Abstract: The development of the constructive approach in the field of philosophy, pedagogy and psychology, as well as essential progress in the development of communication and information theory, emergence of the Internet and artificial intelligence systems, makes the use of the constructive approach in mediation relevant to date. On the basis of theoretical analysis of constructive approach and practical mediation experience of the authors, the general scheme of construct formation in the process of cognition and communication is described and the constructive mediation scheme is proposed. Attempts to analyse and generalize different theories are made providing those theories have different definitions of the same concepts, and also considering the decreasing efficiency of formal institutions in management of the society. The difference of constructive mediation presented in the charts is: the use of dialogue and its varieties of discourse in the process of mediation, training of the conflict parties to dialogue and organization of the discourse by the mediator; assistance to participants in the conflict in achieving the unambiguity of the representation of signs, which are used in communication by mediation participants; the formation and updating of constructs that promote consensus achievement; testing (questioning) of mediation participants and processing of results. Dialogue (discourse), training of conflict parties by a mediator, is considered as the key feature of the constructive approach in mediation. Gained results and its further methodological study will allow to develop the theory of mediation in the unified way, train participants of the mediation to gain dialogue and discourse skills and to reach consensus, allowing them to avoid new conflicts. Additionally, it would help to train mediators and other professionals who encounter conflicts between people in their official duties.

Keywords: mediation, constructivism, communication, conflict, dialogue.

Introduction

The life and development of modern society is accompanied by contradictions between members of society, their groups, institutions and countries. Contradictions become the driving factor in this development, but contradictions lead to conflicts.

The elimination or mitigation of conflicts that counteract development is the subject matter of mediation, which became the essential part of the modern society. The relevance of the mediation is also confirmed by such observed changes in the society as the growing importance of informal communication, the decreasing effectiveness of formal institutions and the increasing influence of informal practices in society management.

In these conditions, it is mediation that can become one of the instruments regulating informal interactions. The concept and principles of mediation and dialogue were considered by the authors in the article Importance of Dialogue Nature in the Mediator’s Competence (Portere, Briede, 2019).

Different branches of science are currently developing within the constructive approach. Constructivism exists in various scientific directions in philosophy, pedagogy, psychology, semiotics, communication. Knowledge and methods created within these scientific directions can be used for the creation of effective mediation solutions.

Theoretical analysis of the achieved by constructivists results that can be used in mediation will be presented further in this article.

Determining the sequence of the process of constructive mediation and the concepts used, we have taken into account the following:

- nowadays, various information systems, communication and artificial intelligence theories are in sustainable development;
there are technical solutions and devices for processing at the high speed and communicating big amount of data available. That allowed to create high-performance information systems and the Internet;

branches of science as semiotics, information systems, artificial intelligence, communication have often obtained the results and created definitions of the concepts that differ from each other.

The purpose of this research: development of a constructive approach to mediation based on dialogue (discourse) and learning to create a dialogue.

Methodology

Generalizing the existing definitions, constructivism (from lat. Constructio — construction) can be understood as the scientific direction, which is based on the idea of the focused activity of the cognizing subject, which uses the information available to him, the cognitive organs, experience, communication procedures in constructing images, concepts (assessments) and conclusions.

According to the constructivists, the fundamental difference of the person is that his being is not contemplative, but actively, and proactively, constructively and creatively constantly reproducing himself.

Although the real development of this direction received only in the twentieth century. The great heterogeneity of theories united by the direction of constructivism should be noted. We can meet social constructionists, radical constructivists, constructivists who, in addition to philosophy, are involved in the development of various branches of knowledge - pedagogy, mathematics, computer science, sociology, semiotics. In pedagogy constructivism is an appropriate basis for successful development of all types of competence (Briede, Pēks, 2014).

What is a distinctive feature of the constructive approach and what should be taken from this for mediation:

- the role of the mediator as a guide and contributor to the process of resolving the conflict and reaching agreement between the parties to the conflict, using the achievements of pedagogy and psychology, where this role is comparable to the role of the teacher in the learning process, which is revealed by L. Vygotsky (Vigodskij, 1999, 176);
- the process of constructive training for conflict parties and mediators;
- the dialogue and its type - discourse, which is the means of reaching agreement between the parties to the conflict;
- the formation and updating of constructs that contributes to consensus achievement.

In the process of its development, various sciences came to the different definitions of the same concepts, used in constructive mediation.

Consider some of them. The concept of Construct is taken from G. Kelly (1991), who has it as a way of interpreting the world: “A person looks at the world through transparent patterns or templates that he himself creates. We will call these templates, applied empirically to the true state of things, as constructs”. It is especially important for this research that, confirming the idea of the bipolar world, the construct can take bipolar values. For various authors, it is close to the references of concept (lat. Conceptus “concept”), frame (English Frame - sequence, cadre, i.e. the structure containing some information introduced in psychology, and initially in ethology by Gregory Bateson) and Pattern (Eng. Pattern "sample; template; shape, model; scheme"). The construct is a component part of knowledge and experience. By knowledge thereafter is meant the information embedded in human, information obtained through the organs of sensory perception, acquired rules (algorithms) for processing this information. Experience is a combination of knowledge and skills acquired by the person in the process of interacting with the world external to him, as well as in the process of his own inner feeling.

The development of information processing tools, the Internet makes it necessary to build constructive mediation on the basis of the modern interpretation of the concepts of Communication and Information. Of fundamental importance was also the appearance of information and computer systems, artificial intelligence systems on the basis of the development of information. Systems, one of the prerequisites for the creation of which was the concept of duality of the processes of intelligence.
The possibility and necessity of developing artificial intelligence systems in mediation, which could today contribute to the solution of some of its tasks, should be noted. Online dispute resolution systems are already in place today on e-commerce sites, developing systems for searching and analysing legal information, digital mediation.

Information (lat. Informatio - clarification, exposition, awareness) is one of the central fundamental concepts of science and modern philosophy, which has been widely included in scientific use since the 50s of the twentieth century. This concept is increasingly considered as the third component of being - along with matter and energy.

There is no single definition of this concept. There were attempts to define “information” through the concept of “data”, which is currently equally vague. In classical philosophy, “information” was the technical concept related to the theory of knowledge and ontology” (Adriaans, 2016).

According to the analysis of L. Floridi (2003), three aspects related to the concept of information can be distinguished: “1) technical problems associated with the quantitative determination of information; 2) semantic problems regarding meaning and truth; 3) the impact and effectiveness of information on human behaviour”.

For purposes of this research, the authors have used such definition of Information, which means any signs, genes of inheritance, results (signals, thoughts) of the brain and consciousness activity, results (signals, thoughts) of the activity of the hypothetically pre-existing or higher mind, the order (algorithm) of processing of the incoming information.

A sign will be considered a component of information, providing the sign is material, sensually perceived (including any technical means) object, phenomenon, action, which act as the representative of another object, phenomenon or action. C.S. Peirce one of the founders of the science of the signs - semiotics, very simplistically characterizes the sign in a broad sense as “a three-part combination of a sign [in the narrow sense], of the thing signified and cognition produced in the mind” (Peirce, 1994).

Authors accept the classification of signs created by C.S. Peirce (1994) for semiotics: iconic signs representing the object designated by them; natural signs indicating natural phenomena; conventional or relative signs adopted by agreement.

The author disagrees with N. Luhmann (1995), who says that “perception remains primarily a mental event, lacking communication existence”. The perception, sensory knowledge is an integral part of communication, which is discussed further in this article.

Disagreeing with N. Luhmann when he says that “But perception remains primarily a mental event, lacking communication existence” (Luhmann, 1995). The perception, sensory knowledge is an integral part of communication, which is discussed further in this article.

Human communication is the exchange of information (Watzlawick, Beavin, Jackson, 1967). To understand the concept of communication, the is a need to characterize and supplement the communication axioms formulated by P. Watzlawick “it is impossible not to enter into communication; each communication contains the substantive aspect and aspect of relations; the nature of the relationship depends on the punctuation of the communication sequences (events) between the communicants; all communication exchanges are either symmetrical or complementary, depending on whether they are based on equality or differences (Watzlawick, Beavin, Jackson, 1967).

Communication as well can be either intentional or unintentional, effective and ineffective; is characterized by the location in time and space, the method of transmitting information, communication feedback; is irreversible.

In mediation, it is especially important to take into account the listed features of communication and eliminate the causes of conflicts related to communication.

**Results and Discussion**

Based on the above analysis and definition of concepts try to describe the general scheme of construct formation in the process of cognition and communication (see Figure 1), which will become the basis
of our constructive mediation scheme and, in the process of description, comes to the common understanding of the basic concepts of the cognition process, how constructs are born and corrected.

Figure 1. Scheme of constructs formation.

It is indisputable that at our birth, we already have inherent information transmitted from parents in the form of genes that materialize in DNA (DeoxyriboNucleic Acid) and RNA (RiboNucleic Acid) molecules known to science, which determine one or another development of the born human fetus, those sense organs that allow us to perceive the new information of the world around us, as well as the rules of behaviour of the new-born - the instincts that are necessary for his survival.

This we call Knowledge or information a priori (lat. A priori – literally "from previous") (1.1). Hereinafter, in parentheses the numbers of block charts are indicated.

It can also be assumed that some of the information we get from some kind of universal mind (god) and/or from some kind of consciousness that has the experience of the past life. At the current level of development of science, we cannot yet say in what form this information is transmitted and on which medium, but we will provide in our reasoning that it is. In the scheme it is call as unknowable information (1.2).

The concept of Actuality – the realized reality in its entirety – the reality of not only things, but also materialized ideas, goals, ideals, social institutions, generally accepted knowledge (1.3).

Signs (information) of the real world are received using the senses. At the same time are two functions of sensory cognition – perceive and sense this information (1.4).
In order to act adequately, it is fundamentally important to correctly present the received signs, which are based on a priori and acquired information. There is the comparison of the representations of the received signs and the information already stored, which allows to make decisions and take response actions.

One of the most important tasks in the processing of the obtained information (signs) is to achieve its correct presentation, and then its correct understanding (1.5).

Of particular note is the concept of internal dialogue (1.6), which appeared in psychology. This is the process of the person’s internal communication with himself, the process of human communication with the higher mind. This is also a way of forming the constructs. To correct the already existing constructs, it is necessary to master the techniques of stopping the internal dialogue. It is necessary to use the rich experience gained in psychology. For example, to recall the selection of the concept of “internal speech” in the theory of the development of children by L. Vygotsky (Vigodskij, 1999, 100).

Based on the information received from the above sources, its presentation, understanding and ability to process it, a person carries out Actions (1.7), including conscious and targeted actions. In this article the definition of Actions by D. Davidson is used. D. Davidson has been argued that the action, in some basic sense, is what the agent does, and it is “intentional according to some description” Actions can also be carried out to obtain signs that are recognized by the human senses, only using technical devices (sensors) (Davidson, 2002).

The forms of cognition existing in the theory of cognition (epistemology) include the above mentioned sensory cognition — sensation, perception, and representation; and also rational knowledge - concepts, judgments, conclusions - abstractions expressed in constructs; Separately, it is necessary to consider irrational cognition (imagination, creativity, meditation, insight, foreboding, clairvoyance), direct knowledge scooped by the subject from the depths of himself, which is especially important when finding ways to resolve the conflict.

On the basis of all the information received and stored in us, experience of actions, prevailing constructs and information coming from the outside world, its presentation and understanding as a result of rational and irrational cognition, discourse, a person forms concepts, make judgments and make conclusions (1.8). As a result, constructs are formed and corrected (including new ones), arrays of information are created that reflect the experience gained are created, which are used in further actions.

It should be noted that the misrepresentation of signs and the opposite (incompatible) constructs of people entering into communication can lead to misunderstandings and conflicts requiring mediation. It is the mediator in this case that should help the parties to the conflict in the same, understandable to the parties’ representation of signs and adjustment of constructs.

The paradox of life and knowledge is that in this process there are contradictions that lead to conflicts. Conflicts can be resolved through dialogue, which is the sign of the constructive approach to conflict resolution - performance mediation. As continuation of the cognition scheme, the authors have offered the constructive mediation scheme (see Figure 2) using two subjects (groups of subjects) as the sides of mediation.

The oval blocks of the diagram contain the functions of the mediator that are performed during the mediation process.

In the process of action, the subjects enter into communication, contradictions (2.6) that cause a hostile, antagonistic attitude towards each other appear, which in turn leads to conflicts (2.8). N. Luhmann’s (1995) words characterize understanding of this formula: “In accordance with the increasing complexity of the social system, more and more contradictions are becoming the subject of communication” and also L.A. Coser (1968) wrote: “We need to distinguish between conflict and hostile or antagonistic attitude. Social conflict is always social interaction, while attitude or feeling is only the predisposition to action”.
That is, the Conflict (lat. Conflictus — confronted) is the obvious hostile action of the parties to the conflict in order to resolve the contradictions that arise in the process of social interaction, that is, the action that goes beyond the rules and norms.
The main form of communication of the social subject is dialogue, dialogue for us becomes the main form of conflict resolution in mediation (2.12) (Portere, Briede, 2019).

The following types of dialogue used in the mediation process are distinguished:

- genuine, which can be expressed both in words and in silence,
- technical, caused only by the need for objective understanding,
- the monologue disguised as the dialogue,... (Buber, 2011).

The notion of internal dialogue used in this research can become both the genuine dialogue and monologue.

Gathering information about the conflict and its participants or resolving the simple conflict can be done using the technical dialogue, and the complex conflict can be resolved only with the help of discourse. J. Habermas (1990) distinguishes between “implicit and explicit options for ensuring the pretension of the speech act on significance”. Implicit options reveal in a technical dialogue or monologue, explicit options – in discourse as one of the types of genuine dialogue.

Conducting the discourse requires serious involvement of the mediator, depending on the characteristics and level of the parties to the conflict, the essence of the conflict, the mediator selects the mediation model and develops the discourse program.

It becomes important in the process of mediation to clarify and correctly evaluate information about the conflict, the ability of the parties to the conflict for dialogue, about the constructs that have developed among the participants in the conflict, which are largely their cause.

For this, testing is used (2.11) and questionnaire including using computers and the Internet. The formulation of questions in questionnaires and tests, the organization of the discourse program is carried out on the basis of the principles of Socratic Method (Clark, Egan, 2018) and the reliability of filling out questionnaires and tests is provided. The composition of the questionnaires (tests) includes questions that characterize the participants and the conflict, initial, directing and final questions that help the mediator conduct the discourse. The system of tests (questionnaires) is prepared depending on the mediation model used.

**Conclusions**

The development of the constructive approach in various sciences, the achievement of visible results of this development, especially in the field of pedagogy and psychology, the emergence of the tools necessary for mediation of this approach, the recent rapid development of computer science (communication), computers, the Internet, artificial intelligence, on the one hand, and appeared in society problems of social development, increasing the importance of the informal aspect in relation to the institutional make it necessary and possible to use constructive approach in mediation. The principal feature of the constructive approach to mediation is the following:

- dialogue and its form – discourse, which is the mean of reaching agreement between the parties to the conflict. Preparation to the discourse by the mediator;
- assistance to the parties to the conflict in eliminating the phonetic, semantic, logical stylistic barriers, that is, achieving unambiguous representation of signs;
- the structure of the mediation process, which involves the formation and updating of constructs that contribute to reaching agreement;
- testing (questioning) of mediation participants and processing of results;
- the constructive role of the mediator in the process of resolving the conflict and reaching agreement between the parties to the conflict, using the achievements of pedagogy and psychology;
- the process of constructive training for conflict participants and mediators;
- use of information computer systems, artificial intelligence systems.
Bibliography