FORMATION OF INFORMATION AND COMMUNICATION COMPETENCY IN THE PROCESS OF GENERAL INTELLIGENCE DEVELOPMENT OF FUTURE SPECIALISTS

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The article deals with information and communication competency as integral part of general intelligence knowledge and skills, which are important for successful professional activity; notions of competence and competency are differentiated; types of activities necessary for general intelligence, information and communication skills development are distinguished.

Keywords: information and communication competency, intelligence, information and communication skills

Global transformation of industrial society into information and communication society in contemporary world leads to penetration of information and communication into all spheres of people’s life, it involves emergence and development of new quality of information and communication structures types and processes as well as fundamentally revaluation of information and communication nature of social reality; modern changes in social-communicative sphere, place and role of information and communication in general society evolution.

In this respect the most important task of existing education becomes preparing of graduate who obtained effective methods of working with information, capable to implement his knowledge and skills in own creative product, ready for personal development and self-actualization as both professionally and personally. One way to achieve this goal is organization of productive educational-cognitive activity where general intelligence development will be aimed at formation of information and communication competency.

As information and communication competence we mean integrative quality of person expressed in capability of future specialist to assimilate information for effective communication, solving educational-cognitive and other personal problems and tasks. Information and communication competences are necessary to modern graduate of higher institution for mastering his further professional activity. Above-noted competences also underlie successful adaptation of person in contemporary world.

It’s possible to distinguish three components in information and communication competency: personal, managerial and pragmatic. Formation and development of these components provide the commitment of showing the competency, of realizing the sense and personal importance of own activity of future specialist, of effective self-management, experience of the competency application in the process of solving professional tasks, self-control, self-assessment and self-consciousness.[6]

Particular importance of information and communication competency increases in response to quick change of information traffic and exploit technologies when the necessity of developing adaptation skills in information society grows. There are two contradicting problems to be defined here: the formidable part of participants of educational process (pupils, students and teachers) is not ready to use information technologies or visa versa their usage of interactive facilities is excessive and leads to diminishing of all other communication types, that results in uncommunicativeness (F. Jameson).[7]

The problem of extensive use of computer technologies in educational sphere during recent decades attract interest of Russian pedagogical science. Substantial contribution to solving the problem of computer technology in education made Russian and foreign scientists: G.R. Gromov, V.I. Gritsenko, V.F. Sholohovich, O.I. Agapova, O.A. Krivosheev, S.Papert, G. Kleimann, B. Sendov, B. Hunter etc.

Introduction of information and communication technologies into educational process involves not only emergence of modern technical devices, but also new forms and methods of teaching. Different didactic problems of education cybernation in our country are described in works of A.P. Ershov, A.A. Kuznetsov, T.A. Sergeeva, I.V. Robert; methodical problems – B.S. Gershunsky, E.I. Mashbits, N.F. Talisinoi; psychological problems – V.V. Rubtsov, V.V. Tikhomirov, etc.

In scientific investigations and publications devoted to modernization of education the main notions are competence and competency which don’t have fixed definition and are interpreted according to author’s position.

Competency is a result of education expressed in individual acquisition of definite number of working methods toward specific item of activity. The number of learning ways of activity is relevant over a long time period and is formed during several years by different means distinctive for each society, social stratum and age. The level of competency is very
important not only for professionalism of company personnel and stable work but also for life quality of employees of the firm and country in general.

Competence is a range of powers committed by law, charter or any other document to certain agency or official body; it is knowledge or experience in one or another field [1, p. 78].

Competency is already formed personal quality (or complex or qualities) of specialist and minimum required experience of specific activity [5].

Many authors agree that information competency is multilevel notion. There are different quantity of levels of information competency in different researches, which in fact make level-hierarchy; each next level includes features of the previous one and has some own specific features which differ from it. According to progression in this hierarchy new mentality is being formed and as the result of it – information competency. It’s obvious that information competency is the key factor in lifelong learning and the first step on the way of achieving educational goals, so it’s needed to be developed [2].

Formation and development of information competencies involves the following activities:

– acquaintance with the computer as a device to work with the information, getting the technical skills for working with different devices.
– be master of the means of working with information: searching in catalogs, systems, hierarchical structures;
– Systematization, analysis and selection of information (different types of sorting, filters, queries, structured file system, database design, etc.).
– Transformation of information (from the graphics – in to textual, from the analog – to digital, etc.);
– A critical attitude to information received the ability to distinguish main thingth, to evaluate the reliability (relevance of the inquiry, network hoaxes, etc.);
– The ability to use information and telecommunication technologies for solution of a wide class of tasks.

Speaking about communicative competence, we can distinguish the following activities in this direction:
– Possession of the forms of oral speech (monologue, dialogue, the ability to ask a question, give an oral argument in response, discussion, defense of the project, etc.);
– Maintaining dialogue «man» – a «technical system» (understanding the principles of the interface, working with dialog boxes, setting the parameters of the medium, etc.);
– the ability to present themselves orally and in writing form, possession of stylistic techniques of text design (e-mails, netiquette, creating text documents from a template, the rules of giving information in a presentation, etc.);
– possession of telecommunications for organizing the communication between remote collocutors (understanding the capabilities of different types of communication, the nuances of their use, etc.);
– understanding of the fact of variety of languages, possession of language, linguistic competence (including – formal languages, coding systems, programming languages);
– Ability to work in a group, to seek and find a compromise (the work on a joint software project, the interaction of the web, client-server technology, networking applications, etc.);
– tolerance, the ability to build a dialogue with representatives of the other views (the existence in the network community, telecommunications with remote collocutors, etc.) [3].

Possession of informational and communication competences promotes the formation of students’ communicative-informational competence, which is especially important now, when the social order of modern society requires the preparation of professionals with information – communicative competence, who can influence the leading decision-making, and who can set the tone of innovation to professional activities.

According to this, the need for inclusion the student’s into educational process is increase, aimed at improving the business culture and professionalism, information literacy and competencies: his training in social business communication technologies and new forms of interactive communication, which is adequate to socio-cultural dynamics of the ongoing changes.

The tasks of the development of informative-communication specialist expertise include:
– enrichment of knowledge and skills of computer science and informative-communication technologies;
– the development of communicative, intellectual abilities;
– implementation of the interactive dialogue in a single information space [4].

In order to implement the tasks, it must be properly and clearly define the criteria for informative-communicational specialist and to design and pedagogical conditions of educational space for their achievement, namely the ability to work with the information (data collection, retrieval, transmission, analysis), modeling and design their own professional activity; modeling and design of the team, the ability to navigate the organizational environment based on modern informative-communicational technologies used in their practice of professional activities of modern informative-
communicational technologies, ensuring the effectiveness of professional activity.

From the foregoing it can be concluded that the formation of informative-communicational competence is a prerequisite for the effectiveness of the professional activities of the future specialist. However, the success of this process depends on many factors – the individuality of the student, on forming the collections of high quality educational resources, systematic and purposeful training for teachers in the sphere of informative-communicational technologies; the improving of informative-educational sphere.

References

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