

# Developing the XXIst century competencies through integration of information and communication technologies

## Desarrollo de las competencias del siglo XXI a través de la integración de las tecnologías de la información y la comunicación

Gulnara Abdumajitkizi RIZAKHOJAYEVA [1](#); Madina Murzakhanovna AKESHOVA [2](#); Akziya Absalamovna MOLDASHEVA [3](#); Dilmurat Temirbayevich DADASHOV [4](#); Akmaral Satybaldieva KARPYKBAYEVA [5](#)

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#### ABSTRACT:

On the condition of educational modernization and joining the Republic of Kazakhstan to the Bologna process, Yasawi International Kazakh-Turkish University points out as one of its main problems the usage of information technologies in highly qualified training of the specialists of international level in the sphere of pedagogy and increasing the quality of their professional training, because the use of information technologies emphasizes practical-oriented education, its professional, pragmatic, subject-professional aspect. Including some elements of well-known approaches in pedagogical sciences such as systematic, personal-

#### RESUMEN:

Sobre la condición de la modernización educativa y la adhesión a la República de Kazajstán al proceso de Bolonia, Yasawi Internacional Kazajo-la Universidad turca señala como uno de sus principales problemas el uso de las tecnologías de la información en la formación altamente cualificada de los especialistas de nivel internacional en el ámbito de la pedagogía y el aumento de la calidad de su formación profesional, ya que el uso de las tecnologías de la información enfatiza la educación orientada hacia la práctica, su aspecto profesional, pragmático, sujeto-profesional. Incluyendo algunos elementos de enfoques conocidos en las

oriented and synergetic and others, the significance of information technologies as one of necessary bases to develop the XXIst century's competencies and professional training of future specialists is stressed, because it has humanistic, professional, pragmatic and practical features, which show its integration and systematic advantages. Accepted as one of new scientific approaches, the use of information technologies is one of the most effective means to develop methodological, critical and creative thinking activity, professional and cultural norms of behavior, orientation values based on the educational system, and to change activities according to the principles of innovative approaches in higher education's academic process. The results obtained through the use of information technologies show improvements in formation of the XXIst century's competencies in future specialists. The use of information technologies in teaching system tends to increase, which points to a significant improvement and higher achievements. The improvement is also represented in higher average grades of the experimental group and showing the efficiency of the information technologies' use in formation of the XXIst century competencies of future specialists.

**Keywords:** competencies, formation, develop, specialists, tourism.

Ciencias Pedagógicas como la sistemática, personal orientado y sinérgico y otros, la importancia de las tecnologías de la información como una de las bases necesarias para desarrollar las competencias del siglo XXI y la formación profesional de los futuros especialistas se destaca, ya que cuenta con características humanísticas, profesionales, pragmáticas y prácticas, que muestran su integración y ventajas sistemáticas. Aceptado como uno de los nuevos enfoques científicos, el uso de las tecnologías de la información es uno de los medios más eficaces para desarrollar la actividad metodológica, crítica y creativa, las normas profesionales y culturales de comportamiento, los valores de orientación basados en el sistema educativo, y para cambiar las actividades de acuerdo con los principios de enfoques innovadores en el proceso académico de la educación superior. Los resultados obtenidos a través del uso de las tecnologías de la información muestran mejoras en la formación de las competencias del siglo XXI en futuros especialistas. El uso de las tecnologías de la información en el sistema docente tiende a aumentar, lo que apunta a una mejora significativa y mayores logros. La mejora también está representada en los grados promedio más altos del grupo experimental y muestra la eficiencia del uso de las tecnologías de la información en la formación de las competencias del siglo XXI de los futuros especialistas.

**Palabras clave:** competencias, formación, desarrollo, especialistas, turismo.

## 1. Introduction

Computerization and globalization of the entire education system are regarded as some of the most important strategic paradigms of the State Education Development Program of the Republic of Kazakhstan for 2011 – 2020 approved by the Decree of the President, implying gradual transition to computer and e-learning, which plays a major role in the formulation of the problem of education system with highly qualified staff (State education development program in Republic of Kazakhstan for 2011-2020).

Professional information and communicative competence include: abilities to proper interaction with others at individual level of training, development of search and processing of information necessary for quality performance of professional tasks; capacity for interpersonal communication and interpersonal interaction via modern communication technologies to achieve significant professional purposes; willingness to establish, maintain and develop effective communication with members of the academic, research and working processes by means of information technologies for continuous training and self-realization in professional work.

## 2. Actuality of Research

In the context of globalization of the economy and society, education institutions need to prepare professionals with the knowledge of foreign languages, high level of professional communicative competence. To do this, institutions must teach students of higher schools not only to freely read the literature on the specialty, but also to be proficient in spoken language. The quality and success of teaching are determined by the following main conditions: the number of hours for training, the number of students in a group, teaching methodology, qualifications of teachers, textbooks, correct formulation on the goals and objectives of foreign language teaching (Karagiannidis, Politis, & Karasavvidis, 2014).

During the teaching of foreign languages higher school students should acquire the level of linguistic and communicative competences, necessary and sufficient for further learning activities, for elementary operations on the study of international experience in the profiling

science, as well as for business contacts at the elementary level.

The special features of learning a foreign language in non-language higher schools include: maximum focus on the future professional activity and organic connection of students with professional interests; focus on professionally significant scientific information to master speech activities.

Expansion of international communication, cooperation and exchange of scientific, cultural and professional knowledge formed a qualitatively new technology as a communicative professionally-oriented approach to teaching foreign languages, based on training of students and predicated communicative, cultural, educational and spiritual needs of the national identity. We live in an era where technology is often deemed to be outdated by the time it is mass produced and reaches the user (Thong & Calvin 2014; Odora & Matoti 2015).

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### **3. Purpose of Research**

The purpose of the research is to analyze the state of the problem of formation of the communicative competence of future specialists in tourism in the course of teaching a foreign language with the use of information technologies in higher school.

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### **4. Methods of Research**

The basic methods of research are theoretical analysis and synthesis, comparison and analyzing statistical data, modeling, study of professional experience, observation. In scientific work for the solution of tasks and verification of assumptions the following methods of research were mainly used: logical methods and techniques (analysis of psychological, pedagogical, legal and other literature on the issues of professional education, synthesis, abstraction, generalization, analogy, structural-functional method and probabilistic-statistical methods; methods of theoretical knowledge (theory, formalization, deduction, ascent from the abstract to the concrete); methods of empirical research: (observation, interviews, questionnaires and bibliographic method; experiment under natural conditions, comparison, description, monitoring, measurement); system approach to pedagogical and logical analysis, generalization and analysis of pedagogical experience; modeling of pedagogical processes; pedagogical design, used for the development of regulatory and technological support. A methodology of experimental work was developed; indicators and criteria for evaluating the efficiency of the identified conditions were identified; pedagogical experiment was conducted; educational and methodical support for the educational process of professional preparation of future specialists in tourism, seeking to form professional abilities and competencies of the graduates, was developed.

*Theoretical and practical importance:* the complex of organizational-pedagogical, psychological-pedagogical, didactic-methodical conditions promoting efficiency of formation of the communicative competency and improvement of professional training quality of future specialists in tourism in the process of teaching a foreign language by means of information technologies is revealed and proved. The system of exercises and tasks, intended for the organization of a practical training on tourism in English and elements of formation of the communicative competence of future specialists in tourism in the process of learning a foreign language by them is developed by means of information technologies.

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### **5. Problem Statement**

The analysis conducted within the research has shown efficiency and necessity to use information technologies to form the communicative competency of future specialists in tourism in the process of foreign language teaching, for the solution of educational problems, formation of professionals with the critical and creative thinking, capable to act effectively in changing conditions of professional work.

Let us consider in more detail the basic methods of teaching foreign language on the basis of information and communication technologies as one of the basics of our research.

Noor (2006) defined the term information and communication technology (ICT) as a technology tool for assisting in communicating, processing and sending information in electronic form. The use of ICT can provide numerous benefits to users such as help in disseminating information, social interaction, education, entertainment, health and so on (Nayak et al., 2010). ICT is the aggregate, of the methods, processes, software and hardware that are integrated with the aim of collecting, processing, storage, distribution, display and use of information for the benefit of users. The term "information and communication technologies" brings together information content and communication technology capabilities, which are understood as a system of methods and means of input, processing, storage, display, retrieval and transmission of information via computer networks. This relationship is marked by Rakitov (2013) as the link between technology and the information revolution.

It should be remembered that the concept "information technology" is much wider than "computer technology". Information technology is an "eternal companion" of the human civilization, it objectively reflects the level of its development (the first historical information technology has been written). For example, communications, films and video, television, etc. are information technologies. However, computer technology is the highest stage of information development, so modern information technology cannot be represented without computer or microprocessor systems.

Computer technology has changed the nature of supply and expanded educational information (the possibility of using graphics, color, sound, etc.). The computer allows spending less time to objectify fragments of thought in the form of words and visual-graphic images on the screen. Analysis, synthesis, transformation on the screen can be a factor in stimulating the thought of persons working with a computer.

ICT implementation in education systems should be accomplished systematically, following evidence-based diffusion models (Kozma & Vota, 2014). Now we will consider the feasibility of using ICT in teaching. The criteria for the feasibility of using ICT as compared to the traditional means of training are according to Kulikova et al. (2015):

- Access to a large array of educational information, the possibility of structuring, considering time and space;
- Increasing search efficiency, possibility of selecting the information according to certain criteria;
- Ability to make creative learners' own real educational ICT-based products;
- Involvement of students in independent development of educational material, gaining knowledge.

The introduction of ICT in practice must adhere to the following methodological guidelines:

1. ICT in education is a means aimed at solving problems of real change in the quality of education, increasing its efficiency.
2. ICT is optimally integrated into the traditional system, taking into account the educational appropriateness of requiring a comprehensive assessment of the use of ICT in combination with other teaching techniques.
3. The most significant benchmarks of ICT applications are creation of favorable conditions for mastering students' social experiences, concluded in the content of education; focus on deep fundamental knowledge, development of students' thinking, their creative individuality, to manifest their independence for self-development and personal fulfillment.
4. ICT cannot replace teachers, only optimize professional and pedagogical activity.

Effective use of tools, such as Wiki, Moodle, and Google Docs, enable learners to share information details using a variety of textual, visual, and audio media with their peers that

require advanced pedagogic and technological knowledge on the teacher's part (MacCallum & Kinshuk, 2014). The application of ICT is one of the factors for development and personalization of strategies of activity, motivation, personal regulation. The success of the training activities with ICT is achieved if there is a search activity, it is born out of the motivational sphere in which there is a goal achieved through the formation of an action plan. Motives for the use of ICT are: higher intensity of work, its organization, activity, quality of assimilation, independence and objectivity of assessment, discipline, subject novelty, unusual activities and others.

The use of ICT in education can be the basis for the emergence of a fundamentally new form of education, which is based on detailed self-assessment and self-education activity of a motivated individual, supported by modern technical equipment. According to Doris et al., (2012), education plays an important role in improving national economic growth as well as in increasing the knowledge and skills for a better life. According to Spector (2013), the technology expansion has affected almost all aspects of life, specifically in teaching and learning process.

Integration of computer technology into the educational process promotes creative factor of mental ability to learn through, first, the reorganization of the cognitive process in which the learner becomes the creator, and second, the fact that the study material becomes a means to achieve creative goals. The use of ICT in the learning process forms in students some algorithmic and creative thinking, and the value of this component of cognitive abilities is very high, because the mental activity of people in any case should not copy computer "system of thinking".

The use of computer technology in education has some impact oriented to the following:

- 1) Development of certain types of thinking – visual-figurative, visual-effective, creative, intuitive, theoretical, etc.;
- 2) Formation of "spatial" vision, the ability to carry out the analysis, synthesis, abstraction, generalization;
- 3) Training of optimal decision-making;
- 4) Training of independent representation and retrieval of knowledge;
- 5) Shaping of experimental and research activities.

The peculiarity of the modern educational process is that, unlike traditional education, where the central figure is a teacher, the center of gravity while using computer technology gradually transferred to students who are actively building their learning process by choosing a certain path in a developed educational environment. The function of the teacher is to support students in their activities: to contribute to successful promotion in the majority of educational information, to facilitate the solution of problems, and to help to master vast and diverse information.

The Internet is the basis for the organization of virtual conferences, remote training courses, and joint training projects as elements of the educational process in terms of reforming the learning process.

In teaching through ICT, qualified support is required from the teacher. Providing such assistance from the teacher required, namely, the following (Rizakhodzhayeva and Rysbekova 2014):

1. Use of innovative teaching approaches and methods. It is necessary to use as much as possible open pedagogical approaches, focused on the improvement, maintenance and simplification of the learning process. Transforming teaching and practical material in digital form must be accompanied by adapting teaching methods to operate on the basis of ICT. The decisive factor in the successful implementation of ICT in the educational process is the willingness and ability of teachers to master the tools of information technology and to offer new methods of learning using these technologies.

2. Management skills. For teachers, there is a reevaluation of vision of his/her functions. From the information provider, teacher is transformed into the leader, consultant and promoter of the academic process. The most effective way to study the educational material is practical tasks to be solved by means of projects. Projects take the form of simulated real-life situations, which contain the context and the problem itself. Advantage of this approach is that students, through joint discussion of assignments, develop critical thinking skills, exchange ideas and opinions.

3. Skills on working with IT. Most countries lack computers at universities and are limited in possibilities of their use, experiencing problems in using ICT in education due to low level of knowledge and skills to work with ICT, i.e., low level of information culture. It is necessary to regularly update the current computer knowledge/skills, thus maintaining the level of competency of skilled and experienced PC users.

4. Regular updating the content and structure of academic disciplines. Constant changes in the content of the subject area should be reflected in the materials and the structure of relevant training courses. Therefore, the teacher must be able to fully exploit the potential of ICT in order to identify changes to carry out the modernization of training courses.

Teachers of foreign languages must understand that the use of ICT does help by freeing them from long explanations and routine, but does not replace them. Changing attitudes to computers, teachers will be able to devote a large part of time to the tutorial exercises that encourage real communication (Noor 2006).

Thus, the use of ICT in the educational process requires search by teachers of the right balance between technological means, teaching methods and approaches. The use of ICT in education ensures the development of trainees' research skills, independence, creative thinking, cognitive activity, the ability to think critically, build and test hypotheses, actualizing their intellectual abilities.

The history of the use of computer technology in learning a foreign language began in 1960 with the advent of the computer software in training foreign languages (Computer Assisted Language Learning – CALL). In the US and the UK, CALL functioned mainly as a pilot project and the main purpose was to study the efficiency of CALL level compared with the traditional forms of learning.

Educational value of the Internet contains the following points: 1) communication with users around the world, 2) access to remote information sources and international libraries, 3) distance learning. It becomes possible to communicate among different language groups. For example, using free Skype software, participants can not only simply communicate online, but also hold discussions on any topic, through direct dialogue, seeing each other on the screen.

The Internet is an inexhaustible resource of new learning opportunities for foreign language learning. Use of the Internet makes it possible to conduct lessons online in real time. Learning a foreign language on the basis of ICT provides an opportunity to create and implement a natural language environment with organization of live communication and activity of students in computer networks, considering the aspects of:

- Real intercultural communication in English – in the discussion on any professional and creative tasks, etc.;
- Formation of individual language competency;
- Availability of educational material.

This is the context that highlights the technical advantages of training foreign language using a computer. Over the past few years, computer training has attracted the attention of experts in artificial intelligence, and the attempts to create a software successfully coped with appearance of machine translation. It should be noted that there are several softwares that accurately perform technical translation. However, translation of literary texts still finds many difficulties. At the same time, a few kinds of software were created for checking spelling and grammar.

Tondeur et al. (2016) noted it was not the mere presence of, or access to ICT resources that

would transform education. Transformation will be effected through what teachers do with the technology available to them.

So, organization of foreign language teaching process on the basis of ICT must be based on the grounds of pedagogical training with the use of ICT in compliance with the general trends of global education development. We formulated the basic conceptual provisions of ICT-based learning of foreign language.

- 1) Computer support in formation of professional communicative competence on the basis of foreign language teaching should be based on the independent practice of each student in the form of speech activity, which he/she possesses at the moment.
- 2) Activities of students must be built under the guidance of an experienced teacher. The educational process must be constructed in such a way that the teacher would be able to systematically monitor, adjust and evaluate the activities of students.
- 3) Independent activity of students needs effective feedback both in terms of learning materials used (internal feedback, providing the ability to self-control), and external feedback when working in groups with a teacher.

The main *methodological principles* that have conceptual meaning for the organization of foreign language teaching based on ICT are as follows:

1. Principle of communicative orientation, which is ensured not only through contacts with the teacher, but mostly when working in small groups (project method, cooperative learning, using a variety of problem tasks).

There are research, creative, role-playing, information, practice-oriented, interdisciplinary and monoprospects.

2. Principle of differentiated approach. Foreign language learning process should be activity-based, implying the need for organization of independent work of students, providing each trainee with sufficient practice in an appropriate form of speech activity via the exercises to form appropriate skills.
3. Principle of consciousness, which provides support to a specific system of rules that precede the formation of skills giving students an idea of the target language's system. Methods of studying a foreign language must be constructed in such a way to form in the minds of students the system of language.
4. Principle of activity. It assumes personal activity of students and their interest.
5. Principle of visibility, which provides various types and forms of visibility: the visibility of the language (selection of authentic texts, voice samples, demonstrating the functional characteristics of the studied language material in a specific cultural environment of the country of studied language, etc.); visual clarity by using a variety of multimedia tools; auditory visibility, which implies the importance of oral exercises using hardware and software resources (network, CD-ROM, sound card, microphone, headphones, etc.).
6. Principle of availability that is ensured via computer training, not only due to the appropriate elaboration of educational material of different difficulty levels, but also due to the interactive mode. Interactivity is the key word, not only in terms of the general methodological training via computers, it also takes on special significance in the course of even traditional learning of a foreign language.
7. Principle of reliance on the native language of the students, which should be reflected in the organization of students' acquaintance with the new language materials, the formation of a rough basis of action. Relying on the native language of students in the study of a foreign language provides conscious, consequently stronger acquisition of linguistic material.
8. Principle of a positive emotional background forming a stable motivation to learn for each student. This is achieved, on the one hand, through specific organization of computer training and, on the other hand, through teacher-student, student-student, and student-students

interaction.

These principles have a methodological significance for successful computer-based training with the use of ICT (Karagiannidis, et al., 2014). There are a variety of multimedia tools, the Internet, PC, electronic dictionaries, etc. The future integration of the principles and techniques of learning foreign languages depends on the goals and objectives of education, periods of study, individual characteristics of students, societal structure.

In the course of this research we conducted survey around English instructors of Ahmet Yasawi University on ICT-based foreign languages learning. After analysis of the responses we marked out the following advantages of using ICT in teaching and divided them into several groups:

1. Psychological. Computer training has a great motivational potential. Correctly applied computer software can help teachers to differentiate and individualize the learning process, and students will feel the constant presence of a friendly instructor – i.e., PC.

2. Confidentiality. Each student only personally knows what mistakes he/she made, and is not afraid that the teacher learns the results. Thus, the students' self-esteem is not lowered, and the lesson goes on in a psychologically comfortable atmosphere. PC provides a greater degree of interactivity of learning than the work in the classroom or in the language laboratory. As the students themselves determine the pace of work, computer training as well is consistent with the principles of individual instruction. Students can accept any number of mistakes free from any computer "patience" and spend their time in class just to correct their own mistakes and do not have to listen to the teacher explaining the familiar material again.

3. Repeatability. Practice is very important while learning a foreign language. It is not enough to say a phrase once, it should be repeated several times, changing the manner in order to more clearly identify the contents. Here, a PC can help: software, including databases, allows repeating similar phrases by changing only certain components or context.

4. Multimedia. The abrupt shift in teaching speech has occurred only after the development of multimedia. Currently, it is possible to store and use a lot more information than ever before, play recordings of individual words, phrases and whole texts and then listen to and compare with the pronunciation of native speakers or see their records on the monitor. Most software also allows varying the rate of speech. Teachers note that graphic computer's abilities allow them to represent any kind of activity in the form of pictures or animations. This is especially important for acquisition of new vocabulary, since the image allows associating the phrase in a foreign language directly with an action, rather than with a phrase in the native language. In addition, animation attracts the interest of students and creates necessary motivation. With the use of appropriate methods of teaching, multimedia tutorials can be used: in class; during extracurricular activities; at extra lessons; at independent work of students in extracurricular time. Multimedia technology improves the efficiency of foreign language teaching and allows individualizing learning, improving students' activity. It helps to intensify the training and increases the motivation; it further creates the conditions for independent work and promotes the development of self-esteem among students creating a comfortable learning environment. This is achieved by immersing the student in a radically new information technology environment that provides extended interactivity, close to reality.

Multimedia learning of foreign language system as didactic work includes typical features like printed matter, video and sound recordings.

The spectrum of multimedia applications in teaching a foreign language is as follows: e-business correspondence; search, analysis and storage of reference data to prepare reports and presentations; development of cooperation with partners in business communication in discussion groups; phenomenon of open communication space on the Internet and electronic communication's ethics and commerce; texts for websites and presentations as a means of communication in cross-cultural space; overcoming communication barriers in the transition from electronic communication to face to face communication.

Experience in the use of ICT in learning a foreign language shows that they meet the principles

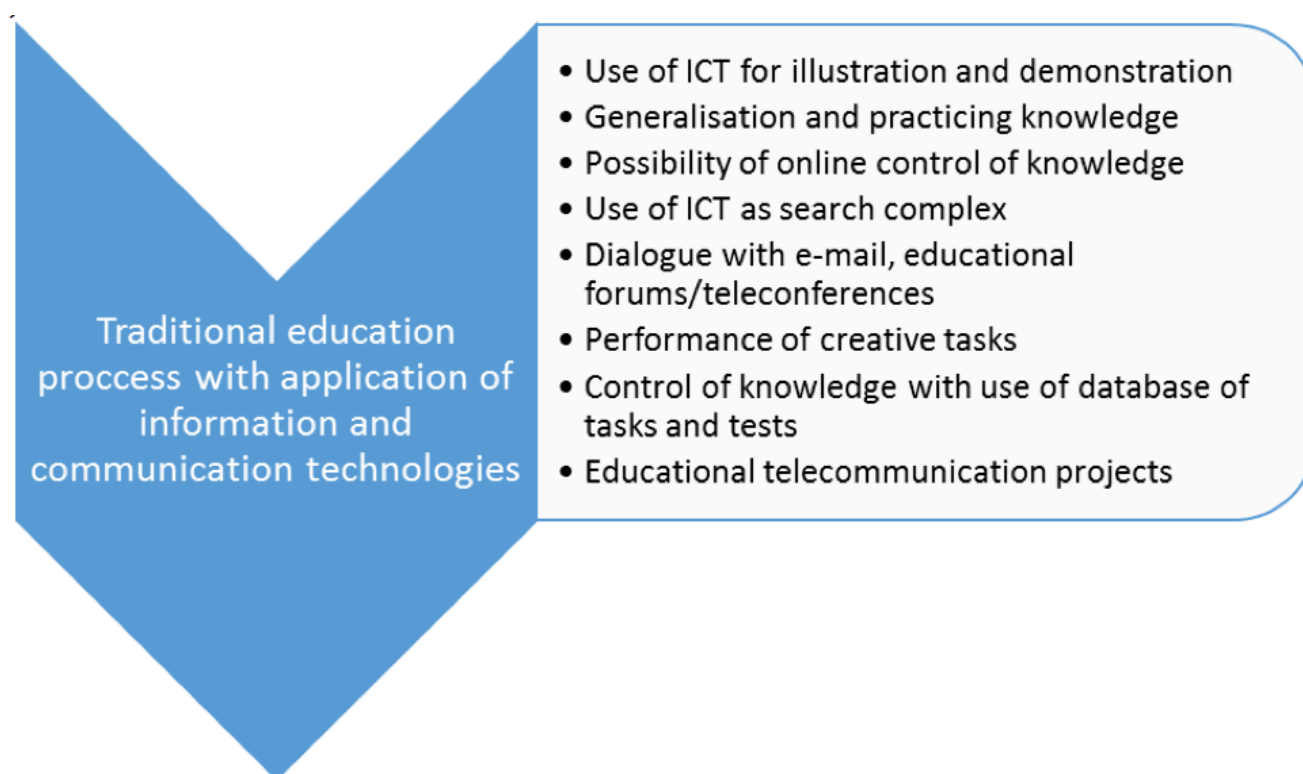


of developing training and help to solve the following learning objectives: understanding of linguistic phenomena; development of linguistic skills (in language and speech exercises); automation of language and speech acts; creation of communication situations.

All of these properties of ICT help to solve the main problem of language education – formation of students’ communicative competency.

## 6. Experimental Part

During the research, we worked out the scheme of integration of the traditional method and ICT in educational process. To find the optimum solution of a task in view of integration of the traditional approach and ICT and to receive required results of efficiency of application of ICT, we conducted English lesson for students of “Tourism” specialties. The third-year students of “Management and Tourism” department of Social Sciences faculty of Yasawi International Kazakh-Turkish University were involved in the experiment. Students of control and experimental groups took part in the experiment. In both groups, English class on “Types of tourism. Tourist motivation” was conducted. The control group included 34 students, and the experimental group – 32 students. In the control group, English class on “Types of tourism. Tourist motivation” was conducted in the traditional way, and in experimental group – with the use of ICT. In both groups, after giving and practicing the material on the said topic, control and total tests were done to check the mastering of the given material and the efficiency of the integration of the traditional approach and ICT in training future specialists in tourism and formation their communicative competency. After all the activities, done according to the program and evaluation, the results obtained by the use of these two concepts were compared and statistical parameters for two groups were established. Figure 1.



**Figure 1.** Traditional education process with application of information and communication technologies

## 7. Discussion

In order to calculate the efficiency of use of information technologies in formation of the communicative competency of future specialists in tourism in the process of learning a foreign language, the results of students in the experimental group and those in the control group were compared (Table 1).

**Table 1.** Data on Each Group: the Mean Score and the Standard Deviation

<b>Numerical characteristics</b>	<b>Control group</b>	<b>Experimental group</b>
N (Quantity of students)	32	34
M (Average grade)	3.14	3.8
$\sigma$ (Standard deviation)	0.61	0.32

To acknowledge the degree of formation of the communicative competency of future specialists in tourism in the process of learning a foreign language with the use of information technologies, it is necessary to show that experimental and control samples have significant distinctions on the chosen indicator – the ability to independently analyze the task, to correlate it with professional practice. For processing of the experiment results, Student's t-test was used to establish similarities and distinctions of both empirical distributions.

The mathematical software STATISTICA was used. By means of Descriptive statistics mode, Basic Statistics/Tables of this software were the hypothesis about conformity of samples to normal distribution which was checked (MacCallum, Jeffrey, & Kinshuk 2014).

Based upon these values, for each group the mean score and standard deviation (Table 1) have been calculated.

For the given quantity of trainees,  $\sigma_f = 34 + 32 = 73$ . The empirical value of t-criterion  $t = 3.376$  exceeds critical for  $p = 0.01$  ( $t = 2.639$ ), but it appears less critical for  $p = 0.001$  ( $t = 3.416$ ), hence, it is possible to draw a conclusion on statistically significant distinction of average arithmetic values in two samples and on advantages of the second (experimental) methodical system of teaching.

The total test conducted with students of control and experimental groups is aimed at revealing the efficiency of formation of the communicative competency of future specialists in tourism in the process of learning a foreign language with the use of information technologies. The concept of factor "relative total mastering of knowledge by students of one group" is entered which is calculated under the formula:

$$\frac{k_1 \times N_5 + 0.9 \times N_4 + 0.6 \times N_3 + 0.3 \times N_2}{N}$$

where: K is a mastering factor,  $N_5, N_4, N_3, N_2$  is the quantity of the students, whose answers are estimated accordingly at "5" – 90- 100 points, "4" – 70-90 points, "3" – 50-70 points, and N is the total number of students in group. The result was estimated on the average by the following parities: "excellent", at  $0.9 \leq K \leq 1$ ; "good", at  $0.7 \leq K \leq 0.9$ ; "satisfactory", at  $0.5 \leq K \leq 0.7$ ; "unsatisfactory", at  $K < 0.5$ .

Results of experiment were processed and tabulated for comparison.

**Table 2.** Generalized Comparative Results of Examination of Students According to Two Tests

<b>Groups</b>	<b>Control test</b>	<b>Total test</b>
<i>Control group</i>	0.74	0.62
<i>Experimental group</i>	0.88	0.93

**Figure 2.** Generalized Comparative Results of Examination of Students According to Two Tests

From the received results reflected in Table 2 and Figure 2, it is possible to draw a conclusion that experimental work confirmed efficiency of the process of formation of the communicative competency of future specialists in tourism in the process of foreign language teaching with the use of information technologies.

Students of the experimental group have received higher scores in total tests.

Improvements were observed in students who experienced difficulties in mastering of the material with the use of traditional approaches.

The quantity of students, who mastered the foreign language material on the basis of information technologies and used this knowledge in other disciplines, grew, and it influenced the success of the group as a whole. Students' results of the experimental group were higher than the results of the control group that proves the efficiency of using information technologies in the academic process.

The use of information technologies in the academic process improved the progress of forming communicative competency of future specialists in tourism.

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## 8. Conclusion

The analysis of works by many researchers shows that the use of information technologies in formation of the communicative competency of future specialists in tourism in the process of foreign language teaching to solve educational problems, to train specialists with critical and creative thinking, capable to function effectively in the changing professional work, becomes the integral component of modern education. In modern education system, the tendency of focus shift from the mastering of knowledge to the ability to use the information, to receive it by means of information technologies is seen.

Therefore, formation of the communicative competency of future specialists in tourism in the process of learning/teaching a foreign language and training of specialists should include a system to use the given technologies in future professional work, especially in the context of modern information society.

In the conclusion, it is necessary to notice that now the global consecutive and steady movement to the information society is observed, which urged to create the best conditions for the maximum self-realization of each person. The bases for that process are intensive development of information technologies and creation of developed information-educational environment.

Study and analysis of the current state of ICT use in the educational sphere have shown that there are numerous works considering possibilities, properties, functions, potential of information technologies having no accurate substantiation on the basis of the factsheets received as a result of practical activities during experiments. The obvious lack of the researches representing theoretically well-founded methodical and pedagogical recommendations on ICT application is seen. The questions connected with development and influence of ICT on the efficiency of the academic process are insufficiently studied. There are no long-term and extensive researches showing degree of efficiency and expediency of support of various courses on integration of disciplines through the Internet by means of telecommunication technologies.

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1. International Kazakh-Turkish University named after Yassawi. 161200, Kazakhstan, Turkestan, B.Sattarkhanov Ave 29. E-mail: [gulnara\\_rizahodja@mail.ru](mailto:gulnara_rizahodja@mail.ru)

2. International Kazakh-Turkish University named after Yassawi. 161200, Kazakhstan, Turkestan, B.Sattarkhanov Ave 29

3. International Kazakh-Turkish University named after Yassawi. 161200, Kazakhstan, Turkestan, B.Sattarkhanov Ave 29

4. International Kazakh-Turkish University named after Yassawi. 161200, Kazakhstan, Turkestan, B.Sattarkhanov Ave 29

5. International Kazakh-Turkish University named after Yassawi. 161200, Kazakhstan, Turkestan, B.Sattarkhanov Ave 29

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