

The Formation of Professional Competence of a Future Teacher Professional Training by Means of Information Technology

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Abstract: The study deals with the theoretical bases of formation of professional competence of future teachers: the essence and structure of professional competence of the teacher, considered activity, formation of competence approach. Special attention is paid to the structural-functional components of the educator in the application of information technology, revealed the list of professional competence of future teachers of vocational training of the English language. The era of informational technology is not only occurring in terms of knowledge and technology but also in terms of politics, social economy, culture as well as education. These development challenges give implications towards the important roles of education to produce qualified human resources. In today's rapidly developing technological society, there has been increasing demand for highly skilled and professionally qualified experts. The teachers have relatively good competencies in making the lesson plans since their lesson plans have been based on the standard competencies and elaborated indicators.

Key words: Future teachers, informational technology, professional competency, learning process, society

INTRODUCTION

The modern world and Kazakhstan in particular, have entered into an era when multiplied the importance and value of intellectual labour, the role of information and information technologies and the knowledge economy becomes the most important sector of the economy. Significant changes in all spheres of human life, new models activities in connection with the changed socio-economic conditions require specialists of the appropriate level of training that meets the needs of the information society. The educational system of the Republic of Kazakhstan is aimed at joining the world educational space, so the quality of education is considered in the context of the correspondence of the level of education services to world standards and norms.

At the present time there are considerable changes in the system of higher education of Kazakhstan. The main task of the higher school of Kazakhstan is to prepare highly qualified, competitive teachers which requires a master not only of specific knowledge but also in the ways independent of their obtaining and understanding of new information in the professional activity. This involves the development of a special system of measures in professional training of future teachers, the research

methods of the analysis, evaluation, storage of the information, its practical use for the development of skills of self-setting objectives and problems, the analysis of the decisions to allocate a new thing, make conclusions. (The State program of education).

A continuous process of education of a global nature in the modern conditions shows a clear trend of the increasing use of information technology. The analysis of psychological and pedagogical literature devoted to problems of computer science and information technology, showed that the main efforts in development of education is directed on creation of appropriate material and technical base, development of information technologies, their introduction into the educational process. However, informatization of society makes substantial changes in the content of pedagogical activity. The ability to use computer equipment information and telecommunication technologies databases and knowledge, the possession of the methodology, principles and techniques of using information technology training become essential qualities of the modern teacher, regardless of his specialization. Information technologies form the information culture of the teacher capable to solve tasks of professional activity in the context of the main directions of education modernization (Iskakova, 2013).

An important factor in the development of higher education is the using of innovative technology of the realization of a complex of measures aimed at ensuring full and timely use of reliable knowledge in all socially significant types of human activity. The process of using of innovative technology, having arisen simultaneously with the proliferation of electronics, computers, communication, intensive development and changes the nature of work and the place of man in the educational space (Kerimbaev, 2015).

Modern society requires a transition to a fundamentally new level of high-quality education. The state of education of the Republic of Kazakhstan and the trends of development of the company require an urgent solution to the problems of the accelerated development of the educational system on the basis of computer technologies and the creation of a single educational information environment.

Future teachers should be competitive and in demand on the labor market. Therefore, the aims of education are defined, first of all on the basis of the requirements of the curriculum for knowledge and skills and the requirements of the company to the development and education of the new generation. Students should be able to independently, actively operate make decisions to adapt flexibly to the changing conditions of life.

To analyze development of the process of developing of professional competence of future pedagogy-psychologist in a higher educational institution to identify the extent of its theoretical and practical elaboration on the basis of experimental verification and analysis of the comparison of the experimental and control groups of students of the Department "Pedagogical science" of the Humanitarian science faculty of the Kh.A. Yasawi International Kazakh-Turkish, on a speciality 5B010300 pedagogy and psychology to justify the need and necessity of formation of professional competence as a component of the professionally-oriented training of the future pedagogies, to develop methodical system of formation of professional competence of future pedagogies.

The importance meaning of using innovative technology is the aspect that is associated with the motivation of learning. Motivation is the most important condition for the effectiveness of training. The main directions of the using of technology in the work of psychologist in the first place, you can use ready-made products: computer games and simulators, battery of computer tests, educational games, digital books, textbooks, encyclopedias, psychological resources of the Internet.

If you cannot find ready-made materials it is possible to develop them independently and the simplest is the presentation on the basis of which you can make games, use them to practice. For the same purpose you can use the Web pages not only on the Internet, nor to create games. The web site also can be done easily using ready-made set of tools.

MATERIALS AND METHODS

Subjects of the study were twenty teachers of Kh.A. Yassawi International Kazakh-Turkish University, Turkistan who teach the third and fourth year students. The data were collected using questionnaires and followed by focused group discussions. Besides that, observations were also conducted in order to see the competencies of teachers in conducting the teaching learning process in the classroom. The whole data were then analyzed based on a descriptive qualitative method. The modern period of development of society is characterized by the process of informatization the use of information as a social product, providing acceleration of scientific-technical progress the intellectualization of the main types of human activity and the democratization of society.

The educational system should not only give the students the necessary knowledge about the new informational environment of the society, the practical ability to use its features but also form their new world outlook which should be based on an understanding of the main role of information and information processes in human society. Modern technologies in the teaching open access to non-traditional sources of information, increase the efficiency of independent work, give absolutely new opportunities for the creation, acquisition and consolidation of various professional skills, allow realizing a fundamentally new forms and methods of training

Informatization of education is a field of scientific-practical human activity, aimed at the application of technologies and equipment for collection, storage, processing and disseminating information, providing the systematization of the existing and development of new knowledge in the sphere of education for the achievement of psychological-pedagogical purposes of training and education (Grinshkun, 2004).

Informatization involves technological change in the content, methods and organizational forms of education. This should be solved the problem of the content of education at the present stage, the ratio of traditional part

of the educational process and computer technologies, the new relationship between the student, the teacher and the educational environment. The development of the innovative technologies entails the formation of a new educational system which can ensure the delivery of educational services in the educational process of the University.

At the present time game technology, technology of individualization of education, problem teaching, communicative technologies, etc. have been created and are successfully used. They are all based on the methods of active learning, so they are referred to as the modern educational technologies. At the present time it is still a problem the use of innovative technologies in the educational process of the high school.

Despite the urgency of this problem there is no single, coordinated for these purposes strategy. Issues of use of innovative technologies of training weakly associated with the teaching plans and programs. The psychological and pedagogical aspects of creation and introduction in educational process of high school innovative technologies have not been adequately studied and worked out.

The analysis of the higher school of pedagogical practice allows asserting that the process of their implementation today the former is very spontaneously. One of the main reasons of such situation is the absence of a uniform methodology for the use of innovative technologies of training in the system of professional training of teachers which in turn creates a lot of problems, starting from creation of the infrastructure of informatization of the education and finishing with the use of available educational software products in educational process.

Thus, there is an objective contradiction between the real need of the use of innovative technologies of training and lack of elaboration of the didactic aspects of the creation and use of innovative technologies of training. (Kerimbaeva, 2012).

Professional competencies in planning the teaching and learning process: In relation to the definition of the pedagogic competencies the data were therefore classified into competencies of planning, implementing and assessing the teaching learning process in the classroom.

Planning is vital to teaching. The importance of planning affects a wide variety of educational activities as described by Clark and Lampert (1986). Teacher planning is a major determinant of what is taught at the university. The curriculum as published is transformed and adapted

to the planning process by additions, deletions, interpretations and by teacher decisions about pace, sequence and emphasis. The teacher is responsible for planning decisions about what to teach, how long to devote to each topic and how much practice to provide take on additional significance and complexity. Other functions of teacher planning include allocating instructional time for individuals and groups of students composing student groupings, organizing daily, weekly and term schedules, compensating for interruptions from outside the classroom and communicating with substitute teachers.

In order to assess the professional competencies of good teachers in planning the teaching and learning process, the teachers were asked to make lesson plans. The results of the analysis can be summarized as follows. Based on these aspects of analysis it can be stated that teachers are quite good in all aspects. However, there are still some things which need to be improved.

The competencies of teachers in developing materials seem sufficiently performed. When they were asked how they developed the materials, it was mentioned that they just quoted from the text books provided. This is quite understandable. However, the competencies of teachers in providing learning experiences seem not as good as developing material. The teachers mostly followed the steps provided in the text books. In other words, the teachers do not try to provide something innovative but just copy the steps of the books instead.

Lack of creativity was also reflected in the kind of techniques chosen by the teachers. Analyzing from the teacher's lesson plans almost all of them mentioned the 'three phase technique as their techniques which consisted of pre while and post activities. How those sub steps were arranged were still teacher centered. When the steps of the techniques were analyzed and compared with the order of the activities in the text book it is clear that the steps were exactly the same with the order of the textbook. This indicates that teachers do not try to arrange innovative and creative management for their teaching and learning situation in the classroom. Also they did not try to modify their text book in order to suit it to their student's level of ability and understanding. In other words the teachers just follow the book as it is. Very often it is found that the students struggled hard to understand some vocabulary provided in the book. Consequently, most of them easily felt bored in the classroom.

In terms of assessment, it can be said that teacher's competencies are limited to knowing the test techniques

only, so in their lesson plans they only chose the tests for measuring the student's competencies. What is meant by competency-based assessment in fact was not entirely understood by the teachers. Through focused group discussion, it was revealed that the teachers know about portfolio but they are not well informed with non-test techniques or other kinds of authentic assessments.

The results of the interview with the teachers, it was found that this kind of planning has consequences for what students learn. But it was not clearly proven that beginning teachers and experienced teachers plan differently and that experienced teachers do not always plan as expected. Some teachers have positive opinions about this. For them, planning processes initiated by teachers can give both students and teachers a sense of direction and can help students become aware of the goals implicit in the learning task they are asked to perform. However, there are also teachers who have a different perspective. In their opinion, planning is not necessarily written down but kept in their heads and all plans certainly will not be applied as written down because it may need to be changed or modified based on the situation of the classroom. Besides that there is an indication that making lesson plans every time before they teach is considered as another burden for the job of teachers which they admitted was already overwhelming. So for them, making lesson plans is mostly for the sake of administration requirements.

Professional competencies in conducting the teaching learning process and assessing student's outcomes:

Based on the observations conducted towards teacher's competencies in the teaching learning process it can be stated that most of them are still teacher centered.

The teacher started the lesson by greeting the students as usual and after that asked the students to open their books and look at a chapter on a certain page in the student's book. The students were asked to read the passage and answered the questions provided in the book. After all the tasks provided in the worksheet were answered by the students the teacher checked the student's answers. These are the rituals which are usually done by most teachers. The teacher mostly used direct instruction and was the centre of attention along the process in the classroom. Even though he tried to make some variations, they were limited to asking students to do the tasks in groups. However, it was clear from the observation that the teacher did not do any significant innovation in terms of substantial elements of teaching.

Clarity of presentation positively influences student achievement (Killen, 1998). From the observation, the

teacher needs to improve his skills in explaining concepts. The concepts explained were not easily understood by students even though the teacher tried to repeat his explanation. However, he did it without trying to simplify the concept, make analogy to the things around the students, or relate the concept to things the students are familiar with. As a consequence, most students looked blank and could not catch the main idea of the explanation.

Variability is also another concern of the teacher's classroom situation. In order to positively influence student achievement the teacher can make deliberate and effective changes when presenting a lesson, like using different questioning strategies giving different types of reinforcement varying student activities or using different types of instructional materials. These changes help to sustain both student attention and interest and keep students engaged in learning.

The results of the interview reveal that the teachers in fact had a lot of experience to attend seminars or training organized by local governments. The training was intended to improve the teacher's competencies. However, the training was mostly theoretically oriented and lacking in practical guidance. This kind of training frequently brings about teacher's reluctance because they often find the knowledge gained from the training does not suit their needs and can not solve their problems in the field. As a result the teachers can not apply their new knowledge and prefer to come back to their conventional rituals/habits of teaching. This reality is often difficult to be officially recorded because the training provided is rarely followed by any follow-up activities or any kind of monitoring or evaluation attached to the previous training. So if the training is finished, the responsibility is considered finished too. Nobody really pays any attention to this part, so when teachers are supposed to apply the new knowledge in the classroom, nobody guarantees that they will do so and change their habits of teaching because once they close the door, nobody will really see and care what is going on inside the classroom. This kind of phenomena will not assist teachers to improve their quality regardless of a lot of theoretical training they have attended.

Competency in conducting assessment: Assessment is the process of making judgment about the quality and value of the teaching. Assessment must be closely linked to the outcomes the teachers want to achieve. The main purpose of the assessment will be to determine what it is the students can do or understand that they could not do before the lesson.

Based on the observation toward the teaching learning process and the analysis toward the lesson plan made by the teachers, it is likely that most teachers still emphasized most on recognition tests. Their understanding is limited to the techniques of testing to measure student's understanding on recognizing correct responses so the outcomes of learning was limited to 'knowledge' level or was only limited to the level of understanding. So it is a wide discrepancy between what is assessed by teachers and what is expected by the curriculum. This situation demonstrated the fact that the teacher's understanding and interpretation about competencies and the expectation of the curriculum about competencies is still mismatched. Competencies are what the learners can actually do say express with what they know and have learned they are tangible applications of what has been learned and it is emphasized that competency is a major step beyond just knowing. So in order to display their competencies, learners need to be able to demonstrate understanding performance that take students beyond what they know. This is the point which is hardly touched by teachers in this era of competency-based curriculum. In fact, this is the root problem which is faced by teachers nowadays.

RESULTS AND DISCUSSION

Formation of professional competence of future teachers also due to the introduction of integrated system of formation of readiness of future teachers for professional self-improvement in the educational process at the University. In each of the areas of educational work, we have identified three main blocks contributed to the professional self-improvement: theoretical training, practical training, psychological training.

Theoretical preparation unit includes the following issues: the role of self-education in the professional formation, the main directions of work of self-education teacher. Practical preparation unit included a student's creative tasks and jobs that we have classified as methodological, theoretical, methodological and practical. The third area of training activities contributed to the development of professional identity of future professionals. Upon completion of the formative experiment for testing the effectiveness of the research program conducted checks sections that sought to determine the levels of formation of professional competence future teachers. The result of the formative experiment was certain growth level of formation of professional competence of future teachers.

The overall dynamics of the level of formation of professional competence of future teachers of vocational

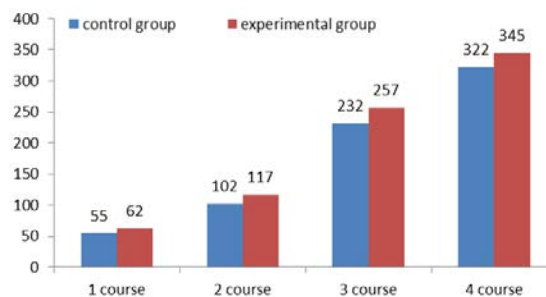


Fig. 1: Dynamics of the level of formation of professional competence of students of control and experimental groups for the 4 year

training English language of students of 1-4 courses, expressed as the sum of the average values of all component activities in control and experimental groups in Fig. 1.

Summarizing from the findings above, it can be stated that competency-based curriculum is not entirely applied by most of the teachers under observation. The 'competency' is applied in the level of lesson plans and even though it is applied in the classroom, the application only touched the 'surface' level and did not really touch the intended level expected by the curriculum, yet. Based on this reality, it can be stated the professional competencies of the teachers were not adequately performed. For that reason it is suggested that the teacher's competencies need to be continuously improved not by theoretical training only but also by providing them with concrete models and examples through workshops.

CONCLUSION

We would like to say that an innovative technology creates the conditions for the individualization and intensification of the training process, ensuring the implementation of the equal on the complexity of the exercise of all the students studying at the same time. The use of innovative technologies is the main basis for the preparation of competitive teachers. Proceeding from a fore said, it is possible to formulate priorities which follow from the requirement of the training of competitive teachers at the high school.

The first is the increase of the level of training of teachers due to perfection of technologies of training, used today at the high school and of wide introduction of information media in educational process. The second is to master the student of high schools the complex of knowledge, skills and abilities, development of personal

qualities, ensuring successful implementation of the tasks of professional activity and comfortable functioning in the conditions of informational society in which information is becoming crucial for high efficiency of work.

REFERENCES

- Clark, C. and M. Lampert, 1986. The study of teacher thinking: Implications for teacher education. *J. Teach. Edu.*, 37: 27-31.
- Grinshkun, V.V., 2004. Theory and Practices of using Structure of Informatizational Education and Learning of Informatics. MGPU, Russia, Pages: 418.
- Iskakova, P.K., 2013. The formation of professional competencies of future teachers. *Life Sci. J.*, 1: 426-430.
- Kerimbaev, B.T., 2015. The methodology of the formation of the communicative orientation of the ITT in the institutions of higher education. *J. Lang. Lit.*, 6: 351-354.
- Kerimbaeva, B.T., 2012. The Formation of Professional Competencies of Future Teachers. *New Educational Review*, Poland, Europe,.
- Killen, R., 1998. *Effective Teaching Strategies Lessons from Research and Practice*. 7th Edn., Social Science Press, Katoomba, Australia, ISBN: 9780170358880, Pages: 448.