Беркимбаев К.М., Ниязова Г.Ж., Кошанова Г.Д.

КОММУНИКАТИВДИК ИЙКЕМДҮҮ КӨНДҮМДӨРДҮ КЕЛЕЧЕК IT АДИСТЕР ҮЧҮН КАЛЫПТАНДЫРУУНУН ЫКМАЛЫК АСПЕКТИЛЕРИ

Беркимбаев К.М., Ниязова Г.Ж., Кошанова Г.Д.

МЕТОДИЧЕСКИЕ АСПЕКТЫ ФОРМИРОВАНИЯ КОММУНИКАТИВНЫХ МЯГКИХ НАВЫКОВ У БУДУЩИХ IT СПЕЦИАЛИСТОВ

K. Berkimbayev, G. Niyazova, G. Koshanova

METHODOLOGICAL ASPECTS OF THE FORMATION OF COMMUNICATIVE SOFT SKILLS IN FUTURE IT SPECIALISTS

Бул макалада маалыматтык коомдун калыптанышынын тарыхый аспектилери баяндалат. Мындан тышкары, экономикалык өнүгүүнүн кыймылдаткыч күчү катары маалыматтын ролу аныкталат. Байланыш максатына жеткенде милдеттүү боло турган негизги факторлор аныкталды. Мындан тышкары, социалдык байланыштын өзгөчөлүктөрү Дагы такталды. Келечектеги адистерди кесиптик даярдоодо ийкемдүү көндүмдөрдү өнүктүрүүнүн маанилүүлүгү аныкталды. Маалыматтык технологиялар жаатында келечектеги адистердин коммуникативдик жана ийкемдүү көндүмдөрүн калыптандыруунун методикалык мүмкүнчүлүктөрү берилген. Ийкемдүү коммуникативдик көндүмдөрдү калыптандырууда кошумча билим берүүнүн зарылдыгы негизделди, кошумча курска даярдыктын мазмуну "Startup инженериясы", окутуу аркылуу ийкемдүү коммуникативдик көндүмдөрдү калыптандыруу ыкмалары көрсөтүлдү.

Негизги сөздөр: *маалымат, билим берүү, университет, келечектеги адис, көндүмдөр, жумшак көндүмдөр, баарлашуу; баарлашуу көндүмдөрү, Startup инженерия.*

В данной статье изложены исторические аспекты формирования информационного общества. Кроме того, определена роль информации как движущей силы экономического развития. Определены основные факторы, которые станут обязательными в достижении цели коммуникации. Кроме того, уточнены особенности социальной коммуникации. Определена важность развития гибких навыков в профессиональной подготовке будущих специалистов. Представлены методические возможности формирования коммуникативно-гибких навыков у будущих специалистов в области информационных технологий. Обоснована необходимость дополнительного образования в формировании гибких коммуникативных навыков, представлено содержание обучения дополнительному курсу "Startup инженериясы", методы формирования гибких коммуникативных навыков посредством тренинга.

Ключевые слова: *информация, образование, университет, IT-специалист, навыки, мягкие навыки, общение, коммуникативные навыки, Startup инженерия.*

This article describes the historical aspects of the formation of the information society. In addition, the role of information as a driving force of economic development is determined. The main factors that will become mandatory in achieving the goal of communication are identified. In addition, the features of social communication have been clarified. The importance of developing flexible skills in the professional training of future specialists is determined. The methodological possibilities of the formation of communicative and flexible skills of future specialists in the field of information technology are presented. The necessity of additional education in the formation of flexible communication skills is substantiated, the content of the training for the additional course "Startup Engineering", methods of forming flexible communication skills through training are presented.

Key words: *information, education, university, IT-specialisty, skills, soft skills, communication, communication skills, Startup engineering.*

The first analytical versions of the concept of the informational society belong to F. Machlup, who substantiated the formation of a new information economy. F.Machlup developed a classification of knowledge, the criterion of which is the subjective meaning of knowledge for the cognizer, which includes five types of knowledge:

- practical knowledge relevant to work, decision-making and action;

- intellectual knowledge that satisfies intellectual needs, considered a sign of a broad humanitarian and natural science education and a common culture;

- every day and "entertaining" knowledge that satisfies petty curiosity or the need for unpretentious entertainment and emotional excitement;

- spiritual knowledge related to the knowledge of God and the ways of salvation of the soul;

- unnecessary knowledge that lies outside the sphere of the knower's interests is usually acquired by chance and held in memory aimlessly. On the basis of the developed classification of knowledge, F. Machlup substantiated the conclusion about the leading role of information and knowledge in accelerating the socio-economic development of society [1].

The assumption of the American economist F.Machlup about the imminent advent of the era of the information economy and the transformation of information into a new type of commodity, put forward in the late 50s, came true. Information has become a strategically important resource, the quality of which is a leading factor in economic development. The process of informatization, which is based on infocommunication technologies, has changed the entire system of social production.

As emphasized in the Okinawa Charter on the Global Information Society, adopted by the leaders of the G8 countries on the 22nd July, 2000: "A new stage in the development of information exchange processes is coming. The intensive introduction and interweaving of modern computer, television and radio broadcasting, telephone

technologies and communication services, the rapid spread of local and global communication networks creates a fundamentally new quality of cross-border information exchange, and tools for influencing mass consciousness, enhancing the importance of socio-psychological and cultural-informational aspects globalization". Modern achievements in the information and communication sphere are revolutionary in nature and create the prerequisites for building the development of a global information society. In the course of its formation, the borders between countries are gradually erased, the structure of the world economy is changing radically, and the market is becoming much more dynamic and competitive [2].

Today, in the context of the development of new technologies, the details of the modern IT industry are growing rapidly. The defining prospect for the development of informatization for the country is the development of unique information products and technologies prepared by new generation IT specialists. The tendency of the modern education system, based on the education of a self-developing personality, involves taking into account the individual characteristics, needs, and opportunities of students. Acting as a subject of pedagogical activity, the student should be oriented to the free development of the personality, creative initiative, independence, competitiveness, professional mobility, which requires a qualitatively new approach to the formation of a future specialist.

The requirements imposed by society on the qualifications of a modern specialist lead to quite fierce competition in this sector of the labor market. Employers give preference to those young professionals who not only have extensive knowledge and skills in the field of information technology, but also know how to be "Team Players" [6].

The results of the Computing Technology Industry Association (CompTIA) web survey on the causes of IT project failure [7] state that about 28% of those surveyed identified bad communication as the first cause of IT project failure, insufficient resource planning as the second, and unrealistic deadlines - the third.

Communication is the act of communication, based on mutual understanding between one or more people; communication of information by one person to another or several persons. Communications - various ways of delivering information between people, especially through official systems - Mail, radio, telephone, etc.: At least 2% of international assistance goes to improving communications [8].

The changing nature of the labor market also poses new challenges for communication skills. Communication is an integral part of professionalism. Communication is important not only for your personality, but also for the company you work for.

Analyzing the survey data, K.Gingrich, Director of

Products and Services and Skills development at CompTIA, emphasizes that communication should be an integral component of the project at every stage. It should be noted that it was CompTIA that was the first company that responded to the demand of employers for highly qualified IT professionals with a high level of communicative competence and made changes to the A + exam (a certification exam to assess understanding of computer technologies in business and certify the skills necessary to support IT infrastructures). Nowadays, The A+ exam includes not only testing technical knowledge and abilities, but also testing suitability for the IT business, that is, the exam includes questions of interaction with customers, team members, managers, etc., problem solving, decision making [10].

Four communication factors have been identified that help an organization achieve its goals [11]:

1) clarity of purpose (the leaders of the organization are consistent in their messages, that is, all members of the organization understand the goals and methods for achieving them);

2) communication methods (a high level of trust and openness in all activities is critical to success, members of the organization at all levels can request information and get the necessary answers)

3) effective information exchange (availability of the right information at the right time to do the job, exchange of opinions and discussion of ideas, and dissemination of the best ideas and learning from each other);

4) The employers must be effective communicators to present their ideas persuasively.

In terms of content, interpersonal communications are the processes of intentional or accidental, often indirect messaging between different partners or groups, and social communications are the direct interactions of a small number of communicators who have the opportunity to see, hear, touch each other, and easily provide feedback. Two points are important in defining social communications.

1. The process of exchange, addressing each other as a sign of direct interaction between people.

2. Message, information as a subject of exchange, transfer of subjective experience from one object to another [12].

Communications as complex, dynamic and reproducible phenomena are a powerful means of including an IT specialist in the external environment, provide the necessary level of interaction with the surrounding socio-economic systems. For the normal effective organization of work, for the management of joint coordinated activities, everything related to the reception, processing and transmission of information is of great importance. Synchronization is necessary here – a correct and accurate understanding of what is being transmitted, so that subsequent actions are also purposeful and effective. Communication

is the process of transmitting information from a source and to a recipient with a specific purpose. In an organization, this goal is to ensure the understanding of information received through exchange, communication, as well as timely management decision-making based on the received and processed information [13].

In this regard, it is important to systematically study the methodology for the formation of communication skills of future ICT specialists through the additional course "Startup Engineering".

The additional training course "Startup Engineering" is based on blended learning technology. Lectures are organized remotely.

The purpose of the course: the development of soft skills of future specialists in information and communication technologies. To give an idea of the technological entrepreneurial process, develop teamwork and the business skills and soft necessary for an IT entrepreneur.

Course volume: 2 credits.

Course content

Module I. Introduction to Startup.

Business or employment? When to launch your first startup. Identifying your strengths: what helps you succeed.

Module II. Creating an idea and startup basis

From Dream to Idea: The Walt Disney Method. Development and refinement of ideas. Idea selection. Idea exclusivity. Description of the business idea. SWOT analysis method.

Module III. Startup partners or own initiative?

Partner's need. Leadership in Startup. Startup mission. Stimulation of project development: long-term planning. Morality in business. Social responsibility of business.

Module IV. Business model design.

Study of promising business areas. Business Model Canvas. Building a Business Strategy and Competitive Advantages. Sales systems B2B, B2C, B2G. Business plan: structure. Business plan: presentation formats.

Module V: Product design and market research.

Product: definition and forms. Customer problems solved by the product. Products that offer innovative solutions. Prototype: why do it. The main market segments. Segments: best or general. Segment scale: TAM, SAM, SOM. Demand for products in the market. Definition of a buyer persona. Competitive advantages of products. Technology as a competitive advantage. Analysis of competitors. Comparison of your product with a competing product.

Module VI. Registration and promotion of startup in Kazakhstan.

IE or LLP. Taxation systems. License for business activities. The specifics of the legal address. Startup: direction for beginners. Basics of accounting. Responsibility of entrepreneurs. Intellectual property and its protection. Logo and corporate style. Website for business. Advertising channels. Basics of online promotion. Social networks for business. Basics of SMM.

Module VII. Mounting and scaling startup in the market.

Market introduction. Stages of the product life cycle. Product life cycle: growth stage. Reducing the service life of the product. Sales funnel. Factors to reduce the cost of production. Digitalization of Business Processes. Expanding the offer through related products and services. Coverage of new market segments. Market trends and their impact on sales growth. Loyalty of clients/buyers. Business scale. Franchising basics. Business expansion to new regions/countries. Investments In Business. Pitch deck: the basics. Pitch rules.

References:

1. Makhlup F. Production and dissemination of knowledge in the USA. - M.: Progress, 1966. - 463 p.
2. Zhuravleva I.A. Information society: textbook / I.A. Zhuravleva. - Irkutsk: Irkut Publishing House. 2013. - 141 p.
3. Ryzhkova M.V., Shefer E.O., Kondrateva A.A., Soboleva E.N. The formation of communication skills by introducing a soft-skills development map in the professional education of IT specialists. Vectors of well-being: economics and society, №2 (41), 2021. - PP.155-168.
4. Rosencrance L. Survey: Poor communication causes most IT project failures [Electronic resource] – Mode of access: http://www.computerworld.com/article/2543770
5. Ter-Minasova S. G. Language and intercultural communication. - Almaty: National Translation Bureau, 2018. - 320 p.
6. Johnson S. The IT Professional's Business and Communications Guide. A Real-World Approach to CompTIA A+ Soft Skills / S. Johnson – Wiley Publishing, 2007. - 236 p.
7. Finch K. Internal communications: it's not rocket science! / K.Finch, C. Hansen, R. Alexander, S.V. Spencer – Halifax N.S.: Communications Nova Scotia, 2010. – 65 p.
8. Bolotova A.K., Zhukov Yu.M. Psychology of communications: monograph. / A.K. Bolotova, Yu.M. Zhukov; National research University "Higher School of Economics". - M.: Ed. house of the Higher School of Economics, 2015. - 495p.
9. Kulikova E.V., Soroka E.G., Khaustova N.M. The formation of the ability to communicate future IT-specialists in the process of studying at the university. // Bulletin of SIBIT. 2016. №3 (19), 2016, - PP. 129-133.