EDUCATION IN TRAINING COURSES IN COMMUNICATION-ORIENTED FIELDS

EDUCAÇÃO EM CURSOS DE FORMAÇÃO EM CAMPOS ORIENTADOS PARA A COMUNICAÇÃO

FORMACIÓN EN CURSOS DE FORMACIÓN EN ÁMBITOS ORIENTADOS A LA COMUNICACIÓN

Tat'yana Timofeevna SIDEL'NIKOVA[1]
Irina Dmitrievna PORFIREVA[2]

ABSTRACT: This article considers the role of independent work in distance learning. Independent work of students is an integral part in modern teaching and learning process. At the moment, independent work in percentage terms for full-time education is up to 50%. The indicator increases significantly to 90% for extra-mural form of study. When determining the content and methods of independent work of students in the educational process, one should take into account the expected level of a certain set of graduates' competencies, which should be achieved during the period of study, and which should be provided by their skills to build their own trajectory of development in a professional and personal format. In this paper, special attention has been given to the potential of visualization as a traditional and, at the same time, exclusively modern means of methodological support.

KEYWORDS: Visualization. Independent work. Information graphics. Mind maps. Education.

RESUMO: Este artigo considera o papel do trabalho independente no ensino a distância. O trabalho independente dos alunos é parte integrante do processo de ensino e aprendizagem moderno. No momento, o trabalho independente em termos percentuais para educação em tempo integral é de até 50%. O indicador aumenta significativamente para 90% para a forma extra-muros de estudo. Ao determinar o conteúdo e os métodos de trabalho independente dos alunos no processo educacional, deve-se levar em consideração o nível esperado de um determinado conjunto de competências dos graduados, que devem ser alcançadas durante o período de estudos, e que devem ser fornecidas por suas habilidades para construir sua própria trajetória de desenvolvimento em formato profissional e pessoal. Neste artigo, atenção especial foi dada ao potencial da visualização como um meio tradicional e, ao mesmo tempo, exclusivamente moderno de suporte metodológico.

PALAVRAS-CHAVE: Visualização. Trabalho independente. Gráficos de informação. Mapas mentais. Educação.

---

[1] Kazan (Volga) Federal University, Kazan – Russia. Doctor of Education, Professor of Kazan (Volga) Federal University, Institute of Socio-Philosophic Sciences and Mass Communication, Higher School of Journalism and Media Communication, Department of Public Relations and Applied Politology. ORCID: https://orcid.org/0000-0001-5902-0477. E-mail: ttsidelnikova@gmail.com
[2] Kazan (Volga) Federal University, Kazan – Russia. Assistant of Kazan (Volga) Federal University, Institute of Socio-Philosophic Sciences and Mass Communication, Higher School of Journalism and Media Communication, Department of Public Relations and Applied Politology. ORCID https://orcid.org/0000-0001-9692-3878. E-mail: polit2015@bk.ru

RESUMEN*: Este artículo considera el papel del trabajo independiente en la educación a distancia. El trabajo independiente de los estudiantes es una parte integral del proceso de enseñanza y aprendizaje moderno. Por el momento, el trabajo independiente en términos porcentuales para la educación a tiempo completo es de hasta el 50%. El indicador aumenta significativamente al 90% para la forma de estudio extramural. Al determinar el contenido y los métodos de trabajo independiente de los estudiantes en el proceso educativo, se debe tener en cuenta el nivel esperado de un determinado conjunto de competencias de los graduados, que deben alcanzarse durante el período de estudio y que deben proporcionar sus habilidades para construir su propia trayectoria de desarrollo en un formato profesional y personal. En este trabajo se ha prestado especial atención al potencial de la visualización como un medio de apoyo metodológico tradicional y, al mismo tiempo, exclusivamente moderno.*

PALABRAS CLAVE*: Visualización. Trabajo independiente. Gráficos de información. Mapas mentales. Educación.*

Introduction

It is definite that independent work is a kind of mutual integration of the activities of a teacher and students, where each party has its own area of responsibility, with sometimes non-coinciding intersection of interest and attitudes towards the phenomenon of "Independent work" (ILHOMOVNA, 2021). At the same time, the focus of attention is shifted at different stages of independent work, a kind of delegation of authority from students to the teacher and vice versa. The following stages can be distinguished:

Stage 1 – understanding the problem (Priority of students).

Stage 2 – studying the algorithm for task fulfilment (Priority of students).

Stage 3 – organizing the process of work performance (Priority of students).

Stage 4 – self-reflection, self-control (Priority of students).

Stage 5 – checking the work and analyzing the mistakes (Priority of a teacher).

One may think that the palm in independent work is carried by students. In part, this is indeed not disputed. It is "self" in the activities of students that provides their professional and personal training. But it is also obvious that the presence of a teacher is indirect at each of the stages, since it involves their developed procedural and methodological support: in order for students to come to the realization of a problem, it must at least be formulated so that students read and understand the instructions (HASANOVA *et al.*, 2021).

Therefore, the zones of student and teaching responsibility for a high level of organization and implementation of independent work are differentiated, and, at the same time, they are impossible without a synthesis of the activities of both subjects. This is due to the fact that students will be active in independent work, if they are convinced of its expediency, they

will be interested in solving the tasks assigned to them, and the teacher, in turn, is a master of art and creativity of their formulation.

Literature Review

Distance Learning (DL) is any learning in which teacher and student are geographically distant from resources. Distance learning is possible using e-mail, video, cable TV, media, or any Internet-related technology such as message boards, chat rooms, and computer conferences or videos (SYARIF *et al.*, 2021). Distance learning is a guided system or process that connects learners to remote resources. It can also be used as a tool for complementary learning (ILHOMOVNA, 2021).

The historical evolution of distance education has taken place in four main stages, each of which, with its organizational form, is derived from the main form of communication (ABDUKHAFIZOVNA, 2021; ULUGBEKOVNA, 2021; BOVKUN *et al.*, 2021).

Correspondence systems: which have their roots in the late nineteenth century and are still the most widely used form of distance education in less developed countries; According to a textual study guide, it is often accompanied by audio-visual components such as cassette tapes and slides, and correspondence is provided through correspondence through letters and other written and printed documents, which are sent through postal systems.

Broadcast Learning Systems: Benefit from a variety of transmission technologies - terrestrial, satellite and cable radio to live and recorded lectures for individual learners living at home and groups of learners in remote classrooms - Where some form of face-to-face support may be provided. Some systems offer limited to radio or video communication with the instructor at a focal point.

Multimedia systems: include text, radio, video, computer materials, and typically face-to-face teacher support that is transmitted to both individuals and groups. In this approach, which is what is used by open universities, education is no longer the work of one person but the work of teams of specialists. Media specialists, information specialists, educational design specialists, and program learning specialists are being prepared to deploy among a large number of learners, usually scattered throughout the country.

Internet systems: in which multimedia materials (text, audio, video, and computer) are transmitted electronically through computers, along with access to information and data databases and electronic libraries. Interaction between teacher-student, student-student, one -

one, one - countless, countless - countless simultaneously or asynchronously - via e-mail, computer conferences and bulletin boards, and the like they make it possible.

The proposed classification of systems in the form of different generations helps us to better understand and describe the components of the system in a specific time interval (KALYANOVA, 2020; POPOVA; KLEVINA, 2019).

The first generation: The most important technology used in this generation was the textbooks and handbooks for each period. Of course, such printed materials do not end with reference texts and books, but these materials are carefully designed and purposefully produced by a group of skilled professionals (KRYSHTANOVYCH *et al.*, 2020; PRIBYTKOVA *et al.*, 2021). This group includes:

- Educational designer familiar with behavioral learning theories
- Course subject specialists
- Skilled graphic artists
- The best editor
- Project manager to manage budget and time management

The second generation: The second generation was formed at a time when newer mass technologies of radio and television media had emerged, and the theory of cognitive learning was gaining in popularity. Advances in cognitive learning theory have enabled advanced role-playing organizers to draw users' thumbnails and simulated counterparts into a complex media world. However, direct interaction between faculty and students of this generation was limited to technology, which was often used in the first generation (telephone and letter).

Third generation: The third generation has the advantage of establishing simultaneous and asynchronous human interactions provided by a range of telecommunications technologies - in particular audio, video, and computer conferencing. Third-generation constructivist learning theory has embraced distance education systems intending to create opportunities for students to create and rebuild the knowledge, both as individuals and as members of learning groups.

Fourth generation: This generation has been able to combine the three basic features of networking: the retrieval of vast amounts of content information, the interactive capacity of computer-based communications, and the power of local processors.

Fifth generation: In short, the fifth generation has been able to add "artificial intelligence" to the capabilities of the network, or, as Bernozli, the network's lead designer, puts it, to create a kind of semantic sharing that enables human and non-human "automated agents."

To search and process the information on the network. By reviewing the "generations of distance education", we find that the type, amount and integration of types and forms of interaction is each generation's basic and determining element (KIREEV *et al.*, 2019; BOBYLIEV; VIHROVA, 2021; RAITINA *et al.*, 2021).

Based on the studies in the given field, Key points in a variety of distance learning methods include:

• Separation of the teacher from the student during the teaching process

• Using media to connect the teacher and students who convey the content of the lesson.

• Provide two-way communication between teacher, educational institution and student.

• Separating teacher and student in place and time

• Voluntary control of learning that this control is done more by students than the teacher.

• Distance education is the latest effort of professionals to meet the educational needs of those who are eligible for education but are under pressure from obstacles such as time, place constraints, physical disabilities, or personal and professional responsibilities that students in mainstream education do not face (RAITINA *et al.*, 2021).

Methods

The study used the method of involved observation in the educational process. The paper provides the examples of well-thought-out assignments of various formats for individual and collective extracurricular and classroom independent work, questionnaire data, and gives the analysis of the results of tests and examinations.

Results and Discussion

Let us consider in more detail the peculiarities of independent work of a teacher and a student. Let us recall that the share of independent work, and, consequently, its methodological support is 50% of the time allowed for studying this course. Effective independent work of a student depends on the degree of elaboration of tasks by the teacher of disciplines. A basic list with fixed resources for educational classes is needed. The stage of monitoring students and checking the completion of assignments is especially important. This algorithm is universal for any form and format of session (GOLIVKIN, 2020; LITVINOV, 2020; ALL-UNION STATE STANDARD GOST R 53620, 2009; TELFER; MARTIN, 2018; MITTERLING, 1967).

It is difficult to overestimate the role of the student in this learning format. Every day, a student must set aside an average of at least 3 hours to perform extracurricular independent work. It is not unexpected that the forms of independent work of students are determined when developing work programs and educational methodological complexes of disciplines by the content of a discipline. The types of assignments for extracurricular independent work can be:

- For acquiring knowledge: reading a text (textbook, primary source, additional literature), drawing up a text plan, graphing the structure of the text, taking notes of the text, extracts from the text, working with dictionaries and reference books, educational research work, using audio and video recordings, computer technology, etc.

- For consolidating and systematizing knowledge: work with lecture notes (text processing), repetitive work with educational material (textbook, primary source, additional literature, audio and video recordings), drawing up a plan and theses of an answer, tabulation for systematizing educational material, studying dictionaries, reference books, answers to control questions, analytical text processing, preparation of messages for a presentation at a seminar, conference, preparation of abstracts, reports, preparation of bibliography, tasks in the form of tests.

- For shaping skills: solving problems and exercises according to the model, solving variable problems and exercises, solving situational production (professional) problems, preparing for business and role-playing games, projecting and modeling various types and components of professional activities, preparing presentations, creative projects, preparing coursework and graduation works, experimental work (RUSSIA, 2017).

The structure of modern visualization can be represented as a set of independent and, at the same time, complementary elements. First of all, in relation to the professional context, mental maps can be noted as a tool for the creative activity of a public relations specialist. "Mental maps" ("Cognitive maps", "Mind maps", Intellect maps) is a tool for visual representation and recording of information, a method that is an alternative to the usual linear method, a special type of creativity that develops thinking and memory. A contemporary researcher and developer of mental maps is Tony Buzan, a renowned writer, lecturer and consultant on intelligence, learning psychology and thinking problems (GORDIENKO; SMIRNOVA, 2018).

Intellect maps neutralize the shortcomings of the standard way of working with information, namely, the difficulty of memorizing it, large time losses for notetaking and lack of creativity. The mastery of the skills of using mind maps is of strategic importance for students pursuing "Advertising and Public Relations" and "Media Communications", as their

professional activities are directly related to business meetings and negotiations, planning, developing complex projects, generating new ideas, making decisions characterized by a clear vision of all the pros and cons, which makes it more well-targeted and sophisticated, presentations, the task of which is less time more and more effective for memorizing the amount of information. Therefore, mind maps are not of short-term interests for students.

Consider the basic rules for building up mind maps:

1.   Arrange your workspace (a sheet of paper or a sheet created in a computer program) depending on the purpose: vertically or horizontally (structure), horizontally (process).

2.   Start work on the map with the name of the topic (central image), which is featured in the center of the map.

3.   Form "branches" (levels) radiantly (from the center) and clockwise.

4.   Be compact. Write "concentrate", keywords on the "branches", exclude long sentences. The length of the "branch" and the length of the word must be identical.

5.   Group the map subtopics according to branch format: color, line type, and so on.

6.   Be free with associative illustrations, pictures, symbols.

7.   Reflect causal relationships (link subtopics with arrows).

8.   Separate the blocks united by a common idea with additional lines (Modern Mind Mapping for Smarter Thinking E-Book, 2013).

Having obtained the preliminary information about the purpose and drawing of mental maps, students should independently, individually in an individual-group mode, develop mental maps (alpha mapping to represent the structure, omega mapping to reflect the process) in various fields of activity. It is suggested using mind maps for creative solution of the problems of the "field of problems", formulated by them independently (For example, "Ten mistakes of an orator", "Fears of public speaking and ways to overcome them", "How to turn gadgets into a partner of the educational process", "Ten promising methods of controlling smoking at the university").

Example 1. Practical session "PR – project" is carried out in independent group work (5 x N) in online format. The goal is to arrange a PR action for a selected project (real or fantastic), providing it with presentation materials and other means of visual support. Given the fact that the presentation of the material and its assessment is carried out exclusively online, special co-operation, consistency and a team-like nature of the organization of intragroup interaction are required.

There is only a non-standard project name. The scope of its application, target audience, and the uniqueness of the proposal are the fantasy of each team. When evaluating the projects,

the following will be taken into account: addressees (target audience of PR actions), time limit on speeches, and visual support of PR actions. Possible project names are "Dust on boots", "Heaters for penguins", "Axe soup", "The snow of yesterday", "Third wheel", "What the hell does the nanny-goat need the bayan?" "A fragmented stone jug", "Carry water in a sieve". The report form is oral, with visual support, presentation of the group intellectual product.

Since independent work is differentiated into extracurricular and classroom work, the next task can be used both in the first case and in the second case. It all depends on the scenario developed by the teacher.

Example 2. Practical task for individual-group independent work "Collective portrait of creative specialists pursuing "Advertising and Public Relations" and "Media Communication".

Variant 1. Students are offered to carefully study the list and identify the most important features of a creative personality, as well as to know the ways of their formation and development. The report form is oral, with visual support, presentation of the group intellectual product.

Variant 2. "Creative maxims". Formulate a list of recommendations that will allow you to purposefully form both personal and collective creativity. Both serious and humorous variants are expected. Particular attention is paid to the non-standard visualization of the project, namely to the format of associative-illustrative series.

Example 3. Several years ago, an idea of a new type of tasks rose, which received the humorous title "Non-standard glasses" (Figure 1). As further practice has shown, anything can be a non-standard set, for example, bags, hats or chairs. The idea was to accompany the key moments of the analyzed process or the proposed solution (in this case) with one of the 16 given illustrations. At the same time, the group was given the opportunity to remove one or more of them but sharing the reason without fail. The most popular were the illustrations of allegories, metaphors, and symbols. Calquing illustration (two glasses = two characters), according to the students, was taken literally, it did not stimulate imagination and did not bring forth a new solution.

Figure 1 – A task example "Non-Standard Glasses"
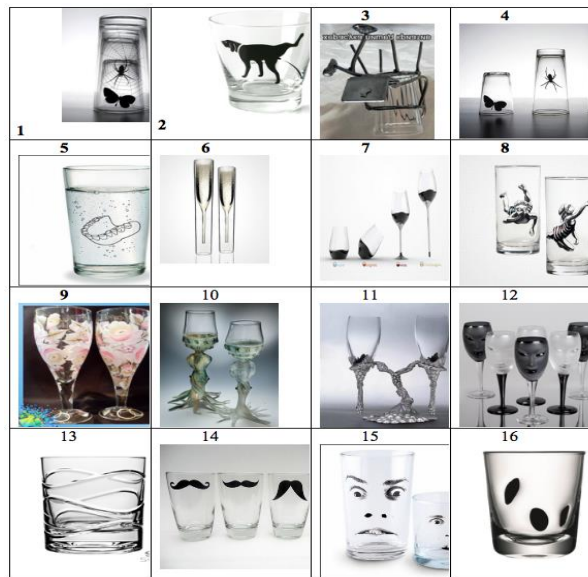
Source: Devised by the authors

The most interesting thing is that at the end of the course students often said that they had made sets of some non-standard subjects for themselves and actively used them when they encountered or needed to solve problem situations. They also offered a valuable addition: to do the task in two stages: stage 1 – the description of a situation and stage 2 - the proposed solution, each accompanied by the use of illustrations. At the same time, their number was increased by students to 30.

Tested and well-proven in the educational process is such a visualization technique as an associative-illustrative series. In organizing independent work for studying various courses and topics, it can also be online supported group interaction. For example, with unfailing interest fulfil the students a task that involves a visual way of answering the question about the mechanism of creativity reflected in I. Guberman's quatrains,

"Deadlocks are useful for creativity ...

Burn of pain and powerlessness

Against to all senses and fear

Thoughts make me jump"...

Tasks for organizing students' online independent work, including the above quatrain, can be presented either by an associative-illustrative series, or by infographics or intellect maps. Not only a visual logic of the presentation of the answer to the question is welcome, but also the transfer of the emotional coloring of this answer with the involvement of emoji. In the conditions of forced online learning, visualization, to a certain extent, is designed to stop undesirable consequences of the communicative deficit which arises from the impossibility of

direct interaction of students in the classroom. The proposed group projects, in addition to mastering the cognitive component of the course, are intended to form the social intelligence of students who learn in a remote mode.

Conclusions

The feedback about the visual support of the preparation and conduct of classes received from students indicates its expediency,

> *Finally, I have been taught to put my thoughts on paper. Mind maps are super!*
>
> *I prepared and passed my exam with the help of the mind map. The best variant of a cheat sheet, and since you do it yourself, you remember much more*
>
> *All my life I always draw all sorts of schemes for myself. A circle in the center, and arrows from it – what to buy, what to take on a trip. I have never guessed that it's possible in the classroom*
>
> *The teacher gave an assignment to draw a line according to Pushkin's fairy tale about the golden Rooster: ... the Rooster shouts "Kiri-ku-ku! Reign, idling away your time" I was tasked with drawing the mechanism of such power. I remember the task well, because I was elected the leader of the group. In the beginning I felt stumped, we seemed to get hung up, and then things have started happening, fast and out of control...!*
>
> *... I've always had problems with public presentations. The group was given the task to construct a "Profile of a Creative Personality", and everyone in the group was to tell about some quality. We began to compile a list in group, and suddenly the teacher gave us about 20 drawings of interesting and unusual glasses and asked us to combine our list of qualities and these 20 glasses with a common idea to get a story. I can't remember that it has been so interesting ever for us, and I myself wanted to make a presentation ...*
>
> *Now I understand the proverb that a picture is worth a thousand words ...*
>
> *The most interesting thing is that I have now taught all my friends and even my parents to mind mapping, and now I always make my preparations for seminars with a notebook and markers.*

It is of the highest importance for a teacher to apply the method of involved observation in learning immersion. It is important to work out tasks and forms of control over students for high-quality individual and collective independent work. The data obtained in the course of this study support this hypothesis and expand the visualization methods for various disciplines. They also shape design – thinking, creativity, culture of intellectual activity and social intelligence.

REFERENCES

ABDUKHAFIZOVNA, Y. S. The peculiarities of using distance learning and independent work in teaching process. **ACADEMICIA: An International Multidisciplinary Research Journal**, v. 11, n. 4, p. 309-315, 2021.

All-Union State Standard GOST R 53620-2009. **Information and Communication Technologies in Education**. Electronic Learning Resources. Generalities. Available: http://docs.cntd.ru/document/1200082196. Access: 10 Jan. 2021.

BOBYLIEV, D. Y.; VIHROVA, E. V. Problems and prospects of distance learning in teaching fundamental subjects to future Mathematics teachers. IOP Publishing. **Journal of Physics: Conference Series,** v. 1840, n. 1, 012002, 2021.

BOVKUN, A. S. *et al*. Analysis of the Features of the Introduction of Distance Learning During the Coronavirus Pandemic. *In*: INTERNATIONAL CONFERENCE ON TECHNOLOGY ENHANCED LEARNING IN HIGHER EDUCATION, 1., 2021. **Proceedings** […]. 2021. p. 288-291.

GOLIVKIN A. P. Current Problems of Distance Education. **StudNet**, v. 8, 2021.

HASANOVA, G. T. Q.; RAXMATOVA, S. B. Q.; MAKHMUDOVA, S. J. Q. The peculiarities of using distance learning and independent work in teaching process. **Science and Education**, v. 2, esp. 2, p. 75-79, 2021.

ILHOMOVNA, H. I. Increasing the Efficiency of Students' Independent Work through Distance Learning. **International Journal of Modern Agriculture**, v. 10, n. 2, p. 4346-4350, 2021.

KALYANOVA, L. Organization of students' independent work through the active use of distance learning technologies in technical universities. **Revista Inclusiones**, p. 498-506, 2020.

KIREEV, B.; ZHUNDIBAYEVA, A.; AKTANOVA, A. Distance Learning in Higher Education Institutions: Results of an Experiment. **Journal of Social Studies Education Research**, v. 10, n. 3, p. 387-403, 2019.

KRYSHTANOVYCH, M. *et al*. **Prospects, Problems and Ways to Improve Distance Learning of Students of Higher Educational Institutions**. 2020.

LITVINOV, D. Distance Learning as a Form of Educational Organization. **International scientific review**, p. 84-87, 2020.

MITTERLING, P. I. "Independent Study". **The Journal of Higher Education**, v. 38, n. 8, p. 457-459, 1967.

Modern Mind Mapping for Smarter Thinking e-book. Proactive Press, March 2013.

ORDIENKO T. P.; SMIRNOVA O. Y. Formation of Professional Skills of Students via Mind Maps. **Problems of Modern Education**, v. 60, n. 1, p. 89-92, 2018.

POPOVA, E. A.; KLEVINA, M. N. Using distance learning in organizing independent work of full time students learning" practical grammar". **Scientific Journal Modern Linguistic and Methodical-and-Didactic Researches**, v. 4, p. 72-80, 2019.

PRIBYTKOVA, O. V.; PONOMAREVA, E. Y.; RYZHKOVA, N. I. **Problems of organization of independent work of full-time students in the context of distance education**. 2021.

RAITINA, M. Y.; PUSTOVAROVA, A. O.; POKROVSKAYA, E. M. **The educational process organization in the distance learning model**: problems and features. 2021.

RUSSIA. **Decree N301 of the Ministry of Education and Science of the Russian Federation of 5 April 2017**. "On Approval of the Procedure for the Organization and Implementation of Educational Activities for Educational Programs of Higher Education – Bachelor's Programs, Specialist Programs, Master's Programs". 2017.

SYARIF, I.; MAHYUDDIN, M. J.; BAHARUDDIN, E. E. Using Moodle Learning Management System in Teaching from Distance Learning to the E-learning 5.0 of New Technology. IOP Publishing. **Journal of Physics: Conference Series**, v. 1933, n. 1, p. 012124, 2021.

TELFER, J.; MARTIN, O. "Can Research-Based Education Be a Tool to Help Students Prepare for the World of Work?". *In*: TONG, V. C. H. *et al.* (Eds.). **Shaping Higher Education with Students**: Ways to Connect Research and Teaching. London: UCL Press, 2018. p. 244-255.

ULUGBEKOVNA, F. G. Methodological and Psychological-Pedagogical Aspects of Distance Learning. **Eurasian Journal of Academic Research**, v. 1, n. 4, 2021.

How to reference this article

Processing and editing: Editora Ibero-Americana de Educação.
Correction, formatting, normalization and translation.