Theoretical prerequisites for the application of interactive and active methods of English language instruction in distance learning

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Abstract

This article examines the theoretical prerequisites for the use of active, and interactive methods of teaching English in the conditions of distance learning. The analysis of literary sources and the semantic understanding of the content of the research topic made it possible to develop a methodological apparatus for distance learning. The research objective of the article: theoretical justification of the use of active and interactive methods of teaching English in the conditions of distance learning. The object of the study is the process of distance teaching of the English language. The subject of the study is the use of active and interactive methods of distance teaching of English. Within the framework of the study, the following hypothesis is put forward if digital means are used in the process of distance teaching as an important condition of a distance learning system. It is necessary to take into account their content components, and the relationship with the taxonomy of learning goals, and learning experience, since this will reflect the activity, and interactivity of teaching English in distance learning.

Keywords: Digital learning tools; theoretical prerequisites; taxonomic approaches; interactive teaching methods; taxonomic approaches.

Introduction

It should be noted that in the 60s of the last century, the first research was carried out on introducing computer tools for teaching a foreign language into the traditional system. In the 80s, in the Western model of education, with the support of "CALL" methods (Computer-Assisted Language Learning), remote teaching of a foreign language through technical means, and information carriers began to develop. The features of studying the subject "Foreign language" correlate with the features of distance learning, the main specific properties of which are network or remote interaction of participants in the educational process, and taking into account the amount of work for independent mastering of the material conducted in the "Just in time" mode.

Modern continuing education is aimed at improving and developing a variety of human abilities to adapt to the transformations that occur in the economic, professional, social, cultural, and other spheres of activity. The basic rules for the organization of the educational process based on distance learning technologies, and educational programs are approved in the State Mandatory Standard of Education of the Republic of Kazakhstan for the corresponding stage of education. The fundamental basis for optimizing the educational process is digital technologies associated with new forms, and methods of teaching, with a tendency to switch to an interactive approach as a kind of communicative approach to the theory of learning. Distance learning technologies and the updated content of educational programs provide training and teaching, allow you to interact, and actively participate in a particular webinar in a synchronous format, make chat entries, ask questions to the teacher, and study the recorded, and prepared content of lessons outside the schedule in an asynchronous format.

Literature Review

Scholar Contribution

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In the socio-technological concept of foreign scientists L. Weisberg et al. (Weisberg et al., 2021), set out the main provisions of the development of Web services that influenced the integration of digital technologies into the educational process, the improvement of the "online-collaboration" system, unlimited, and instant access to information materials, which allowed the use of active, and interactive teaching methods in the conditions of distance learning. In the theory of E.S. Polat, (Polat, 2000, 2005) distance learning is considered a distance learning technology for the development of active, and interactive teaching methods, and interaction of participants in the educational process at a distance, which increases the effectiveness of learning through active communication. The process of distance teaching of English on the principles of activity, and interactivity involves the selection, and structuring of educational material for the analysis of organizational, methodological, and procedural components, effective interaction of participants in the educational process, through the use of digital technologies, and authentic texts. In this vein, M. Mahyoob, (Mahyoob, 2020) and A. Ariyanti (Ariyanti, 2021) state that “Technology integration has increased in the whole education community as face-to-face education, which has been implemented for years, has evolved into distance education after the pandemic, and online education has become compulsory in many educational institutions.” O.F. Ipek et al., assume “With the advent of technology, expansion of distance education, and increasing mobile applications for language learning, EFL teaching has transformed in terms of teaching sources” (Ipek et al., 2021, 261).

Accordingly, several research works have been carried out to explore the field of mobile-aided language learning, for instance, the works of Viberg et al. (Viberg et al., 2020), Hoi et al., (Hoi et al., 2021), D. Kim et al., (Kim et al., 2019), M.Al-Shehab, (Al-Shehab, 2020), N.M. Gharehblagh et al (Gharehblagh et al., 2020), W. Lichao et al., (Lichao et al., 2024), M. Nilsberth et al. (Nilsberth et al., 2022).

In the theoretical concepts of Kazakhstani scientists, the concept of interactivity can be distinguished as a unifying, coordinating, and complementary means of developing a communicative approach through speech interaction, since interactivity enhances the communicative process of active and passive interaction of subjects in the educational process S.M. Ablyaykhan et al., (Ablyaykhan et al., 2009), Y. Tazhigulova, (Tazhigulova et al., 2020).

Multiple characteristics of traditional teaching methods are classified on the sources of transmission, and the nature of information perception in the works of I. Abd Al-Alessa et al., (Abbad Alessa et al., 2023), S. Mehta (Mehta, 2019), T. Nilson (Nilson, 2016), S. Perse (Perse, 2017), B. Fairbanks (Fairbanks., 2021). Scientists refer to active methods as methods that activate students’ educational and cognitive activity, encouraging them to mental activity while mastering the material. The nature of mutual activity interaction based on explanatory-illustrative, reproductive, problematic presentation, partial searching, and research methods are reflected in the works of I. Ya. Lerner (1996), D. A. Ivanov (Ivanov, 2008), S. Bhandari, (Bhandari, 2022), V.V. Kraevesky (Kraevesky, 2001), N. Qizi, (Qizi, 2021).

In the theory of I. P. Podlasy (2004), the position highlighted those new ideas in didactic systems should be transformed into progressive systems of teaching, and learning with the preservation of the "root (maternal) signs" of the learning process.

The approach to distance learning is considered a two-way process, including in its structure the activity of a teacher – this is distance teaching, and the activity of students - this is distance learning. One of the important principles of distance teaching is "interactivity", in which the leading tools are passive, active, and interactive methods, assuming the ability of the teacher, and students to interact in a dialogue mode. Therefore, most researchers believe that the interactive approach includes activation, and is identified with the communicative approach, as it is implemented in the process of distance teaching through "language acts".

Diverse theories made it possible to identify approaches to the development of research issues of teaching methods in distance learning, and to identify contradictions: between the importance of using active, and interactive methods of teaching English in distance learning, and the lack of development of their theoretical, and practical foundations, which systematize, and concretize the content components of the learning system, and allow using the capabilities of digital tools in the process of distance teaching between the use of digital tools in the process of distance teaching, and their interactivity, based on their integration with an approach that allows taking into account the taxonomy of learning goals, and learning experience
in the course of learning English. The necessary demand, and for the use of digital learning tools, and the improvement of teaching methods in the distance learning system at the school level led to the choice of the research topic: "The use of active, and interactive methods of teaching English in distance learning".

**Research Methodology**

**Research Procedure**

The analysis of sources of psychological, and pedagogical literature, scientific, and methodological literary sources in English, materials, and publications in modern scientific periodicals on the problem of research; documents regulating the management of activities in educational institutions, and innovative skills of teachers.

The effectiveness of the introduction of digital learning tools that enhance the quality of the use of active and interactive methods of teaching English is revealed.

Hence, an important aspect of language development is the ability to improve learner engagement and give fast feedback through utilizing digital tools including interactive simulations, language learning applications, and taxonomic approaches.

**Results**

_The essence of concepts, and classification of "active", and "interactive" teaching methods in distance learning_

The solution of one of the tasks of this study is aimed at defining the conceptual issues of the distance learning system, which will fix the stability of the use of active and interactive teaching methods, highlight their characteristics, and consider their essential properties. Training refers to a purposefully organized, planned, and systematic process during which teaching takes place to transfer knowledge, skills, and learning to master them to prepare for life, and professional activity.

The two-way nature of learning means the inclusion of two interrelated processes in its process - teaching, and learning. Therefore, the basis of training is a joint activity for purposeful interaction, and the manifestation of activity by the teacher, and the student as subjects of the educational process. The effectiveness of the learning outcome or the level of learning depends on the degree of activity of the subjects of the educational process, and the interactivity of interaction.

Teaching is the process of acquiring, consolidating, or changing the available ways of an individual's activity. The results of the exercise include elements of individual experience - knowledge, skills, skills, and competencies. The structure of educational and cognitive activity as a kind of intellectual mental work includes such components as motivation; educational tasks situations, and forms; training activities; control with the transition to self-control; and evaluation component, which turns into the ability to make self-assessment.

The understanding of the term "distance" comes from the Latin "distatia" as a distance or a gap in space, and time, therefore distance learning includes a combination of concepts such as learning, and distance, that is, distance learning. The basis for the development of distance learning is the following areas: asynchronous learning is a form of training; synchronous learning is a form of distance learning, in which the interaction between the tutor, and the group is organized.

Synchronous and asynchronous learning have a fundamental difference, but they complement each other through teaching through the development of organizational, methodological, and procedural components that need to be "provided" to students. Based on an integrated approach to distance learning, the organization of educational and cognitive activities is built through the use of digital means, where web materials and software applications are of dominant importance. This is a high-quality educational, and methodological complex of the discipline being studied, specially designed for the organization, and conduct of distance learning.

The two-way relationship between the teacher, and the students through correspondence, face-to-face consultations, and the organization of short-term lessons at the place of residence had a high cost at the initial stage of preparation, however, after the development of the organizational and methodological
complex of the subject, and the procedural component of distance learning technology no longer required a large investment.

The analysis of teaching methods in the conditions of distance learning makes it possible to determine the basic parameters of active and interactive methods that significantly affect the choice of information, communication tools, and distance learning programs. The teacher's interaction with students in distance learning is carried out through the use of various digital means, for example, audio or video conferences, a forum, a dialogue program, and e-mail, web assignments, software applications.

An important factor in the conditions of distance learning is the passive, active, and interactive methods used in the learning process. The main criterion of teaching methods is the ways of interaction between the teacher, and students, which can be classified as follows: Teaching methods through the interaction of the student with educational resources in which the teacher and other trainees take minimal part, an active self-learning process takes place. The development of this group of teaching methods is based on a multimedia approach through the diverse use of learning tools. Educational resources are being developed: printed, audio, video materials, and educational material that is delivered via computer networks. These are interactive databases, electronic journals, computer training programs, or electronic textbooks.

The interactive database systematizes information material for accessibility, scientific, consistency, and flexibility of using the database. The most important sources of information include the use of electronic textbooks or manuals, which are periodical for their distribution through a computer network. Teaching methods in the conditions of distance learning include training software products. These are software programs through the use of a computer network at a remote distance. A communication session via a remote computer is carried out using modem communication, and Internet services.

Passive teaching methods include a form of interaction between students, and a teacher, during which the teacher transmits knowledge to the main actor, and manages the course of activity, and the student performs the role of a passive listener or observer. Interaction in passive teaching methods occurs through surveys, independent, and verification work, testing, and other methods, and techniques.

Teaching methods include the interaction of a teacher with students, during which "one-to-one" training takes place. This group of methods is implemented in the conditions of distance learning through the use of telephone communication technology, voice mail, and e-mail. Audio or video mentoring refers to a system of "tutors" mediated by a computer network, which refers to an important component of the method of teaching at school in a distance learning environment.

In passive teaching methods, the student is offered the assimilation of ready-made knowledge, in which there are practically no tasks of an analytical and synthetic nature, or evaluation, the basis of which is educational, cognitive activity, and interaction with other trainees.

The group of teaching methods in the conditions of distance learning includes teaching methods, the basis of which is educational material, in which students enter into active interaction for communication with the teacher. This interaction process refers to one-to-many learning. This group of methods is characteristic of the traditional learning system and belongs to a new direction in the use of modern information, and communication tools. The methods of teaching the subject are based on the use of "e-lectures", or electronic lectures for high school students by the teacher. This is educational material that is distributed through a computer network.

Active teaching methods are based on such forms of interaction between the teacher, and students, which are used in the process of educational, and cognitive activity, where students are active participants, and act as subjects of learning.

The next group of methods of teaching the subject is characterized by interactive interaction between the teacher, and the students, between the students themselves as participants in the educational process, which makes it possible to organize "many to many" training. The importance of this group of methods and the intensity of their use is increasing, as educational telecommunication technologies are developing. Interactive interaction takes place between the students themselves, and not only between the teacher, and the students, which refers to an important source of knowledge acquisition. The development of this group of methods is associated with the use of educational collective discussions and conferences.
When using interactive methods, the teacher models life situations using role-playing games organizes interaction to jointly solve problematic issues, and excludes the dominant role of one or another participant during the educational process or any priority idea. Students as subjects of interaction actively participate in solving problems based on their route. The interactive method is considered the most modern form of the active method; it means interaction, being in the mode of conversation, and dialogue with the participants of the process in the conditions of distance learning.

The interactive method of interaction differs from the active method in that this group of methods involves broader interaction with many students, not only with the teacher, and is focused on the dominant role of the activity of the trainees. The teacher takes the role of an organizer and directs the activities of students to achieve the goals, and objectives of learning in the mode of conversation, and dialogue. The role of the teacher in interactive teaching is aimed at organizing the educational and cognitive activities of students to achieve goals.

Thus, the analysis shows that in the conditions of distance learning, it is possible not only to improve the quality of teaching the subject, but also through the use of active, and interactive methods of interaction in line with the latest digital learning tools to gain access to the necessary information material at a faster pace than traditional teaching methods, and interact with students in an active or interactive mode in regardless of their place of residence, and location.

The teacher develops a lesson plan and selects, and includes interactive exercises, and web tasks in the course of the lesson, during which the student studies, analyzes, synthesizes, and evaluates the studied material. Consequently, the structure of interactive interaction consists of a system of interactive exercises, and web tasks based on digital tools that are performed, discussed, and commented on by students, and the teacher. An important difference between interactive exercises and tasks from the traditional system of tasks is that when they are performed, the student does not fix so many learned materials, but such a system of selected web tasks allows, and pushes for finding new rules, theories, and facts.

Active and interactive teaching methods are based on such an important principle as taking into account the levels of intellectual behavior of students as subjects of the educational process. This principle during the implementation of the learning process can be represented by the "pyramid of knowledge" of the American educator, and psychologist Benjamin Bloom. In his taxonomy of educational goals having a hierarchical order, overlapping areas of learning are highlighted, which allows for taking into account the level of intellectual behavior of schoolchildren in the process of distance teaching.

The ability of students to use a variety of tools during the assimilation of the material depends on the level of formation of psychomotor skills. The purpose of using such tools in the course of teacher-student interaction is to develop the primary level of intellectual skills with web tools and improve behavioral actions. It is the development of these skills that allows the use of teaching methods, and the correct setting of learning goals, and objectives for cognition of reality (Figure 1).
In the psychomotor field, goals are associated with the formation of a particular type of motor or motor apparatus, a manipulative way of acting with tools, and neuromuscular coordination. The teacher organizes the formation of writing, and speech skills through the active use of various tools.

The affective or emotional-value area in the taxonomy of goals includes targets that are aimed at forming emotional-personal ways of relating to a person, to a group, to a collective, to phenomena occurring – this is perception, interest, and active manifestation of emotional feelings. Planning the goals of distance teaching in the cognitive field are aimed at understanding, and developing analytical-synthetic, and evaluative thinking, memorizing, and reproducing the studied information, solving cognitive problems, during which there is a rethinking of existing knowledge, building new combinations, and options based on previously studied rules, regulations, methods, procedural actions.

**Taxonomic approaches in designing the goals of distance teaching**

The study and consideration of cognitive, affective, and psychomotor spheres affect the description of the goals, tasks, and competencies of training, which are developed by the teacher, and reflected in the training program, in the selection of the content of educational material, the selection of textbooks, teaching aids, and the construction of various types of lesson activities.

Designing learning objectives during the planning of the training program, and taking into account the initial levels of knowledge of students, age characteristics, individual, and psychophysical characteristics, and factors that need to be emphasized by the teacher to give the process of distance teaching a taxonomic orientation.

The importance of the taxonomic approach lies in the fact that the theory of the taxonomy of goals allows you to describe the English language training program based on principles, and regular relationships for the classification of training modules, and topics, and also allows you to systematize complexly organized areas of material development that have a hierarchical structure. This important provision is reflected in the effective construction of interaction between participants of the educational process in modern conditions of distance learning.

The tendency of the transition of teaching English in the conditions of distance learning to active and interactive methods is also explained by the fact that these methods belong to the varieties of the communicative approach. The idea of this theoretical position is that the use of active and interactive methods of teaching English occurs through participation in "language acts". The main emphasis in active and interactive interaction is on the communication process, taking into account the various functions of the language. This refers to modern ligvodidactics, which implies the reflection in the program material of the English language of the laws of language teaching, specific features of the content, methods, and means of language teaching. It depends on the formulation of the didactic goal, tasks, and characteristic features of the studied material, the principles of mono- or bilingualism, the stages of building activities, taking into account the intellectual, and speech skills of students, the mechanisms of interaction in distance learning.

Interactivity in the taxonomy of goals allows for the unification, coordination, and complementarity of goals, and learning objectives, and strengthens the quality of results through information, and communication tools.

Activity and interactivity enhance the information and communication result of students' interaction during English language learning. Based on this definition, it can be concluded that active and interactive methods of teaching English are the means to achieve the planned goals of teaching English. At the same time, the difference from the principle of communication is that activity, and interactivity involves cooperation between students, and the teacher, as well as students among themselves in the learning process, during which the main task of the teacher is to develop ways of communication, and interaction through planning learning goals.

Based on the above, it can be concluded that in a broad sense, the concept of "interactivity" is one of the basic principles of distance learning. At the same time, the leading signs, and properties of active, and interactive interaction are manifested in the planning of learning goals and assume the ability to interact or be in a dialogue, or communication mode. The effectiveness of the distance learning process depends on such components as descriptions of goals, and objectives in educational, and methodological complexes;
interaction of the student, and the teacher, regardless of the distance; information, and communication tools; methods of material delivery; and feedback.

The success, and quality of active, and interactive methods of teaching English in distance learning mainly depend on the taxonomic approach, since the scientific systematization of learning goals affects the effective organization, and pedagogical quality of the components used. It is very important to implement internal feedback for monitoring and designing subsequent learning goals.

The taxonomic approach of designing the goals of the distance learning process for the organization of interaction in the course of teaching English based on B. Bloom's taxonomy makes it possible to realize activity, and interactivity in the conditions of distance learning since it is important to take into account the previous knowledge, and experience of students when organizing the interaction process.

The principle of dynamism is an indispensable postulate of the use of active, and interactive methods of teaching the subject to achieve each subsequent level of cognition in the presence of previous knowledge, skills, competencies, as a transition from the elementary application of concepts, representations to more complex forms of analysis, synthesis, and evaluation to the creative search for new options or ways of action. Such visualization of natural connections in the process of cognition, and their application are important for the process of distance teaching.

At the level of knowledge, it is necessary to memorize and reproduce the studied material, which contains specific facts and reveals holistic theories. Goals at this level include such specific knowledge as terminological, and conceptual apparatus; knowledge of declarative, and algorithmic plans; and abstract knowledge based on principles, axioms, theorems, generalizations, theories, and structures.

The taxonomic approach reflects the stages of planning learning goals, which correlate with the dynamic nature of the distance learning process in the process of studying problematic issues, and the level of assimilation of knowledge, skills, and competencies.

At the level of knowledge, it is necessary to memorize and reproduce terminological categories, conceptual knowledge, concrete factual material, methods, algorithms, laws, and patterns of language learning. The first level is aimed at the perception of information material, and the formation of initial ideas about the objects being studied, while a prerequisite is the challenge of cognitive motivation, and interest in the problematic issues rose.

In the second stage, the teacher develops students' mental actions related to the level of understanding, awareness, and formation of key positions on the topic. An important point in the implementation of this level is the memorization of the previous material, the basic principles, and patterns that are implemented in the training material to understand, and the actions that represent a cross-cutting element of the experience.

The clarity of the goal and the definition of ways of interactive interaction allows you to select the training material, and highlight the basic rule, important position, symbol, and designation for their memorization in the learning process since actions can be formed only when the trainees easily reproduce the information. Psychologists believe that memorization refers to a mental operation, and includes a stage of primary impression, a stage of stream memorization, and a stage of consolidation.

At the initial impression, digital tools play an important role, in enhancing the interactive process of distance teaching, since this stage refers to the process of cognition through constant interaction to check the correctness of the formulation of actions, and their indicative basis, because the retraining of rules refers to an extremely complex process. At the same time, the teacher needs to take into account the features of the student's memory, aimed at selectivity, efficiency, and the ratio of productive memory with mechanical and logical memorization. When formulating learning goals, the teacher should give clear definitions and designations of rules in the material for memorization by students.

The majority of high school students are characterized by the ability to use techniques, and methods to transform or translate material from one form of expression to another, for example, translating verbal information into numerical or figurative expressions, interpreting the information received, and making assumptions about further solutions. Basically, at the level of understanding facts, rules, principles, verbal
information sources, schematic, graphic diagrams, and materials can be interpreted, transformed into other formal meanings, and describe a possible consequence based on existing knowledge.

In the third stage, the process of interaction between the teacher, and the students are based on the organization of productive actions. The indicative basis of interaction is aimed at idealizing the mastered actions, and students can "play" them in their minds. The solution to non-understanding tasks should correspond to specific situations, and correlate with the objects of study. The category "application" means the manifestation of the ability to use the studied material in distance learning conditions that create new situations for active or interactive interaction. The course of application of concepts, and principles in the new material, rules, and laws in a specific practical situation is checked and monitored. Interactive and active tools allow you to demonstrate the correctness of the application of the method or procedural actions.

The category "analysis" in Bloom's taxonomy allows you to designate skills for dividing the material into parts, designating its structural foundations, and highlighting meaningful ideas in parts. The selection of a part of the whole text and the definition of the relationship between them allows you to understand the principles of building the whole. Students learn to identify a hidden or implicit assumption, to see erroneous and missed judgments in a logical sequence, and to distinguish between factual material, and its consequences.

The category "synthesis" in taxonomy is aimed at designing the process of distance teaching, and the selection of methods, and means for describing skills, and mastering methods of action that allow combining parts to obtain a whole that has a novelty of ideas. The options for synthesizing the material include: combining ideas by finding a solution to a problem; combining procedures by developing a plan for the sequential construction of operations in solving problems; and combining structures through the construction of functions, and classifications. In this stage, the teacher thinks over with the students a plan for writing an essay, or discusses a plan for organizing project work, based on the application of knowledge from different fields (culture, sports, education abroad, children of the "third world"), the teacher uses a variety of and web tasks, and digital means of interaction.

The category "assessment" in Bloom's taxonomy allows you to describe skills for assessing the significance of studying a topic and including information material in a lesson. To form students' judgments, it is necessary to identify clear criteria: internal criteria for designating structural, and logical indicators; external criteria for meeting their intended goals.

The criteria should be discussed with the students, dividing them into subgroups to develop and define them, then, taking into account the opinions of the majority of students, making appropriate changes to the criteria.

Students learn to evaluate the logical construction of educational material, to which the teacher selects fragments of statements from verified data, excerpts from works of art, and parts from research data. The conformity of the conclusion made with the available data in the material, the value, and the value of the studied product of activity are evaluated, based on the identified internal and external criteria.

The taxonomic approach of designing interaction goals is aimed at constructing a lesson in the process of distance teaching, in which the lesson is characterized by active, and interactive methods, and means, and is consistent with the requirements of the understanding of instruction for students' competencies.

The achievability of goals in the interaction of the teacher with students in the conditions of distance learning is understood in such a way that the described goals in the training program, their formulation, and coordination should be realized, and achieved, while the results of learning are characterized by a sufficient healthy ambition. The measurability of designing goals is determined by measurable criteria and indicators to find out their achievement. The comparability of goals should determine the way to achieve the goal by the goals of the entire educational process.

The concreteness of goal design is manifested in a clear understanding of goals, and their implementation through specific operations and actions. The limited time and other resources of the teacher must be taken into account for planning, and marking the boundaries of the study of thematic material, and the use of teaching methods.
The taxonomic approach sufficiently technologizes the process of interaction between a teacher, and students, allows us to determine the typology of educational web tasks, highlights the main procedural actions, and lays the basic prerequisites for the use of active, and interactive teaching methods in distance learning.

Discussion

Digital Learning Tools in the Process of Distance Teaching English

The taxonomic approach to determining the levels of educational goals should correspond to specific actions, and reflect their achievability, measurability, comparability, concreteness, and limitations at a certain stage of educational and cognitive activity. The key component element of the goal-setting process, and the design of the corresponding system of web tasks, and exercises involve the interaction of the teacher with students in the ways of "one to one", "one to many", and "many to many".

The transition from interaction to action directly depends on digital tools as the basis for the use of active, and interactive teaching methods in the course of the activity itself, which are reflected in goals, tasks, systematized web tasks, and software applications. The conditions of distance learning actualize the use of digital learning tools for teaching a subject by a teacher and ensuring personal development in a real situation of learning at a distance.

In the 1960s, Professor E. Daly of Ohio State University put forward the theory of distance teaching (1969) and highlighted the idea that direct and indirect teaching methods, the accumulated experience of concrete facts, and abstract propositions in the theory of learning can be generalized. Systematize, and present in a pyramidal form, designated by him as a "cone of experience" or "cone of experience".

The categories of "learning experience" are correlated with digital learning tools for organizing the process of distance teaching in an interactive mode as an important condition for the distance learning format. These are the methods: direct interaction; simulations – learning by action; dramatization; demonstrations; problem-search lessons, brainstorming lessons; smart cards; audio, and video recordings; and methods of visual, and verbal symbols.

The initial goal of digital learning tools is aimed at illustrating the interconnectedness of various types of audiovisual tools with active, and interactive teaching methods, and to determine their role, and place in the learning process. The audiovisual means in the Scheme are arranged according to the degree of increase in abstract understanding, and knowledge, and as the student moves from one level to another directly empirical experience.

The selected "categories of the learning experience" correlate with the methods of presenting new knowledge during training; therefore, the following levels were defined in the "pyramid": auditory reading, and perception as a means of studying information material at the verbal level; demonstration of fragments of audio, and video recordings as a means of explaining educational material through visual channels; discussions of presentations, and oral presentations as an active expression of judgments of the cognition process; preparation of theatrical presentations of fragments or excerpts from works, reproduction or simulation of a real situation, and development of real products (mini-essays, essays) as a means for the process of distance teaching, and organization of interaction in a group, couple. Verbal and visual learning tools were attributed by researchers to passive methods, and the participation, and real actions of students were identified as active methods.

Overview of E. Dale's theory

One of the ideas of E. Dale's (Dale, 1969) theory confirms his idea that listening and reading educational material belong to passive ways of mastering the material, since the process of imprinting, and subsequent preservation of perceived information occurs in a short period, but depends on the stable properties of the human nervous system, interest in the subject, the level of knowledge, and experience. The different duration of memorization of the material, i.e. short-term, efficiency, and duration depends on the degree of activity of the distance teaching process. The use of passive, active, and interactive methods in this case affects intentional or arbitrary memorization, unintentional or involuntary.
The next idea of the theory of E. Dale is that a variety of means of presenting educational material should correspond to individual psychological characteristics of perception and learning styles. This idea should be taken into account when organizing the interaction process during and the organization of educational activities. In the pyramid of E. Dale, less time, and space were allocated to passive methods of perception of information material, they are located in the pyramid closer to the top of the pyramid of acquiring "educational experience", where less time is allocated for the volume of transfer of ready-made knowledge on the topic, and active methods are located at the base, which should correspond to reality.

Modern teachers correlate this idea of E. Dale with the statement of the Chinese philosopher Confucius: "What is heard is forgotten, what is seen is remembered, what is done is understood." Important in this statement is the fact that in the course of organizing joint activities, it is necessary to use active and interactive teaching methods to achieve learning goals.

**Major Categories of Methods in Distance Teaching**

Active methods are focused on the level of knowledge acquisition, and understanding, interactive methods can use all the criteria, and indicators of learning, and will significantly increase the quality of learning material. All types of methods are important for teaching, but they must be correlated with the level of the intellectual development of the student, and with the learning objectives (Scheme 1).

![Scheme 1](image.png)

**Scheme 1.** The relationship of "learning experience" with the methods of distance teaching of the subject

The trend outlined in the pyramid Scheme allows the teacher to focus on the role of teaching methods, and their use, which allows discussing educational material in a group, pair, and practice practicing skills during the lesson, training, and other types of lessons. The use of active and interactive methods can involve the student's consciousness, feelings, and will. The interconnection, and complementarity of the "learning experience" with active, and interactive methods of teaching English involves the implementation of digital learning tools, which include modern computer multimedia programs.

As part of the use of the Padlet digital multimedia platform, the teacher has the opportunity to create creative tasks that are characterized by ease, accessibility, and joint execution of web tasks, and exercises. On this platform, students are provided with a blank leaflet, on which they are invited to place the content of the completed task in a group or a pair: videos, diagrams or tables; record dialogue or discussion of problematic issues in a group; write a text message; upload a file in which students can describe in detail the analysis of the exercise performed, and the algorithm of actions.

This digital software application "Padlet" has distinctive features, and the flexibility of its use allows you to create a diagram, write down questions for discussions, and develop the main parts for a portfolio, and project development plans. This digital platform allows the teacher, and students to develop booklets as individual products of students' project activities, to transfer ideas, and judgments to each other to change, and improve their quality following the knowledge, and understanding of the educational topic studied.

The new features of this platform allow you to invite students from other parallel classes to view, analyze, and evaluate works; the teacher constantly monitors the work of his students, and their actions when organizing work with tablets. The teacher has the opportunity to use this platform to develop a handout of
didactic material, which is made out in the form of a brochure, and share it with the students of his class to complete tasks from the prepared brochures. Students open the tablet from the "SchoolWork" application, and perform web tasks, while the teacher has the opportunity to observe the actions of his students and record the time to complete the task, the process, and the completion of the work. The software application "Padlet" allows the teacher to conduct effective lessons, promptly post diverse educational material of any format, organize a project, and problem-solve forms of lessons.

The next digital technology is "Mindmeister", which refers to a web-based tool that allows you to create memory cards, visually disseminate ideas, and maintain cooperation with students in real time. Instant transmission of information allows you to see the entered element in the Scheme or mental map. The teacher and students have the opportunity to comment on each topic.

The Mindmeister platform can be used to conduct Brainstorming lessons, develop an intellectual map, write mini-texts on the topic, conduct project lessons, and presentation lessons, to organize work in groups or pairs to solve creative tasks.

The ability to visualize thoughts is an effective method of interactive interaction between the teacher, and students when working with lexical, and grammatical material of the English language, the ability to fix conscious thoughts, and to understand the information material conveyed by the teacher is an important part of the implementation of learning goals, and objectives, and the applied intelligent Schemes or maps help to visualize hierarchically related structures of the material, and to view or highlight the complementarity of individual ideas in a graphically constructed map.

The "MindMeister" application allows the developed mental graph or diagram to instantly turn into a fascinating slide, to broadcast to parallel classes, and other teachers in real-time, regardless of the conditions of use of the software, i.e. in the classroom, or presentation room. In the "MindMeister" application, you can save students' mobile creations, and easily synchronize them in an online account.

Teachers use "MindMeister" to develop presentations for lessons, which allows them to present a new topic in a more accessible, and consistent form for their understanding, and memorization. If we compare listening, and reading the educational text on slides with the development of intelligent circuits or maps, then the process of distance teaching will be more meaningful and memorable for students through the use of diagrams, and maps with detailed commented management. The complexity and volume of the educational material on the topic of the lesson can be reflected fully and holistically through the application of the "Mindmeister" program, and implement the interaction of the teacher with the students in a passive way.

It should also be noted that the work in this digital application is aimed at improving memory, linking new elements of information material with existing knowledge, and experience, developing analytical, and synthetic abilities, and the ability to evaluate one's activities, and cooperation in a group, in a couple.

Digital tools include the Dvolver program, which makes it possible to direct the development of both grammatical and lexical skills of students through a variety of animated dialogues. The software application "Dvolver" in a simplified form allows you to create animated actions for a video, the fast, and simplified tools of this program are aimed at multiple-choice actions. We will describe the stages of work for the development of an animated film in this program: selection of background, plot, heroes, or characters from the suggested options; selection of the species for their interaction; input of speech in English for each hero or character in the line that corresponds to the hero; adding background music in English; design for the film.

The animation development stages are completed by the fact that the student sends the created animation by e-mail to other students and the teacher. When organizing the activities of students on this platform, the teacher necessarily recommends using lexical, and grammatical material on the English language, since in the system of language tools, the development of skills belongs to the most important component element of communicative development, which determines its most important importance in the organization of educational and cognitive activities. It is important to take into account the level of knowledge, understanding, application, analysis, synthesis, and evaluation when introducing digital learning tools into the process of distance teaching English.
Conclusion

Thus, distance learning is a learning process in which the teacher and students actively, and interactively interact at a distance based on digital means, including an educational, and methodological complex with a system of web assignments or electronic textbooks, and manuals, software applications that allow to effectively organize the educational, and cognitive process, and improve cognitively emotional-value, and psychomotor areas of cognition. The main factors determining the conditions of distance learning include the separation of the teacher, and students by distance, related to the measure of independent development of most of the educational material; taking into account the location, of educational, and informational material following the order, and the law of their systematization, and classification, as well as the ratio of web tasks, and exercises in the educational, and methodological complex; the use of digital learning tools to strengthen the methods of interaction between the teacher, and students, and the full-scale development of the course content; ensuring passivity, activity, and interactivity between the teacher, and students; the dominance of self-control over control.

This article reveals the theoretical prerequisites for the use of active, and interactive teaching methods, the ideas of research scientists who have contributed to the theory of distance learning, and determines that distance learning refers to the purposeful process of active, and interactive interaction of a teacher, and students not only with each other but also with learning tools are reflected. This is an invariant or indifferent process concerning their location in space, and implementation in time in a didactic system.

The implementation of the second task of the study is connected with the system-forming element of distance learning, which includes the concept of a "didactic system". The process of distance teaching is singled out as its subsystem, its implementation is based on the taxonomy of learning goals, and learning experience, the analysis of the educational, and methodological complex of the English language, which allows for classifying teaching methods, and reflecting their relationship with the psychomotor area for the formation of writing skills, speech, affective or emotional-value area for the formation of an emotional-personal attitude to a person, to the group, the collective, and the cognitive domain for the development of analytical-synthetic, and evaluative thinking. The information, and educational subsystem include digital learning tools, their relationship with other components of the didactic system is determined by the selection, and content of web tasks, and tools. Since the conceptual apparatus of distance learning includes the concept of "pedagogical technologies of distance learning", their implementation is carried out by specific means of Internet technologies.

It should be noted that distance learning technologies are part of the distance learning system, an important component of this system, but not the system itself. It is aimed at optimizing the educational and cognitive process and makes it dynamic, holistic, and flexible for the use of passive, active, and interactive teaching methods.

The key principle of distance learning is interactivity, which manifests itself in the constant systematic active interaction of the teacher, and students, as well as students among themselves in the educational and cognitive process. Interactivity in the conditions of distance learning is implemented at two levels: at the level of interaction between the teacher, and students, and students among themselves; at the level of interaction with the learning tools used, mainly digital learning tools, and the performance of web tasks based on them.

Digital tools make it possible to implement the components of a distance learning system, and have a specific impact on each of its components, determining the selection of substantive and procedural components, structuring educational and cognitive activity, and organizing the interaction process during training. Digital learning tools, and methods of active, and interactive teaching of English have made it possible to characterize the didactic process based on the mechanism of action of the taxonomy of learning goals, learning experience, and learning principles. Which are reflected in the substantive aspects of the educational and methodological complex of the subject?

Teaching methods in the context of this study show feedback from a distance teacher, and students through web tasks, and their implementation through software applications, with the help of which the content of the exercises performed occurs at a fast pace, taking into account their productivity, and ergonomics.
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References


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