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«مقاله پژوهشی»

تبیین مبانی فلسفی نسل سوم آموزش از دور

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چکیده

یکی از مسائل مهم و اساسی در حوزه تعلیم و تربیت موضوع معرفت است. معرفت‌شناسی لازمه فلسفه تعلیم و تربیت است. مسائل معرفتی در قلب فرایند تربیت قرار دارند (بهشتی، ۱۳۷۷). در حال حاضر در نظام تعلیم و تربیت توجه به منبع کسب معرفت و تشخیص ملاک حقیقت از امور غیر حقیقی (خطا) بیش از گذشته احساس می‌شود. در واقع معرفت‌شناسی به ایجاد بستری فلسفی می‌پردازد که در قالب آن مشخص می شود چه انواعی از دانش امکان حصول دارد و اینکه چگونه می‌توان مطمئن شد آنها برای ورود به زندگی انسان‌ها و آشنایی با الگوهای اجتماعی، مناسب و درست هستند (رضایی، پاک سرشت، ۱۳۸۷ و بلیکی، ترجمه حسنی و همکاران، ۱۳۹۲)؛ از این‌رو معرفت‌شناسی به عنوان پایه هرگونه دانایی همواره با مفهوم یادگیری گره خورده و مورد توجه متخصصان نظام آموزش و پرورش در جهان است. آموزش و یادگیری از دور یکی از مهمترین جایگزین‌های آموزش حضوری و سنتی و از عوامل کلیدی توسعه در آموزش عالی محسوب می‌شود، چراکه به فراگیران اجازه می‌دهد در کمترین زمان و با صرف کمترین هزینه مهارت شناختی و کارکردی خود را ارتقا بخشیده و برای حضور در محیط اجتماعی و شغلی آماده شوند. در نسل سوم آموزش از راه دور به واسطه حضور رویکرد سازنده‌گرایی آموزش با هدف خلق فرصت‌هایی برای فراگیران به منظور ایجاد و بازسازی دانش از طریق بحث و بررسی محتوا یا برنامه‌های درسی مسأله‌محور بسط و گسترش یافت (نجفی،۱۳۹۱). روش پژوهش حاضر توصیفی تحلیلی و ابزار جمع‌آوری اطلاعات، مطالعه اسناد بوده است. گردآوری اطلاعات اسنادی، شامل شناسایی، مطالعه، طبقه‌بندی اطلاعات، تجزیه و تحلیل آنها و جمع‌بندی اطلاعات درخصوص معرفت‌شناسی بوده و سپس دلالت‌های تربیتی آن در نسل سوم آموزش از راه دور مورد توجه قرار گرفت. نتایج نشان داد از آنجا که نسل‌های چهارم و پنجم از نظر زیربنای اندیشه مرهون فلسفه حاکم بر نسل سوم هستند شناخت و واکاوی هر چه دقیق‌تر دلالت‌های یادگیری سازنده‌گرایی و درک مولفه‌ها و ابعاد شناختی حاکم بر معرفت‌شناسی این نسل از اهمیت شایان توجهی برخوردار است.

واژه‌های کلیدی

معرفت‌شناسی، سازنده‌گرایی، نسل سوم، آموزش از راه دور.

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ORIGINAL ARTICLE

Explanation of the philosophical foundations of the third generation of distance education

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ABSTRACT

One of the important and fundamental issues in the field of education is the topic of knowledge. Epistemology is a prerequisite for the philosophy of education. Knowledge-related issues are at the heart of the educational process (Beheshti, 1998). Currently, in the education system, there is a greater emphasis on the source of knowledge acquisition and the ability to distinguish the criteria of truth from non-truths (errors) than ever before. Epistemology, in fact, deals with creating a philosophical framework that specifies what types of knowledge can be obtained and how one can ensure that they are suitable and correct for entering human life and becoming familiar with social patterns (Rezaei, Pakseresht, 2008 and Baliki, translated by Hasani and colleagues, 2013); Epistemology, as the foundation of any kind of knowledge, is always intertwined with the concept of learning and has been a focus of education system specialists worldwide. Distance education and learning is considered one of the most important alternatives to traditional in-person education and is a key factor in the development of higher education, as it allows learners to enhance their cognitive and functional skills in the shortest time and with the least cost, preparing them for participation in social and professional environments. In the third generation of distance education, due to the presence of the constructivist approach, the goal was to create opportunities for learners to generate and reconstruct knowledge through discussion and examination of content or problem-based curricula (Najafi, 2012). The research method used in this study is descriptive-analytical, and the data collection tool was document study. The collection of documentary information includes the identification, study, classification of information, analysis of it, and summarization of information regarding epistemology, and then the educational implications of it in the third generation of distance education were considered. The results showed that since the fourth and fifth generations are fundamentally influenced by the philosophy governing the third generation, understanding and examining the implications of constructivist learning and comprehending the cognitive components and dimensions governing the epistemology of this generation is of significant importance.

KEYWORDS

epistemology, constructivism, third generation, distance education.

Introduction and problem statement

Epistemology, as the foundation of any kind of knowledge, has always been intertwined with the concept of learning and has attracted the attention of education system specialists around the world. Epistemological issues lie at the heart of the educational process (Beheshti, 1998). Currently, in the education system, there is a greater emphasis on the source of knowledge acquisition and the ability to distinguish between truth and falsehood (error) than ever before. Since the concern of every human being is the discovery of truth, reaching truths requires proper and effective tools. As long as reaching reality is uncertain and questionable, this effort either does not take place or will always lead to doubt. Therefore, discussing epistemology, tools of cognition, and criteria for the validity and error of perception is essential. On the other hand, leaving doubts about human perceptions unanswered can be devastating in the realms of religion, ethics, and politics. Therefore, addressing such issues is essential at least to establish a solid and firm foundation. (Moqimi Moredraz, 2009). Knowledge and issues related to knowledge are directly connected to education and training. Education and training cannot be separated from learning, and learning is the acquisition of knowledge. Thus, discussions about human knowledge help in the continuous liberation from the clutches of ignorance, superstition, disease, famine, and other human problems. (Shari'atmadari, 1994). At the threshold of the twenty-first century, the expansion of growing technological trends and the widespread use of information and communication technology, along with the emergence of post-industrial societies, have led to some changes in epistemological approaches (Azpoulat and Akar, 2009); because it is no longer possible to think about the process of educating the younger generation solely with past perceptions and traditional approaches (face-to-face education), given the existence of the internet, computers, and virtual space; as in the information and communication age, the teaching-learning system and its methods have also transformed. In this regard, various theories have emphasized learning and have been met with a great deal of acceptance in the educational systems of today's world (Abedini Beltruk and Nili, 2014). Pragmatism found a special form in Dewey's thought. Their emphasis on experience and the construction of knowledge and understanding of the world based on the individual's current situation, the disregard for a final and predetermined goal for existence, the close relationship between the individual and society, and the close interaction between the two, as well as a world filled with conflicts from theory to practice and from the classroom to comprehensive life, and the human engagement with the surface of nature rather than the supernatural, are among the factors that constitute the education of the third generation. In the last three generations of distance education, the learner takes on a central and dynamic role in learning and teaching. Unlike the previous two generations, the one-way flow of education gives way to a multi-channel communication highway that allows for continuous interaction among the learner, the instructor, the content, the educational program, assessment, and other elements present in the learning process.

Epistemology

The word knowledge and its synonyms such as understanding, knowledge, and science are frequently used in speech and writing. With a little attention, we find an undeniable diversity in the way the words knowledge and its synonyms are applied. This fundamental

diversity means that various types cannot be reduced to a comprehensive matter. In English, knowledge is equivalent to knowledge and has various meanings, including having skills, being familiar, experiencing, being aware, having information, knowing, distinguishing, having knowledge, and recognizing. The Greek equivalent of knowledge is episteme, and based on this, epistemology is derived, which consists of two parts: episteme and logos, meaning theory, explanation, and rational meaning. In Arabic, if the borrowed term (epistemology) is not used, the terms " epistemology " or " Knowledge Research " are commonly employed. About the importance of epistemology, it is enough to say that until the issues related to it are resolved, there will be no possibility of ultimately solving other problems. Knowledge is equivalent to the word "ma'rifah" in Arabic, and it has various applications. Its most general concept is equal to absolute knowledge, awareness, and information, and sometimes it is specifically dedicated to particular perceptions, while at other times it is used as recognition. Occasionally, it is also used in the sense of knowledge that is in accordance with reality and certainty. The Sophists were the first to doubt the possibility of knowing reality, and following them, Socrates, Plato, and Aristotle engaged in establishing the foundations of knowledge, thus shaping the discussions of epistemology. (Misbah Yazdi, 1988) Epistemology, as a specific branch of philosophical sciences, does not have a very ancient history, and one can consider John Locke (1632-1704) and Leibniz (1646-1716) as the first individuals to systematically and independently discuss epistemological issues. (Hossein Zadeh, 2014) Several times in Europe, a dangerous wave of skepticism emerged and even engulfed great thinkers. History and philosophy mention schools that have absolutely denied knowledge, such as Sophism and Pyrrhonism, and Agnosticism. (Mesbah Yazdi, 1988) Epistemology can be defined as follows: the study of the types of human knowledge, its foundations, expressions, and criteria for evaluation. Its central core is the explanation of the ability of reason to reach reality. (Shirvani, 2006)

Distance education

Distance education is the organization of the teaching-learning process by an educational institution (not a teacher) and the selection of appropriate strategies for utilizing educational technologies, multimedia systems, and information and communication technologies to provide facilities for personal learning, self-assessment, and establishing communication and interaction between the instructor and the learner who are temporally and spatially separated from each other (Ibrahimzadeh, 2006). It is a system of distance education designed to provide training to learners who are separated by time and space and do not have access to traditional education. They engage in learning using various media such as printed materials, audio tapes, radio programs, and television in their workplaces and living environments (UNESCO, 2002). This type of education has five essential features: the temporal and spatial separation of the teacher and learner, the existence of a supporting organization, the presence of communication tools, the essential element of sevenfold interaction between the learner, teacher, and content, and the individualization of education. With this in mind, distance education must have strong theoretical foundations and theorization to transform into a new educational system, Of course, before addressing the theories in this field, it is necessary to first look at the evolution and growth of distance education, the

scientific foundations, and the reasons for the emergence of these generations.

Constructivism

In the constructivist approach to learning, the design of education involves providing resources and learning processes to facilitate students' learning, which is the creation of meaning in their minds. In other words, since the constructivist approach assumes that learners construct knowledge based on their own experiences and activities, the predetermined goals, content, teaching strategies, and evaluation methods give way to designing learning environments that are suitable for the cultural, social, economic, and political conditions of the learners. The interactive possibility that arises between the learner and the teacher, as well as among the learners themselves, establishes a space for negotiation, discussion, sharing of opinions, and mutual respect. It focuses on the learners' understanding of knowledge and the use of various media suitable for the learners' learning styles, while also considering the current issues faced by the learners in comprehensible and understandable packages. This is one of the outcomes of this philosophical perspective. The design of a constructivist learning environment includes six important elements: context, grouping, bridge (connection), questions, representation, and reflection. These elements are designed to stimulate and compel the teacher to plan and reflect on the learning process of students. The teacher creates a context for students to clarify, employs a process for grouping materials and students, establishes a bridge between what students already know and what they want to learn, anticipates questions to ask, and students engage in representations of their thinking while the teacher requests that students reflect on their learning. One of the themes related to constructivism is the discussion of critique. According to Ahanchiān (2003), it is clear that the subject of language and discourse is one of the topics discussed in postmodernism. Language is a creative force that does not simply represent the world and its realities. In this regard, according to Safar Haidari (2007), today linguistic theories have found wide application in science and technology, and scientific knowledge has, in a way, turned into discourse. Storing information and establishing databases have brought about significant changes both in the nature of society and in the functions of schools. Gootak (2001) also states that people in the modern era, living in societies with highly specialized technologies, find themselves trapped in problems related to establishing understanding and communication. The specialization has led to the emergence of specialized jobs and professional groups, each of which has created its own language, vocabulary, and specialized terms. While specialists are able to communicate with each other in their own specialties, they often struggle to communicate with those outside their area of expertise. Analytical philosophers see their role in facilitating communication beyond specialized boundaries. According to Hashem Rezaei and colleagues (2008), the critical paradigm offers a different interpretation of education and its relationship with society, believing that schools are more related to the demands of the elites of society than to the needs of the whole. According to Gotak (2001), critical theorists consider learning essential to emphasize and encourage the cultural diversity of students. Those who support multicultural education emphasize that learning should begin from the personal circumstances of students and their family and social experiences. Tolerance of opposing

views and the effort to examine and analyze perspectives are among the noble and humanitarian goals of the third generation of distance education, which arises from the influence of the critical school.

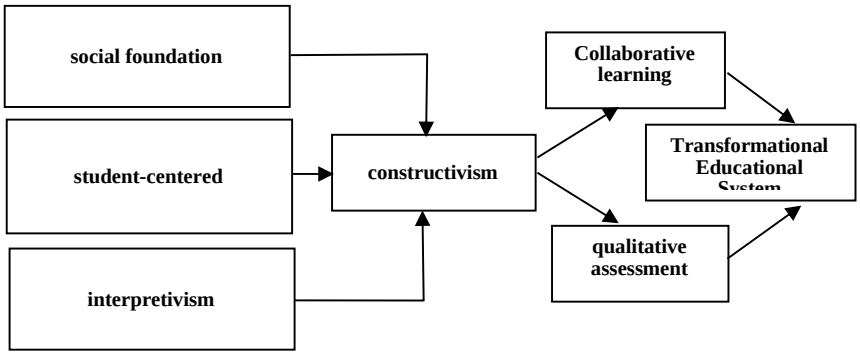

Figure 1: Components of Constructivism in Education

Jacobsen, in his article titled "Constructivism and the Architecture of Cognition," provided a list of principles that encompass the meaning of constructivism in order to clarify the concept. He believes that there is no single perspective on constructivism, and most experts agree on the fundamental principles supported by this theory. These principles are as follows:

1. Individuals construct their understanding of what they study instead of merely recording it.
2. The process of knowledge construction occurs in both natural situations and formal learning experiences.
3. The product of construction is understood as knowledge that has been meaningfully created by the individual.
4. The product of knowledge construction is altered by the individual's experiences and knowledge.
5. Interaction with others influences the process of construction and the creation of perception.

Figure 2: Constructivist Principles from Jakobson's Perspective

Distance Education Generations

Grayson has identified five generations of distance education as follows:

First Generation: The first generation of distance education began with correspondence education (Peters, 2000); therefore, in this generation, the postal system was used to transfer educational content. Ebrahimi Zadeh (2007) refers to the first generation, known as correspondence education, as a single-media

education. Because the technology used in this period was only the printing of standard books and uniform pamphlets. The dominant epistemological approach in the first generation is also a positivist approach (Ebrahimi Zadeh, 2007).

The second generation: The second phase began with the invention of the radio by Marconi in the late 19th century, and educational radio spread across the world. Following that, with the invention of television, the use of multimedia tools in educational environments increased. Radio, television, video, satellite, and audio-visual tapes were the most important educational media of this period (UNESCO, 2002). In this generation, the effort was to provide interactive computer-based training courses to students who had personal computers. The epistemological approach of this generation was often interpretive and interpretative; because in this approach, social realities are constructed by individuals who participate in them.

The third generation: The third generation began with the invention of microprocessors and the use of computers, as well as connecting to the internet and sending electronic messages. It includes textual, visual, auditory, and computer-based materials and topics, and usually some face-to-face support for learners, which was offered to both individuals and groups. The third generation has features such as the ability to establish synchronous and asynchronous human interactions, especially audio, video, and computer conferences. The constructivist methodology of the third generation has been expanded and developed with the aim of creating opportunities for students to generate and reconstruct knowledge through discussion and examination of content or problem-based curricula that defined the qualitative planning of the third generation.

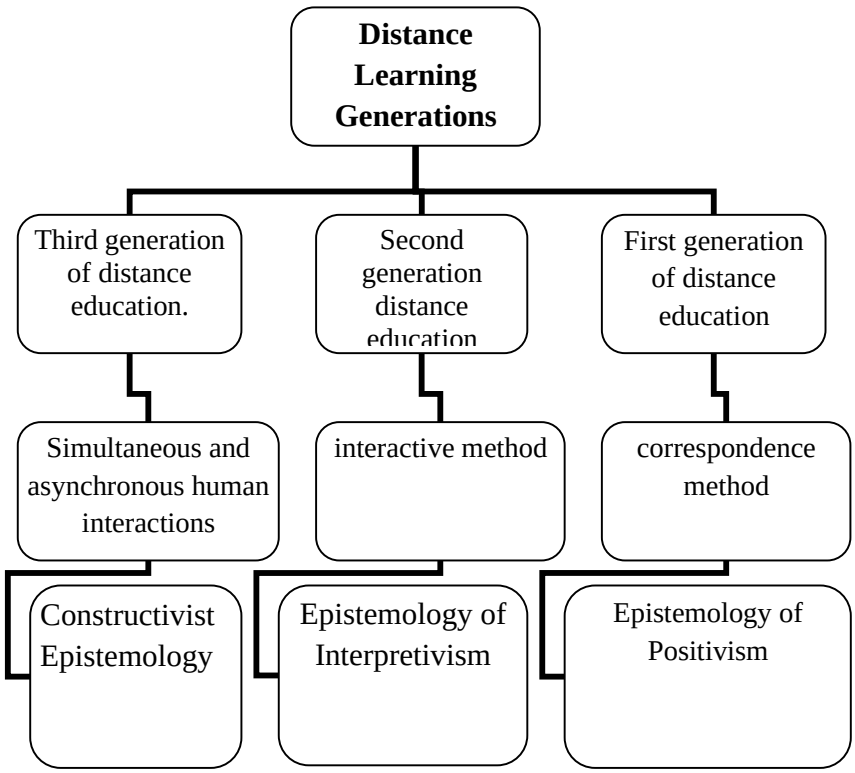

Figure 3: Generations of Distance Education

The fourth generation: Moore (1990) believes that a fourth generation has emerged, capable of integrating three major and primary characteristics of the network; namely, the retrieval of a vast amount of content information, the interactive capacity of computer-based communications, and the processing power related to processors through computer programming software, especially Java.

Fifth Generation: Anderson and Alumi introduce the fifth generation and refer to it as "the model of intelligent and flexible learning" (Anderson and Alumi, 2006). The fifth generation is capable of adding artificial intelligence to the capabilities of the network or creating a type of semantic sharing that will enable both human and non-human agents to search the network using information technology (Anderson and Alumi, 2006). Electronic and virtual education is considered the latest generation aligned with the critical epistemological approach. This epistemological approach is a broad social and philosophical movement that questions human rationality in action by using positivist epistemology and any human effort in the pursuit of truth (science). In this approach, the goal is to bridge the gap between positivist and interpretive approaches. In a critical approach, two elements are emphasized: critique and the reform of issues related to education. This perspective holds that those in power in society use tools of power, such as authoritative documents or texts, to legitimize their dominance (Gootak, 2006) and bring social institutions like schools and universities under their control; especially in the age of information and communication technology, where those in power dominate electronic media and have organized sectors, particularly the lower classes of society, under their control; In addition, in this generation, educational content is designed and developed more in a completely electronic format, and the teaching-learning process is also influenced by two factors: constructivism and the power of electronic technologies.

An Overview of Domestic Background

Sarmadi and colleagues (2019) in an article titled "Study of the Epistemological Foundations of Education Based on Virtual Social Networks" aim to study the epistemological foundations of education through virtual social networks. The research is descriptive in nature and employs a theoretical study method for the analysis and interpretation of documents and scientific resources. Therefore, after examining various generations of distance education and their philosophical educational schools, and after a brief review of related research, it was concluded that social networks are a powerful tool for creating an educational environment and should be presented with the support of the constructivist approach in the continuation of new generations of distance education. Additionally, the epistemological function under the umbrella of the constructivist educational philosophy has been explained for the main elements of education through virtual social networks.

Sarmadi and Masoumi Fard (2018) in an article titled "Analysis of the Epistemology of Existentialism and Its Educational Implications in Distance Education with Emphasis on Virtual Education," stated that the aim of the present research was to examine the epistemology of the school of existentialism and its educational implications in distance education. This research, using a descriptive-analytical method, has gathered library information, including the identification, study, classification of information,

analysis of them, and summarization of information regarding knowledge from the perspective of the primacy of existence, and then considered its educational implications in virtual education, which contains inconsistent ideas; However, this school of thought has implications for distance education in terms of acquiring knowledge; in the area of objectives, it emphasizes serving humanity and seeks to promote individual awareness and independence. Additionally, in the discussion of educational methods, it emphasizes flexible approaches in curriculum design. This school considers the instructor as a guide and the learner as an active participant in virtual education, and based on this, it adopts a qualitative approach in evaluating knowledge acquisition. It is therefore suggested that those involved in distance education utilize the noteworthy points mentioned from this school of thought to plan in such a way that greater flexibility in acquiring knowledge in virtual education is created.

Abedi and colleagues (2017) conducted a study on the structural model of the relationships between epistemological beliefs and self-regulated learning strategies, with the mediating role of academic self-efficacy and achievement goals, using a causal model and path analysis method. The results showed that epistemological beliefs have a direct impact on self-regulated learning strategies of students, in addition to their direct influence through achievement goals and academic self-efficacy. Therefore, it is essential to create the necessary environment to enhance these beliefs in the living and educational context.

Mohammadi and colleagues (2016) conducted a study titled "Explaining the Philosophical Foundations of the Socratic Teaching Method as a Strategy for Improving the Teaching-Learning Process in Schools" with the aim of elucidating the philosophical foundations of the Socratic teaching method using two qualitative methods: conceptual analysis and critical philosophical exploration. The findings indicate that the Socratic teaching method serves as a model for encouraging students to engage in collaborative research and assists them in strengthening critical thinking skills and acquiring the necessary habits for participation in society. Teachers, by employing the Socratic method and asking appropriate questions, can encourage their students to examine their own and others' reasoning, allowing them to recognize the logical shortcomings of various beliefs and thoughts. The use of such a method not only leads to a wise selection of values but also facilitates the growth of logical thinking.

Jabal-Ameli, Foroshani, and colleagues (2015) conducted a study titled "Clarifying the Philosophical Foundations (Epistemology) of Philosophy Education for Children in Iran" using qualitative content analysis and a deductive categorization system. The results indicate differences and similarities between the epistemological foundations of philosophy for children in the West and the national curriculum. The result of the harmonious combination between them is the epistemological foundations of philosophy for children in Iran, which are as follows: Knowledge has two levels, real and nominal. Human ability to discover and create knowledge is dynamic in its stability. The tools of cognition are multiple and include senses, imagination, thought, reason, intuition, and revelation.

Kamali (2013) conducted a doctoral thesis on the examination of the philosophical foundations, position, challenges, applications, and role of information and communication technology (ICT) in the higher education system of Iran from the perspective of professors and students in the fields of

psychology, educational sciences, and teacher education in Region 2 using a qualitative research method. The results showed that the use of information and communication technology (ICT) in the higher education system of Iran was based on philosophical foundations, and the results indicated satisfaction among both professors and students with the current situation, with no significant difference found between the two groups in their use of ICT.

Sarmadi and Shayestehfar (2011) conducted a study titled "Analysis of Philosophical Foundations and Their Role in the Structure of Open and Distance Education" with the aim of analyzing the philosophical foundations in this system using text analysis methods. The results indicated that philosophical perspectives, including realism, existentialism, and relativism, were examined and analyzed, providing an image of the open and distance education system regarding the attention to philosophical foundations within the three frameworks of open and distance education.

In a paper titled "Analytical Examination of the Epistemological Foundations of Constructivism and Its Educational Themes," Lovi and colleagues (2009) conducted a critical analytical study utilizing realism. The results indicated that the characteristics of the epistemology of constructivism do not resemble realism in any of the aspects of nature, limits, and sources of knowledge. It was found that, contrary to realism and some other traditional schools that consider knowledge a fixed product of the learning process, for constructivists, this product is unattainable, and instead, the learning process is emphasized.

An overview of foreign background

Harvey Siegel (2020) in a book titled Why Epistemology Matters in Education states that one of the reasons that is at least important at first glance is that the traditional and rarely questioned goal of education is for students to acquire knowledge. If educational efforts were correctly perceived as aiming to transfer knowledge to students and provide the abilities and inclinations needed to acquire more information, then epistemology seems to be important, insofar as epistemology is a branch of philosophy that encompasses knowledge - including education aimed at transferring to students strives to enable students to construct their own understanding.

Linda Harasim (2017) emphasized in a book titled "Learning Theories: The Role of Epistemology, Science, and Technology" that scientific theories emerged in the nineteenth century to explain natural and social phenomena and laid the foundation for twentieth-century learning theories: behaviorism, cognitivism, and constructivism. Behaviorism and cognitivism were based on objective epistemology, which emphasized the truth, efficiency, and superiority of absolute technology. The constructivist learning theory was based on the epistemology of change and progress, knowledge construction, and human agency. The emergence of educational computing and computer networks in the late twentieth and early twenty-first centuries intensified the epistemological and educational differences: objective epistemology emphasized the role of technology in replacing human teachers. Learning theories based on constructivist epistemologies have also emerged, emphasizing the role of technology to enhance rather than replace human intelligence. Online collaborative learning theory, which later changed its name to collaboration, is the main theory of learning and education that argues that the increase in human learning occurs in the digital age.

G. Green and colleagues (2013) in an article titled The Importance of Epistemological Beliefs in Teaching and Learning Psychology: A Review Study of Beliefs about the Nature of Knowledge, refer to "epistemological beliefs," which relate to understanding the educational strategies of both language learners and teachers. Epistemological beliefs, due to their emphasis on integrating knowledge from multiple theoretical perspectives, certainly have a specific connection to the field and profession of psychology.

Richard Ston (2013) in a study titled "Cognitive Development in Higher Education" has researched the cognitive growth of students in higher education, which has been conducted for at least 50 years. Researchers on both sides of the Atlantic have converged on reports that describe the cognitive growth of students in terms of a sequence or hierarchy of distinct qualitative stages or positions. Rich qualitative data obtained from longitudinal studies that show cognitive changes, but whether a uniform design is suitable for all students and whether the changes found are a specific result of exposure to higher education is debatable. There are still no reliable quantitative tools that can be used to measure epistemological growth in large samples of students. Unresolved issues include: Can students adopt multiple epistemic positions? Are these culturally and contextually specific, and are they mental entities, discursive actions, or social constructs?

Research method

The approach of the present research is qualitative, and in terms of the type of research, it is descriptive-analytical based on its objective and method. The prerequisites for qualitative research include identifying relevant sources related to the research topic, studying texts, understanding the meaning of the text, extracting the desired content from these sources, establishing connections between the content, and describing and analyzing them, as well as discussing and concluding from the collected information. The method of data collection is documentary and includes identifying and studying existing scientific resources, including articles and books written in the field of epistemology, especially in relation to distance education, and classifying information, analyzing and interpreting the collected data, and answering research questions.

General Conclusion

Epistemology, as the foundation of any kind of knowledge, has always been intertwined with the concept of learning and has attracted the attention of education system specialists worldwide. On the brink of the twenty-first century, the expansion of growing technological trends and the widespread use of information and communication technology, along with the emergence of post-industrial societies, have somewhat altered epistemological approaches (Azpoulat and Akar, 2009); Because it is no longer possible to think about the process of educating the younger generation solely with the past mindset and traditional approaches (face-to-face education) in the presence of the internet, computers, and virtual space; because in the age of information and communication, the teaching-learning system and its methods have also transformed. In this context, various theories have emphasized learning and have been well received in today's educational systems around the world (Abedini Beltrak and Nili, 2014). According to Ebrahimzadeh (2007), the most important principle in the ontology of pragmatism can be called the principle of change, according to which everything in the world is in a state of change and nothing is fixed, and there is no enduring reality in the world; in other words, change in this philosophy is the

ultimate reality. The philosophy of pragmatism found a special form in Dewey's thought. Their emphasis on experience and the construction of knowledge and understanding of the world based on the individual's current situation, the disregard for a final and predetermined goal for existence, the close relationship between the individual and society, and the close interaction between the two, along with a world full of conflicts from theory to practice and from the classroom to lifelong learning, and the human engagement with the surface of nature rather than the beyond, are among the factors that constitute third-generation distance education. The interactive possibility that is created in this generation between the learner, the teacher, and the learners together establishes a space for negotiation, discussion, sharing opinions, and mutual respect. It focuses on the learners' understanding of knowledge and the use of various media suitable for the learners' learning styles, while also considering the current issues faced by learners in comprehensible and understandable packages. This is one of the outcomes of this philosophical perspective. In the constructivist learning approach, instructional design is about providing resources and learning processes to facilitate students' learning, which is the creation of meaning in their minds. In the constructivist learning approach, instead of emphasizing adherence to specific stages for design, the focus is on principles such as embedding learning in relevant and real contexts, incorporating learning in social experiences, encouraging ownership and having a voice in the learning process, providing the experience of constructing knowledge, promoting self-awareness in the process of knowledge construction, offering experience and valuing diverse perspectives, and encouraging the use of various presentation methods. In regard to the constructivist approach, there is consensus among experts that instructional designers follow a set of principles for designing educational courses instead of establishing linear and sequential stages. In other words, since the constructivist approach assumes that learners construct knowledge based on their own experiences and activities, the predetermined goals, content, teaching strategies, and evaluation methods give way to the design of learning environments that are suitable for the cultural, social, economic, and political conditions of the learners.

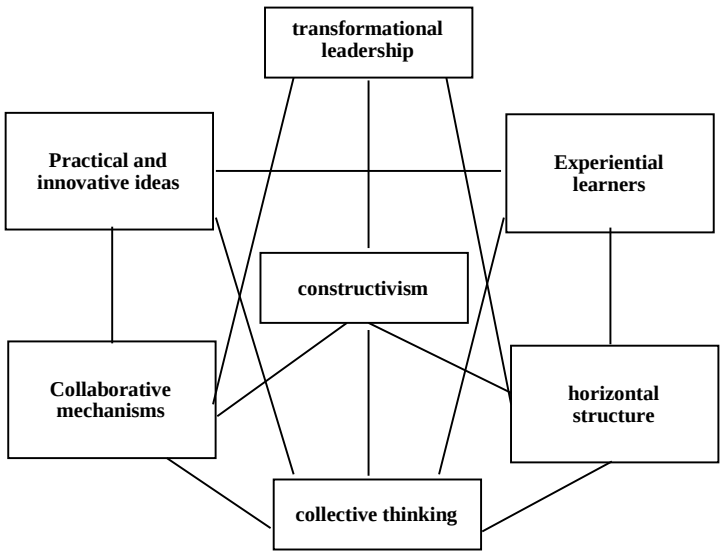

Figure 4: Functions of Constructivism Theory in Distance Education Systems

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