The transition to the information society is introducing change in all areas of human life. In our time, the requirements for primary school teachers are much different. Now the demand for future specialists are:

- No obstacle to reach information to use technical subjects and communication technologies ;
- Ability to make timely and quality information through technical subjects ;
- Using the acquired knowledge , to enable new knowledge to exercise ;
- Being socially active and optimistic professionally ;
- Be competent in mixed areas.
- Fast and effective decision making .
- Be able to self-regulation , self-development and the reading of his personality .

As a result of the formation of student-centered focus, specialist is able to manifest himself in an informed society.

Thus by searching , sorting , organizing, and distributing information proposals of informational competence are formed.

It is the most important quality , since the material life of mankind consists of a set of information , and it is implemented through interpersonal relationships .

According to the scientist V.A.Suhomlinskii: "Everything develops in early childhood and adolescence moral Portet of person depends on the education received in childhood ."

In order to give proper upbringing of the child , the teacher must meet the requirements for and conditions of professional competence.

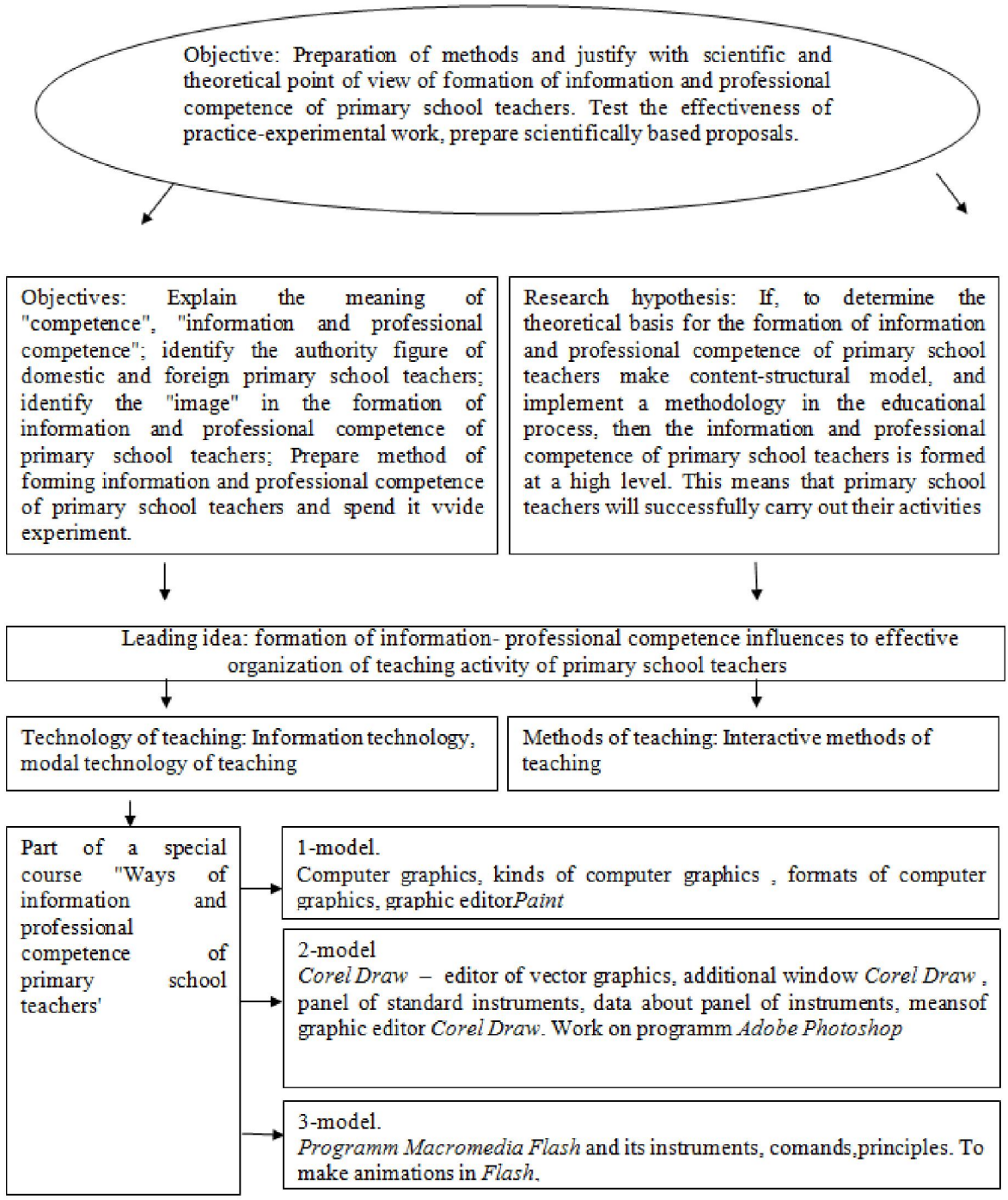
Now , consider the success of the teacher who possesses these qualities . The teacher knows the theory and owns techniques , explains the material and is able to properly assess the knowledge of students. They evaluate their activity logically, professionally which affects child development, good relations with students and parents and has respect for them . Improving our knowledge, using professional terms teacher awakens interest in science among children and it is the basis of their knowledge.

Awaken interest in learning and to develop skills for self-improvement is an indication of competence of primary school teachers . Competence of the teacher also affects how he conducts his subject .

One of the elements of pedagogical skill is the ability to develop humanity, patriotism , hard work and allow the student to feel their individuality.

Thus, given the demands of the new era of teacher poses a problem and consider solutions. In my practice, the teacher must possess modern technology training and education , to solve pedagogical situations steered their ability to the positive development of the individual student .

Structural and substantive model of information professional competence of primary school teachers.



Results: Formation of information-professional competence of primary class teachers.

Results of the research.

In modern scientific literature, the term "statistical method" more popular than the term "mathematical method" . Statistics from the Latin word «status» « state ." Science explores the phenomenon with statistics and quantitative change phenomenon qualitatively . In some literatures statistics given a different definition . For example , statistics - is the science of collecting data . According to foreign scientist McConnel , statistics - this way of thinking , in order to use it you need a little wit and knowledge of basic mathematics .

Mathematical statistics - is a branch of mathematics that examines and uses mathematical methods , which aims to codify scientific and practical results of statistical data.

From a mathematical point of view is determined by three kinds of methods for describing the results of the experimental study :

1. Descriptive methods ;
2 . Inductive methods ;
3 . Correlation methods .

As a result, the experimental part of the thesis , we use descriptive statistics .

I. . Method for estimating average data ..

1. Definition of arithmetic mean. For this we use this formula :

$\overline{M}$ – arithmetic mean $\overline{M} = \frac{\sum_{i=1}^{n} x_i}{n}$

Table 1 . Number 138 gymnasium named after A.B.Bazarbaeva The experimental group

Before experiment	$\overline{M} = \frac{4+3+4+3+3+5+\cdots+3}{23} = \frac{81}{23} = 3,5$
After experiment	$\overline{M} - \frac{5+4+5+4+4+5+\cdots+4}{23} - \frac{98}{23} - 4,3$

According to the survey in the gymnasium number 138 named A.B.Bazarbaev before and after results revealed according the arithmetic mean were different. For example, in the experimental group until the study results - 3.5, and after experiment - 4.3. That is, difference arithmetic mean after the experiment increased by - 0.8. This means that our experiment gave a positive result.

Table. 2 Kazakh secondary educational school № 45

Before experiment	$\overline{M} - \frac{3+4+3+3+5+3+\cdots+3}{16} - \frac{56}{16} - 3,5$
After experiment	$\overline{M} - \frac{4+5+4+3+5+4+\cdots+3}{16} - \frac{69}{16} - 4,3$

According to a study in the Kazakh secondary educational school № 45 before and after revealed experiment results of arithmetic middle were different. For example, in the experimental group until the study the results - 3.5, and after experiment - 4.3. That is, difference arithmetic mean after the experiment increased by - 0.8. This means that our experiment gave a positive result.

Before experiment	$M = \frac{3+3+4+3+3+4+\cdots+4}{15} = \frac{49}{15} = 3,3$
After experiment	$\overline{M} - \frac{5+4+5+5+4+5+\cdots+5}{15} - \frac{69}{15} - 4,6$

According to a study in the Kazakh secondary schools number 46 before and after revealed experiment results of arithmetic mean were different. For example , in the experimental group until the study the results - 3.3 , and after experiment - 4.6 . That is, the difference of arithmetic mean after the experiment increased by - 1.3 . Here we see once again that our experiment gave a positive result. We have shown that the results of the experimental group higher than in the control group. Results of the study proved the correctness of the hypothesis and research has shown the effectiveness of the proposed method .

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