# STUDY OF TEACHING METHOD AS A FACTOR OF SOCIAL PARTICIPATION AND DEVELOPMENT OF CRITICAL THINKING AMONG STUDENTS -TEACHERS OF FARHANGIAN UNIVERSITY (ARTICLE: TEACHING METHOD AND CRITICAL THINKING)

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Abstract -The present study was conducted to investigate the effect of teaching method on the growth of critical thinking. And it aims to highlight the role of educational centers (such as the University of Cultural Sciences) in this growth process. The research hypotheses seek to explain the relationship between communicative activities and free participation without exercise of domination, the relationship between teacher teaching practices in classrooms and the growth of critical thinking among teachers of Isfahan Farhangian University as well as the relationship between gender and field of study in the spirit of participation The students of Isfahan Farhangian University a stratified random sampling method has been developed based on the gender and field of study (given that the list of all students had all the classes) and a sample of 331 were selected. The information was compiled by a researcher-made questionnaire and based on the standard Rickets critical thinking Questionnaire. Data were analyzed using SPSS and IMOS software. The results of the research indicate the hypothesis and the relationship between the research variables.

Key words- Teaching method, Critical Thinking, Farhangiyan University, Communication, Cooperative Spirit

# **I** INTRODUCTION

Due to the increasing volume of information, instead of transferring information, he taught the thinking and critique of this information, and the teaching method and classroom environment is one of the factors that can affect the growth of this type of critical thinking, with the approach that the university As a repository of information, professors should not only convey information as transmitters, but instead of receiving information, students are expected to increase their thinking skills, process information, and use their abilities. And the spirit of participation in socio-political, educational and moral activities Zahabi rise to a generation in the shadow of dynamic and

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critically about the environment have developed society. Today, improving the level of critical thinking skills and creating sociological insight in educated people is an expected result of higher and higher education. The development of students' intellectual skills has always been a complex issue in education, but today it has become critical because, beyond the knowledge of society, it has gone beyond the ability of individuals to think critically about this information, as in recent years. Educational experts have expressed grave concern about students' inability to think critically (Myers, 1996). Common teaching methods deliver people with a lot of theoretical information to the community who are unable to solve the smallest problems of the community for the future. In fact, traditional teaching methods in universities convey a mixture of information and concepts to students, but they are important in analyzing, prioritizing, and organizing emerging knowledge, which is critical thinking and will lead to effective and meaningful learning. The patrol leaves its mark (Ata Elahi, 2014: 19). And now, in terms of such a necessity and importance, this research has been done. This study seeks to study the theories of social thinkers in this field with a sociological approach, and then, using a suitable method and a researcher-made questionnaire, to collect information from the study community and test the hypotheses appropriate to the problem. The purpose of this study is to find out whether the education system is in a position to cause public action and reduce indifference between future generations and educated strata, and ultimately provide the public with social issues to make them more responsible and. Be more ethical.

# **II RESEARCH HYPOTHESES**

1. There is a relationship between creating a suitable space for communication and free participation and without applying domination for students in the classroom with the growth of critical thinking among the students of Farhangian University of Isfahan.

2. There is a relationship between teachers' teaching methods in classrooms and the growth of critical thinking among teachers of Farhangian University of Isfahan.

3. There is a relationship between gender and participatory spirit among teacher students of Farhangian University of Isfahan.

4. The type of field of study is related to the participatory spirit among the student teachers of Farhangian University of Isfahan.

#### **Defining Research Concepts and Variables:**

#### Critical Thinking:

Critical thinking is defined as the process of thoughtful ordering, active and skillful conceptualization, application, analysis, composition, and evaluation of information collected, or produced by observation, experience, reflection, reasoning, or communication as a guide to thought and action. (Javidi and Abdoli, 2010) Anis defines critical thinking as logical and reasoned thinking whose focus is on judging and judging beliefs and practices. He believes that when an individual tries to analyze issues accurately, he seeks credible evidence, and When it comes to credible conclusions, his thinking will be critical (Anis, 1987: 76).

React also proposed three areas of critical thinking:

1- Mental employment 2- Intellectual maturity 3- Innovation

Therefore, a critical approach can be considered from three dimensions:

- Cognitive dimension
- In terms of skills
- In terms of tendencies and emotions

In this study, the tendency of this way of thinking is considered as a dependent variable, so we want to know more whether the students-teachers of Farhangian University who are going to teach the next generation critical thinking and the right way of thinking as teachers. , Themselves have a tendency and temperament to think critically and emotionally an ideal critical thinker is accustomed to searching, understanding, honest reasoning, open mindedness, flexibility, fairness in evaluation, honesty in dealing with individual biases, Fair and prudent judgment, re-attention, clarification of issues, systematization of complex issues, diligence He relevant information, arguments in criterion focuses on the search, Vagraandyshy, Mshahdh¬Gry, willingness to change and innovation, risk-taking and insists on the results of the research. Accordingly, using React's critical thinking questionnaire, the tendency to critical thinking is measured.

# Social indifference

Social indifference in the conceptual definition is a situation in which individuals become disinterested and disregarded for the surrounding realities due to a lack of mental or cognitive and objective connection with society and their peers, institutions and social structures. They avoid social-political participation, social responsibilities, altruistic activities, and active and civic engagement in social issues. Now this state of indifference can be examined from two psychological and social dimensions: from the psychological dimension, attention is paid to the states of isolation, disinterest and depression, and in the social dimension, the lack of social participation and lack of social activities (Both social, political, and interpersonal communication and political and social alienation are emphasized. According to the dimensions of social indifference and the opposite point, students' participation and social action will be measured based on the Social Indifference Questionnaire.

# Public action

Public action is an act against the socio-political indifference that draws society's space to a kind of passivity and acceptance. What is often referred to as "metaphysics of presence" in the social science and political literature literature means a situation in which a person, due to the growth and excellence of consciousness, demonstrates his presence in the social arena through intellectual and practical action. Even in spite of the majority's orientation, it has the power to say no as a right. In contrast, the term "silent majority" refers to people who are indifferent to the issues of their society. In fact, one of the most important conditions for fulfilling the demands of the people in society is the **content** of the richness of public culture, in which passivity and indifference have become participation and participation in their destiny as a socio-political value and belief (Sedaghati Fard, 2014: 6). In this study, the concept of public action is considered synonymous with intellectual and preferential participation. Because in the concept of public action, the presence of others is discussed and due to the action taken between the person and others, the influence and influence is achieved.

#### farhangian University

It is a university for providing, training and empowering teachers and human resources of the Ministry of Education in Iran. This university was established in 2011 with the integration of all teacher training centers throughout Iran and has about 98 university units (in the form of 64 campuses and 34 campus-affiliated centers) and more than 65,000 students. Farhangian University is one of the largest and most extensive universities in Iran. (Statute of Farhangian University) In this study, two campuses of Isfahan brothers and sisters have been examined.

## Teaching method

There are many different ways to teach. Accordingly, teaching methods can be categorized in different ways, but here only one general classification is mentioned.

# **III CLASSIFICATION OF TEACHING METHODS**

In general, many educators and educators place teaching methods in two categories: A) Traditional methods b) New methods (Safavi 1991: 239). The term teaching, although it seems familiar in the context of educational sciences, is familiar to most teachers and programmers with its true meaning and nature. Different teachers' perceptions of the concept of teaching can have a positive or negative effect on their attitudes toward students and how they work with them. Multiple interpretations of the concept of teaching can have a positive or negative effect on their attitudes toward students and how they work with them. Multiple interpretations of the concept of teaching can have different reasons; the most important of which is the weakness of basic knowledge and differences in translation and misinterpretation of teachers from different educational perspectives. Sometimes the confusion and confusion in understanding educational concepts is such that many experts, teachers and students in this field think of concepts such as upbringing, education, teaching and vocational training as one and use them instead. Although these concepts may have common and intertwined aspects in some respects, they are basically independent concepts and have their own meaning.

Nurturing or educating "is a regular and continuous process whose goal is to guide the physical, cognitive, moral and social development or in general the comprehensive development of students' personality in order to acquire and understand human knowledge and accepted norms of society and also help to develop talent. (Saif, 2000: 28). " They are according to such a definition, it is the cultivation of a system, the basic function of which is to develop the talent and education of citizens who acquire the norms accepted by society and are committed to its values. Even many educators believe that cultivation is beyond the scope of cultivation and believes that instilling accepted social values, traditions, and morals in individuals is one of the oldest forms of cultivation. Instead of such a function, the educational system should develop cognitive skills such as Critical thinking should focus on the analysis of group values and skills in order to provide the basis for democracy in society (Miller, 1983). Another group believes that the educational system should be a factor in social change (Ferreira, 1972).

The concept of education is not the opposite of nurturing a system, but education is a purposeful and predesigned activity, which aims to provide opportunities and opportunities to facilitate and accelerate learning within a nurturing system. Therefore, education is a means to nurture, no. Self-cultivation. Education is a well-defined and precise activity, so its goals are more precise, more specific, and more immediate than far-reaching goals.

Training may take place in the presence of the teacher or without the presence of the teacher through film, radio, television and other media. The concept of teaching refers to that part of the educational activity that takes place in the presence of the teacher in the classroom. Teaching is part of teaching, and like teaching, it involves a series of regular, purposeful, and predetermined activities that aim to create the right learning conditions for the teacher. The part of the educational activities that is done by the media without the presence and interaction of the teacher with the students is not called teaching at all. Therefore, teaching has a more general meaning than teaching. In other words, **any** teaching is education, but not every teaching may be teaching. Sha'bani (2003) states four special features for teaching that distinguish it from similar and close concepts:

A) The interaction between teacher and students

B) Activity based on certain and predetermined goals

C) Regular design according to location and facilities

D) Creating opportunities and facilitating learning "(Shabani, 2003: 9).

It can also be said that "teaching is the interaction or interaction of teacher and student, based on the regular and purposeful design of the teacher, to change the behavior of the student. Teaching different concepts such as attitudes, tendencies, beliefs, habits and behaviors, and in general, includes the types of changes that we want to create in students" (Mirza Mohammadi, 2004: 17). Teaching is, in fact, a factor in engaging and activating learners to be more prepared to understand, analyze, and solve social problems. Therefore, how the teacher prepares the classroom space can lead to participation or, conversely, passive reading.

# IV THEORETICAL FRAMEWORK OF RESEARCH

At the theoretical level, in order to explain social behavior, in the words of James Coleman (1998) as the main work of social sciences, phenomena should be analyzed at the social level and not at the individual level and individual behavior of individuals. There are two ways to explain social behaviors: - The first method depends on an example of system behavior or observing direct behavior in general over a period of time.

- The second way of explaining the behavior of the social system requires examining the internal processes of the system that include its constituent components or units at a lower level than the system level, and in this type of explanation the constituent components are people who are members of the social system.

In this study, it seems that the second method is more appropriate, because students-teachers are components related to the university education system, and Farhangian University, which deals with teacher education, is also a unit of the entire education system. It is the training of society. On the other hand, the data is collected from people affiliated with this system, and if a change is to take place and a proposal is made to repair and improve the process of teacher training, it will be done at a lower level.

At the same time, we believe that a combination of these behaviors is at a lower level, which affects the whole system, although the effect of the system on the components cannot and should not be overlooked. The place of critical thinking in religious thinking: In the Islamic education system, in addition to reason and its cultivation, it has a high status. The verses of the Holy Quran with different words and expressions, the words of the Infallibles (AS), the discourse of Islamic scholars in their writings confirm this claim; Therefore, they base

human education on the basis of reason and thought. Therefore, the principles and components of thinking in religious texts are consistent with the components of critical thinking: observing the principles and method in doing things is an important component of critical thinking. There are many instances of order in the Holy Qur'an, and even the order of the natural world is considered as a proof of the existence of God the Guardian.

Truth-seeking is important in critical thinking. Searching for truth means not forgetting that you are going to move to achieve the truth that is in your and others' interests, and you should not trample on the truth, because if the truth is trampled on, it is far from critical thinking, from morality, from humanity.

Flexibility is another feature. Flexibility means that if, for example, an issue is being discussed between two people, it should not be the case that one side says that what I am saying is true and the other side says that what I say is true. And be abusive. Flexibility means that when the other party says something else that has a stronger argument than you, accept it, and that means accepting the truth. In addition, even with the reasons of the other party, the person learns other things. Verses 17 and 18 of Surah Zumr refer to the critique of sayings and views and the selection of the best of them. This statement can also refer to religion itself; that is, in matters of religion, man is guided if he makes a choice with the power of reason and the balance of criticism.

One of the Islamic thinkers in Iran who has addressed the issue of critical thinking is Dr. Shariati, who has made many references to this issue in his books and articles. He has always lamented the lack of critical thinking in the face of various social, political and cultural issues, and has condemned the superficial and naive view of things. In his view, critical thinking about the simplest and most trivial matters is necessary to the most basic and complex, and accepting phenomena without critical thinking in society is a great scourge among the general public, especially the scholars of a society. (Badri, 2008, 13). Critical thinking in the minds of theorists. The Foundation has used Delphi's study to identify seven critical thinking structures. These structures include analytics, self-confidence, curiosity, maturity, enlightenment, order, and truth-seeking. Other researchers have completed these structures, taking into account three factors that predispose to critical thinking. These factors include conflict, cognitive maturity, and initiative that can be used to describe a person's talent for critical thinking. (Latane, 1970, 30)

Conflict: This factor describes a person's ability to reason and judge. People with this trait enjoy solving problems, believe in the power of reasoning, and are able to explain the process to others. Cognitive maturity: People with this trait are aware of their prejudices and biases that may affect decision-making and reasoning. People with cognitive maturity are comfortable with differences of opinion and listen to the words of others with an open mind and are ready to correct their opinions if convincing evidence is presented. Innovation: Innovative and creative people are always looking for opportunities to learn more and pay more attention to new knowledge, insights and initiatives that improve their lives. Innovators are mentally curious and ask questions to clarify issues and learn.

Here we can ask the root of critical thinking, how does one move towards a non-critical and passive thinking in the process of thinking? What attitudes form in one's mind that prevent one from reaching a critical point of view? Although the following attitudes are not uncommon, they are obstacles to critical thinking:

\* I prefer others to tell me what to do and how to do it, rather than trying to do it myself;

\* I do what I think is good. I don't like to think too much about my decisions;

\* I don't usually review the mistakes I've made;

- \* I hate looking for something myself;
- \* I don't like people who obscure issues and discuss them instead of answering them;
- \* I don't like to be criticized;
- \* If I agree with something, I don't care why others don't agree with me.

These sentences and phrases are part of the Critical Thinking Assessment Questionnaire, which represents a mindset that is inconsistent with critical thinking.

With regard to theories of critical thinking, it seems possible to find critical thought in C. Wright Mills' theory of sociological insight. According to C. Wright Mills, a person with a sociological insight can understand the impact of wide-ranging historical events on the private lives and social activities of others. They have a false sense of social status. In other words, sociological insight helps us to consider the whole of our new society in our daily lives and to classify and explain the psychology of different people in its form. In this way, fundamental issues are considered instead of private ones, and dealing with public issues replaces public indifference and frustration. Sociological insight helps us to understand the history of society and individual history and the relationships between them. This recognition is the duty and mission of sociological insight, a new way of thinking that not only helps the individual, but also the meaning and impact of his time. Understands better, but also helps him to take an active part in making history (Truino, 2015: 9)

This part of Mills' thought is consistent with Habermas's thought of communicative action and rationality and way of thinking. In his view, the rationality of communicative action leads to a relationship free from domination and free and open communication. Rationality here requires the release and removal of communication constraints. This is where Habermas's aforementioned work on legitimacy and, more generally, ideology, comes into play. These two factors are the main causes of distorted communication. And if we want to be open and free, we have to eliminate these causes. Such rationality reduces normative repression and dry-mindedness at the level of social norms and increases individual flexibility and rethinking. The development of this less restrictive system constitutes the lifeblood of Habermas's theory of social evolution. Habermas's rationality, instead of a new system of production, leads to a new and less distorting normative system. (Ritzer, 1995: 209) And based on this, only through a liberating educational system and away from domination, it is possible to reconstruct and not reproduce social structures by future generations.

# Critical thinking and the university education system

Great educators see thinking as the foundation of education, and they see the growth of thinking as the main goal of educational institutions. (Shariatmadari, 2003). The beginning of thinking is when a person is faced with an indefinite question, problem, or situation. Thinking is the foundation of education and the basic axis of science and philosophy (Suleimanpour, 2004). Thinking has a variety of ways, one of which is "critical thinking." In its latest division, UNICEF (2003) considers decision-making and critical thinking as one of life's skills. In today's world, every human being needs to learn to think correctly in order to live properly. Critical thinking is about analyzing the influences of the media and peers, analyzing attitudes, values, social norms and beliefs and the factors that affect them, and identifying relevant information and information resources. (Pasha Sharifi, 2005)

Critical theories have also focused on issues of the educational process and sought to uncover overt and covert laws that reinforce stratification and reproduce inequality. In fact, critical theories both deal with precise reflection on the structure of the accepted socio-economic class and deal with ways in which programmers unknowingly pursue the stability of the socio-economic class structure. In an effective way, they help the socio-economic classes to dominate or subjugate, they help (Aghazadeh and Dabiri, 2003: 95). One example of this theory is Michael Apple's theory. In relation to economic issues, he notes that knowledge is now a kind of capital, and just as there is a class divide in capitalism, this gap is also evident in the enjoyment of knowledge, and so we are now at the stage of educational capitalism. We have (quoted by Ghaderi, 2010:  $\neg$ 87-86). In addition, Sherry Holmes (1985) argues that labels that give standardized scores to students typically reflect classifications of social class, race, and other characteristics. They are like that. (Quoted by Joseph et al., 2010: 230).

It is obvious to everyone in any society that this educational system can train creative, critical, passive, and receptive individuals, and the vast majority of this is related to the way teachers teach whether they only implement a curriculum in the classroom curriculum. They are already designed and presented by the authorities of the system, or they consider the local classroom as a place for denial and exchange of ideas and public discussion and action, and they see a ground for the formation of critical thinking in learners. This is a huge potential for the classroom, and it is the instructor who can provide a free atmosphere for discourse to bring the ideas of learners to the forefront. In fact, the dynamism and vitality of a society depends on the active participation of its young generation in various affairs of the society, a generation that can consciously and with a developed personality have a full participation in its society and play its citizenship well and deal with issues. And think about the problems logically and make wise decisions to solve them, and the requirement for such a situation is the membership of individuals in social institutions and formal and informal organizations in society to be both influenced and influential in the process of socialization. Be, and one of the most important of these institutions is the educational system in any society where almost all people He trains society at different times in his life, and Dewey is one of the people who has paid close attention to the importance of this institution. Dewey's most complete work on education is a book called Democracy and Education. This book seeks to identify the basic ideas of a democratic society and apply them in education (Pakseresht, 2009: 98).

An individual needs skills to participate effectively in society. The most important of these skills is that the individual has reached intellectual and intellectual maturity and has a critical and open mind to be able to analyze the problems of society and also in terms of Social maturity is such that it conveys one's thoughts and ideas to others and even challenges one's thoughts. Therefore, one of the important factors in a person's participation in society is that: 1- The person has critical thinking skills, 2- The person has social skills. Critical thinking in curricula has been considered as the fourth element of basic education (after reading, writing, and arithmetic), and all academic systems have considered it necessary to take courses in this field. Existing scientific theories about critical thinking in curcicula process. (Shabani, 2003) For example, theories of cognitive processors look at students in the learning process as active information processors; those who experience and search for information to solve problems, in the structure of their minds, what they find useful for solving new problems. Instead of being actively influenced by the environment, they are actively choosing, practicing, paying

attention, or ignoring. For this reason, cognitionists consider the learning situation to be one of the most important factors in the learning process.

From a metacognitive point of view, the learner should have active supervision over his mental process and regulate and reconstruct his mental activities. Some even believe that cognitive and metacognitive abilities and skills begin to develop around the age of five to seven, and that many students grow significantly. Another theory that supports critical thinking is "constructivist theory," which itself is rooted in cognitive thinking. The philosophical foundations of such an approach are based on the "principle of epistemological error." Constructivists, like cognitive psychologists, see learning as a perceptual process of experience, and believe that curriculum executives should provide an opportunity for students to think critically through argumentative discourse that accelerates interaction and analysis. (Shabani and Mehr Mohammadi, 2000)

Accordingly, one of the most important skills to be taught to learners in any educational system is the skill of thinking and reasoning. To make this happen, the country's education system, especially higher education, must strive to increase the thinking skills and reasoning of its learners and move them from memorization to meditation. In other words, the focus of educational activities should be on learning how to think, not on teaching ideas (Ghasemi, 2000). Peter and Saden consider critical thinking to be the best and best type of thinking, and believe that one of the goals of higher education professionals is to prepare students for the ability to think is analytical and critical. One of the areas in which the concept of critical thinking should be considered is the education system, teaching method, educational content and curriculum in this system, the atmosphere governing the relations of an educational system and the study of the thinking of educators and parents who manage this system.

Undoubtedly, having critical thinking that leads to the construction and analysis of social structures and conditions governing a society has always been current in the history of Sari, but with less intensity and intensity and in a different way in different areas of existence. But since the 1960s, in particular, a critical movement has emerged to create a new vision of the issues that govern societies, leading to a critique and challenge to what has so far been taken for granted, a tradition that has itself been a factor in stabilizing the ruling class. And critical thinking can be seen as an obstacle to the continued dominance of stereotyped and certain ideas. This kind of thinking among the general public should be tried and appreciated. This is a mission that is mainly left to the education system of the society from primary to higher levels, and it is expected from it, and that is why many thinkers, this field was put into the realm of their theory of theory.

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In examining and analyzing the role of the education system, in addition to the way teachers think and teach, it is essential to emphasize the curriculum in educational systems, and for this reason, many thinkers have based their curriculum on their work. Reconstruction theory, which was largely economic, was criticized in the 1970s by

critical theorists such as Apple and Henri Giro, and most critical theorists called the theory of regeneration an algebraic and simplistic theory that lacked cultural analysis of the curriculum is, in fact, a mechanical theory. Apple, Philip, and Kessler were influenced by the Frankfurt School not only in material and economic production but also in the cultural sphere and theories that were social in nature, and believed that Frankfurt's cultural analysis could be a kind of conceptual seed to move from recreational to mechanical theory. Provided the Buddha to the theory of resistance which is mixed with cultural themes.

Resistance is a process that prevents the re-creation of the status quo. Apple and Henry Giroud consider the theory of resistance to be an important theory that reformed both the conservative and the radical curriculum. According to them, the workingclass youth are resisting the curriculum introduced by the dominant class under the influence of their family and group culture. In fact, working-class children, although influenced by the school curriculum, form an informal and interactive group atmosphere to resist the prevailing ideology. Reconstruction and resistance are considered to be the two levers on which domination is exercised on the one hand and repulsion on the other. (Ghaderi 2010: 3-82)

Also, Qaderi (2010) writes in explaining the thoughts of these thinkers about the curriculum that from the point of view of these thinkers, curricula act as industrial products for cultural reproduction and not as learning opportunities for Cultural reconstruction. Curricula become commodities. To maintain and recreate unjust structures, the spirit of the users of these programs becomes accustomed to all the structures of domination. Awareness gained through school does not become meaningful, but it becomes blind awareness that produces fragments of fragmented, uncoordinated and assembled mindsets, and in fact, curricula as artificial human structures. Rationalism becomes a tool that enables human domination over man and absorbs all human values, such as altruism, self-confidence, and intimacy with the world, and thus the alienation of man not only from others but also from himself. It occurs. Of course, it is worth noting that critical theorists refer to the hidden curriculum. This concept refers to the output and set of educational processes that are unintentional, but are realized in schools (Ghaderi, 2010: 83).

# V THEORETICAL MODEL OF RESEARCH



# **Research Methodology**

#### Type of research method and data collection tools

In the present study, according to the conditions and subject of the study, the type of research method is a survey method that has been done using the instrument of a researcher-made questionnaire (based on the standardized questionnaire of Reactive critical thinking) and localized data collection.

# Statistical Society

Statistical society means the same as the main society, from which a visible or representative example has been obtained (Sarukhani, 2005: 157). The statistical population of the present study is all students-teachers of Farhangian University of Isfahan who are studying in campuses and higher education centers and have passed at least one semester, and 330 people have been examined as an example.

#### Determine sample size

To select a sample, you must first specify the sample size. The sample size refers to the total number of elements in the sample (Sarokhani, 2005: 157). The size of the sample depends on two key factors: the degree of accuracy required for the sample and the rate of change in the population according to the main characteristics studied (Dawas, 2014: 78). Due to the high volume of the study population and the need for student articles and time constraints, the sample size was determined based on the software equivalent to 331 people for the present study.

#### Sampling method

The sampling method adopted for this part of the research, since the list of individuals in the statistical population was provided to the researcher, the random sampling method of the class, which depends on the composition of the individuals in each class, has been used. Simple random sampling (SRS) has been used to select the desired student classes, and systematic random sampling (SRS) sampling has been used to access the samples, as the list of all individuals is classified by class and sex. And the field is available to the researcher:

$$K = \frac{N}{n} = \frac{1902}{384} = 4.9$$

Approximately 5 are considered to be based on the existing list of five to five advanced classes from each class and individuals are selected. However, the number of people in the first class of each class was chosen as a lottery from the numbers one to five in a simple random number 4, so the first person in the number 4 and the next in the number of 9 and so on. selected.

# Information collection techniques

In this research, data collection has been done with the questionnaire technique (questionnaires used in the appendixes section), the questionnaire related to Rex's critical thinking, after reviewing and with the guidance and opinion of the supervisor and consultant, a combination of parts of them. Related to the research variables, in the form of a questionnaire, it was first performed experimentally and then by removing some of the questions in the final form.

## Techniques used in data analysis

Data analysis was performed using spss Amos & computational statistical software. At the descriptive level of frequency, the mean using SPSS software with version 23 and at the inferential level for testing hypotheses and drawing structural equation patterns, Amos software with version 24 has been used.

#### **Research findings**

Here, first the descriptive statistics obtained from the questionnaires are described, then the fit of the model, including a two-step approach of confirmatory factor analysis and fit of structural equation analysis, and then the hypotheses are analyzed and finally the side findings. The research has been analyzed.

#### - Descriptive findings

The statistical sample consists of 136 women, which is 41.1% of the total sample. There are also 195 men, accounting for 58.9% of the total sample. According to the father's education, 96 of the 331 students have a diploma, which makes up 29% of the total sample, which is the highest percentage according to the results, and 21 of their father's 331 students are illiterate. 6.3% of the total sample, which is the lowest percentage according to the results, and 21 the results, and mother education, 136 people from the sample of 331 people have a diploma, which is 41.1% of the total sample, which with Considering the results, the highest percentage is included, and 9 of the 331 people have a master's degree and higher, which is 2.7% of the total sample, which is with you. The lowest percentage of results to be allocated.

#### - Inferential findings

After compiling the pattern theory to explain the phenomenon under study and measuring the hidden hidden variables, it is necessary to discuss the pattern estimation and analyze the general and current indicators of the model, to determine whether the experimental data support the theoretical model as a whole. Are they or not?

Using the Kolmogorov-Smirnov test, the distribution (normal, uniform, and exponential) of a small variable data can be examined. Given that the significance level of the test was higher than 0.05, the claim that the questions of the questionnaire were normal was accepted and parametric tests and ML method could be used in modeling structural equations. The general indicators of pattern fit for measurement patterns (confirmatory factor analysis) are presented in the table below.

Influence and	Free	The rate of	Psychological	Education	Critical	Index
dominance of	communicatio	social	and economic	al	thinking	structure
the university	n space in the	indifferenc	dimension	dimension		
	classroom	e				
1/730	2/121	2/715	1/531	1/022	1/593	CMIN/D
						F
0/731	0/733	0/850	0/731	8210/	0/745	PCFI
0/86	0/92	0/88	0/91	0/95	0/92	GFI
0/04	0/03	0/04	0/03	0/05	0/04	RMR
0/996	0/796	0/792	0/673	9840/	o/832	CFI
0/096	0/092	0/088	0/098	0510/	0/706	RMSEA

General indicate	ors of fit of	<sup>f</sup> measurement	patterns
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In explaining the value of the CM Scoyer (CMIN) of the model and its significance level, it should be noted that the smaller the value of the C-Scoyer, the more satisfying and better the fit of the model developed by the researcher. If the value of P is greater than 0.05, it can be concluded that the structure of the pattern covariance is not significantly different from the observed covariance structure, and in fact the value of Kay Square is acceptable for the pattern. Given that the value of P for most measurement patterns is greater than 0.05, it can be concluded that the value of Kay Square is appropriate for measurement patterns.

The GFI index for measurement patterns is greater than or close to 0.9, indicating a good fit of the data from the model. The second root of the average square of the remaining squares, or RMR, for these patterns is less than 0.05 and a small value, which also indicates a small error of the patterns and their acceptable fit.

The CFI value for all measurement patterns is greater than 0.9, and it can be concluded that the data well supports the measurement patterns.

RMSEA is based on residual matrix analysis. The value of this index for measurement patterns is less than one, which also indicates the good fit of the patterns by the data.

It can be concluded that the measurement patterns have a good fit, in other words, the general indicators confirm that the data support the patterns well. Finally, considering that almost the amount of factor loads in most cases is higher than 0.50 and according to the partial P index (less than 0.05) and general indicators, it can be concluded that the items are good data. Oleaster.

#### Structural Equation Analysis Results

The first hypothesis: There is a relationship between the action of communication that is achieved away from the exercise of influence and domination and the growth of critical thinking. In the first hypothesis that the relationship and effect between the communication action that is obtained away from the application of influence and domination and critical thinking is examined, the general indicators obtained from fitting the model related to the first hypothesis are given in the table below. The corresponding structural equation model is also presented in the figure shown.

CIMIN	CMIN/DF	IFI	GFI	RMR	CFI	RMSEA
315/95	3/434	0/733	0/818	0/05	0/723	0/086

Table 1. General Indicators of Analysis of Structural Equation Model Hypothesis I.



The structural equation model of the first hypothesis

Regression coefficient table (first test hypothesis test result)

Result	Р	Critical	Regression	Hypothesis	Hypoth
		value	coefficient		esis
					numbe
					r

Confirma	0/047	-1/990	-0/149	Communication action	Critical Thinking	1
tion						

The standardized impact factor for this hypothesis is -0.149, and the value of 0.047 for P indicates the confirmation of this hypothesis. It can affect the critical thinking of student teachers at Farhangian University of Isfahan. In other words, there is an inverse effect between variables. Dominance destroys the formation of Habermas's communicative action and prevents the flourishing and growth of critical thinking.

Hypothesis 2: There is a relationship between the teaching method and teaching of teachers in university classes and critical thinking among student teachers of Farhangian University of Isfahan. In the second hypothesis, which examines the relationship and effect between teaching methods and teaching teachers with critical thinking, the general indicators obtained from fitting the model related to the second hypothesis are given in the table below. The corresponding structural equation model is also shown in the figure.

Table 2. General indicators of structural analysis of structural equation model hypothesis II

CIMIN	CMIN/DF	IFI	GFI	RMR	CFI	RMSEA
08/692	273/3	7210/	8880/	0/02	8530/	0920/



Structural Equation Model of the Second Hypothesis

Regression coefficient table (second test hypothesis test result) Regression coefficient table (X test hypothesis test result)

Result	Р	Critical	Regression	Hypothesi		Hypoth
		value	coefficient			esis
						numbe
						r
Confirmatio	0390/	-2/064	-0/177	Active teaching method	Critical thinking	2
n						

The standardized impact coefficient for this hypothesis is -0.177 and the value of 0.039 for P indicates the confirmation of this hypothesis. Are effective. And since we believe that this process of critical thinking development should be taught in a system and over a period of time, then the best institution is the educational system, which must be provided by its educators and trustees. Peter and Sadden also consider critical thinking to be the highest and best type of thinking, and believe that one of the goals of higher education professionals is to prepare students for the ability to think analytically and critically.

Hypothesis 3: There is a relationship between the gender variable and the level of social participation and communication action among student teachers of Farhangian University of Isfahan. Performing the T-test with two independent samples and a significant value given the difference in the average rate of social participation in terms of gender shows that it is not significant. (05/0 <Sig.).

Significance	t	Man		Female		Variables
level		Standard deviation	Average	Standard deviation	Average	
0/219	1/232	5/73	49/45	5/55	50/23	Social participation rate

Hypothesis 4: Correlation between fields of study with the level of social participation and communication action

Total second	Degrees of	The average of the	F	Sig		Variables
power	freedom	second power				
1037/453	12	86/454	2/879	0/001	Between	Social participation
					groups	rate
9550/003	318	30/031			Intergroup	
10587/456	331				Total	

Since the number of disciplines was more than two, the F test was used. Based on the output of the table, it can be concluded that there is a significant difference between the mean of these several communities (different disciplines). The Toki follow-up test was used to examine how this difference occurred, and the results show that different fields of study make a difference in the level of social participation, the lowest level of social participation in English and the highest level of social participation in social sciences.

# VI DISCUSSION

#### The result of the first and second hypothesis tests

This hypothesis is consistent with the research of Hossein Karimian (2018) on teacher teaching methods with emphasis on critical thinking skills that states that teachers do not pay attention to the components of critical learning and teaching in teaching lessons. Also, with Hashemi's research (2015), entitled "Assessment of students' critical thinking skills and how it is taught by professors"; Excellent in developing critical thinking skills has not been successful. It seems that the weakness of students in critical thinking can be related to the poor functioning of higher education in rich educational and curriculum planning as well as the cultural context of society. The first

hypothesis in this study is closely related to the results of Javidi and Abdoli's (2010) research, which "examined the evolutionary process of critical thinking of first and fourth year students of Ferdowsi University of Mashhad". However, the average score of critical thinking of fourth year students is higher than first year students, so the educational system can be effective in strengthening and developing critical thinking.

Also, Farideh Hasheminejad's (2001) research entitled "Theoretical Framework for a Critical Thinking-Based Curriculum in Elementary School" with an emphasis on the Social Studies Curriculum has the skill of questioning, analyzing, evaluating, communicating, reasoning, organizing concepts. The relevant science, the use of metacognitive critical vocabulary, is intended for critical thinking and is believed to teach this skill.

- The most important finding of another study in which Jafar Jahani (2001) criticized the philosophical foundations of Lippmann's critical thinking teaching model is that teaching critical thinking is possible exclusively through research processes. Therefore, teachers and administrators should pay attention to cultivating the spirit of research and the development of students' thinking, and it is consistent with the results of the present study.

Hassan Shabani (2001) entitled "Group study on critical thinking and academic achievement of fourth grade elementary students in Tehran" shows that problem solving method by group activity has a valuable role in developing critical thinking skills, so It is safe to say that the educational system can and should play a valuable role in the development of critical thinking. Among the foreign studies, the confirmation of this hypothesis can be seen if Osbron (2013) in a study entitled Investigating the Relationship of Emotional Intelligence on Critical Thinking has reached a positive and significant correlation and Bron (2012) receiving educational intervention can improve critical thinking. Forgive. Based on their collaborative research, Toj and Karsu (1989) found that collaborative and interactive learning activities were very helpful in increasing cognitive learning and developing critical thinking in children.

Katz (1989) argues that students who use project-based learning, which is an active teaching method, perform better than students who are taught only on the basis of traditional and passive methods. Therefore, the theoretical foundations and previous research conducted inside and outside and the results of the present study confirm this hypothesis.

Third and fourth hypothesis test results: The third and fourth hypotheses, which refer to the relationship between gender and field of study and the degree of social participation or social indifference, overlap with Ghazizadeh's research (2015) entitled "Study of social indifference among students" (studied: University of Isfahan). His findings did not find a significant relationship between the contextual variables of the study, including age, level of education, and field of study, with social indifference. But the degree of social indifference varies significantly according to gender variables and marital status. Also, Khojasteh et al. (2014) in examining the situation of tendency to critical thinking of undergraduate students of the university states that the relationship between the two variables of tendency to critical thinking and gender indicates a weak but positive correlation (01/01) between these two variables but between the field of study. And there was no significant relationship between critical thinking and thinking.

All in all, what can be said with certainty is the direct impact of the way teachers teach and operate in the classroom if they can put students on the path to public action and intellectual interaction and provide a free space for their ideas to contribute. Critically, critical thinking will grow and strengthen among students, and only then will we have a developed and dynamic society. In particular, creating, strengthening, and developing critical

thinking for student-teachers at Farhangian University, who will themselves be in the position of educating and nurturing the next generation and generations, is much more important, sensitive, and requires more careful planning.

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