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The Necessity and Application of Educational Technology in Teaching

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ARTICLE INFO	ABSTRACT

Educational media have undergone significant changes and transformations with the passage of time and the advancement in science and technology, and for this reason, different educational media have been used by educational centres in each period and according to the available facilities. Any educational system will be successful in fulfilling its mission if it has teachers with scientific qualifications familiar with educational methods and equipped with educational, occupational and professional skills. Among these very efficient educational methods are educational technologies and tools. In 1954, the Ford Foundation launched educational television and introduced it to schools, and the US Senate passed the National Defense Plan for Education, and schools immediately started buying educational tools. In this way, modern devices and tools entered the field of education and were used to facilitate and improve it. In general, educational technology can be considered as a set of methods and instructions that are used by using scientific findings to solve educational problems, including design, implementation, and evaluation in educational programs. This article focuses on the use of new technologies in teaching to improve the quality of teaching and also facilitate the teacher's work, it has been compiled with a descriptive and analytical method and using library information, and we are trying to find out which tools What tools and equipment can be used in teaching and what should be the conditions of working with them so that it can help students' learning and speed up the teacher's teaching work.

1. **Introduction**

The modern education and training system in Iran was founded after the establishment of Dar al-Funun school in 1299 by the efforts of a great man named Amir Kabir and was practically launched by sending 30 people to continue their studies abroad to provide the teachers needed for this school. In 1313, the Ministry of Culture divided the academic courses into two primary and secondary courses. Until the early 1950s, the students of the primary course finished primary school after six years of study and participated in the final exams of the sixth grade and after passing the exams, They received the report card of the end of primary education. The first change in education after the Islamic revolution was the cancellation of notification of all deputy ministers and their advisors, general staff and provincial directors and their advisors, heads of education and their deputies and administrative heads, as well as most of the principals of elementary, middle, high school and conservatories. which finally led to the entry of new revolutionary figures who were committed. The second general change in education after the Islamic Revolution was the creation of changes in textbooks, which were carried out over time based on the goals of the revolution. Making superstructure changes and limitless trials and errors, daily routines performing cross-sectional tasks, and issuing circulars and instructions. Diverse in the area of headquarters and general offices, holding various and fruitless meetings and seminars and increasing the salaries of employees and teachers were some of the points that occupied the minds of the officials and prevented the development of education.

Over time, politicization in education also became the most basic and biggest factor of the lack of transformation in this ministry, so the change of a minister, deputies, advisors and general managers of headquarters and provincial offices and their deputies, ultimately led to the change of regional managers and They became their deputies and, in some cases, these changes were extended to the level of school principals. More interestingly, each of the newly arrived managers considered the plans of the previous managers to be ineffective and made a new plan. Implementation of various non-expert projects such as Kad and Tam, elimination of final exams in elementary and middle school, semesters or unification of courses and exams, creation of educational assistantship and its removal and revival, integration of different assistantships into each other and re-separation of them and creation of pre-university course And its removal has been one of the trials and errors that have hindered the development of the country's education system in the last 3 decades (Bagherifar et al., 2016).

The passage of time always makes a difference; Education, teachers and schools are not excluded from this. One of the common keywords of today's society, which is common among our generation, our fathers and mothers, and our children, and when we hear it, many associations are formed in our minds, is the word teacher, maybe these days this word - which is not just one word - is mostly heard with words such as livelihood, arrears, teacher of right to teach or official teacher, ranking, etc. But "teacher" is something more than being interpreted with a few words, and maybe a reminder of the same issue. Simple to the education community and its audience, which includes almost the entire society of Iran, should be a push to return to the principle of "teacher" and the top of these reminders is that "a teacher has never been simple". The teacher of yesterday with the teachers of today. And the teachers of today are different from the teachers of tomorrow. The tools that were

available to the teachers of the past generation are different from the tools that are available to the teachers of today. We can divide these tools into two general categories:

1-Physical tools such as computers, tablets, etc.

2-Tools that are related to the teaching method, such as the use of new educational methods, the use of new theories of psychology and philosophy, etc.

In short, it can be said that the main difference between teachers in different generations is in educational media, virtual laboratories, etc. Of course, it should also be noted that in addition to teachers, students have also become different in different generations. Teacher means new thinking, new ideas, and new performance. What difference does it make if he is in yesterday and spent hours and days with love to implement his creations, or if he is in today and spends his time more lovingly in the service of creating his ideas than implementing them; Because their implementation has become faster today with the help of technology (Shakib, 2019).

History of the development of educational technology in the world
The evolution of the field of educational technology in the West in the last century has undergone fundamental changes based on the changes that have taken place in the perspectives of epistemology, the approaches of the psychology of learning and other related sciences related to communication, systems and education, the definition of educational technology. The 18th and 19th centuries were the period of prosperity and all-round scientific development of the West. In these two centuries, scientific discoveries and inventions in various fields and the emergence of theorists such as Rousseau, Yestaluzi, Herbert and Froebel in the field of education led to the inclusion of natural sciences in the school curriculum, which led to the faster scientific and social growth of the countries. Westernized. In the second half of the 19th century, education as a social science opened its place among other sciences, and in the period before the First World War, new educational hopes arose in three separate but related movements: the child study movement, The school review movement and the growth of empirical studies in education.

History of educational technology development in Iran
In our country, from 1306 onwards, some schools tried to establish physics, chemistry and biological science laboratories, but the lack of expert staff, the lack of necessary tools and materials and the lack of belief in the use of these tools and methods caused the lack of success. These centres and their activities became stagnant. In 1308, the Ministry of Culture established the General Department of Fine Arts. In addition to supervising all artistic activities, this department was also responsible for the use of audio-visual equipment in schools. The creation of audio-visual laboratories, and introductory and advanced knowledge centers were also part of the activities of this department. In 1341, an office called the Department of Audio-Visual Education was established in the Ministry of Culture, which later continued its activities under the name of the Office of Audio-Visual Education. Attention to film as an educational medium at the global level caused this department to organize international educational film festivals. Educational TV was established in 1343 under the supervision of the Ministry of Education and began its work two years later, broadcasting lesson programs in the fields of physics, chemistry, algebra, natural sciences, Persian language and grammar. The purpose of broadcasting these programs was to compensate for the lack of specialist teachers and to compensate for the lack of laboratories, but due to the time mismatch with the schedule of teachers and schools, its broadcasting was stopped. In 1352, the preparation of educational programs was entrusted to the National Radio and Television Organization of Iran, and the educational programs began to operate again in 1353 with the broadcasting of middle school lessons, and at the same time, about three thousand television sets were distributed among the schools of the country's major cities; But the TV programs failed due to

lack of proper planning and lack of publication of correct information related to the broadcast time. In 1353, the post-graduate course of educational technology was established. Although before this year, in the undergraduate courses of teacher training and educational sciences, courses with the titles of educational technology introductions, production and application of educational materials or the role of mass communication tools in education were included, in the postgraduate course, courses such as educational systemic design, Preparation of self-tutorials, educational psychology and learning, statistics and measurement are also seen. The next stage of technology in Iran was the creation of Aburihan Boruni Correspondence College for the education of government employees which was established by relying on teachers. The method of teaching in the correspondence college was through sending books and audio tapes and sometimes face-to-face classes to fix the problems. The next step in Iran is the establishment of the Azad University of Iran and Payam Noor University, which seem to aim to universalize the level of education. (Aliabadi: 1383, 11-12).

History of the use of educational technology in the world
In the early 20th century, the field of educational technology was known as audio-visual. The first visual aids used in American schools were slides of different subjects. In 1910, the first list of educational films for regular use in schools was published. With the beginning of the Second World War, the centre of activities in the field of audio-visual equipment was transferred from education to the American army. During the war, many devices such as projectors and overheads were made for the first time. The production of Hollywood war training films played a huge role in the training of millions of soldiers around the world. In the early 1950s, emphasis was placed on the communication process, including the sender, receiver, channel, and the means of transmitting the message, and the means of communication was the second priority. Also, in the 1950s, scanner program training was provided. In the late 1960s, the emphasis on systems approach and communication science replaced the communication process. On the other hand, in a division, five stages have been considered for educational technology, and we will briefly describe each stage (Shamsai, 2012):

A) The course of hardware and devices. The beginning of the formation of educational media was in the early 20th century. Tools and equipment, such as projectors of all kinds, were produced without regard to schools, purely by addressing commercial issues. Images with sound or silence were displayed on the screen. Little by little, this kind of equipment entered the schools. Most of the people they worked with were electronics engineers and technicians. After some time, experts and teachers realized that simply being equipped in school cannot solve problems and problems.

b) Software and materials course. With the acceptance of equipment and devices by schools, the production of educational materials (software) started by photographers, filmmakers and videographers. Preparation of books, posters and educational maps for children started from this period. The conducted research did not show a difference between traditional education and education with the help of educational materials. Because the role of elements such as teacher and student in teaching and learning was not considered.

c) Curriculum course. By observing that the existence of hardware and software do not have the necessary efficiency in schools, educational planners concluded that all effective elements in education should be taken into consideration. Therefore, according to the general theory of systems, attention to the precise needs of learners and precise determination of goals are important and effective on each other. In this course, educational materials and resources are used for the curriculum and the teaching and learning process is viewed as a system, and educational systems (regular educational design) are proposed. That is, in this course regular design of teaching (teaching) or educational technology (teaching) was considered.

d) The course of educational systems. In this course, the training of people was discussed according to their needs and about their society. He produced and developed all kinds of educational media according to the needs of the society. Groups such as sociologists, psychologists, economic planners

and systems analysts were added to the group of previous courses. Education at this stage was not only school education but was done at the community level.

e) Courses on social systems. At this stage, educational technology is not specific to individuals or organizations. Rather, it includes the field of action of every person or organization that works for the growth and development of their country. The coordination of the activities of educational and executive organizations is considered to carry out educational activities. At this stage, educational technology should be included as one of the factors in the planning of each country, and all institutions and organizations should pay attention to it for the implementation of their educational programs.

What is technology?
Technology can be defined as all knowledge, goods, processes, tools, methods and systems that are used to create and manufacture goods and provide services. Technology is the way we do things. Technology is a tool by which we can achieve our goals. Technology is the practical implementation of knowledge, it is a tool that comes with the help of human efforts. Technology encompasses much more than cars. There are several other technological identities other than hardware, which include software and human skills. Zeleny (1986) revealed and highlighted this matter by stating that every technology consists of three interdependent, mutually determining and equally important components:
1-Hardware: the physical structure and logical arrangement of equipment or machines that are supposed to be used to perform necessary tasks.
2-Software: knowledge of how to use hardware to perform necessary tasks.
3- Brainware: reasons for using technology in a certain way. This can also be called technical justification.
4- In addition to the above three components, a fourth component should be considered independently, because this component includes all levels of technological success:
5-Technical knowledge: learned or acquired technical knowledge or skill about how to do things correctly. Technical knowledge can be the result of experience, knowledge transfer or practical practice (Gould and Kolb: 2014, 262).

Definition of educational technology
Educational technology, in its new sense, does not discuss audio-visual devices. Also, the purpose of educational technology is not to promote and develop television, radio educational machines, computers and other old or new educational tools. In addition, educational technology does not apply to mechanical or electronic devices, and if one day the electrical outlets are blocked or the electricity is lost forever, educational technology will still exist and we will always need it. Because educational technology is as wide as education. Educational technology, in practice, depends on the design and evaluation of curricula, educational experiences, their implementation and reformation, in other words: educational technology is a principled and logical method for solving educational problems and lesson planning with a kind of systematic thinking. and scientific) is accompanied. According to this concept, applying the title of educational technology to audio-visual devices or other educational tools and educational aids does not seem correct. Of course, this does not mean that audio-visual devices or educational media are not used in the educational technology method; On the contrary, the use of audio-visual devices and the use of media are hidden in all concepts and definitions of educational technology. However, none of the accepted systems of educational technology considers tools and media as a goal and considers them as a means to generalize and reach results sooner (Faradanesh, 2010)

The necessity and application of educational technology

The title of the use of technology in education and training includes any possible means and information that can be used in education and training. It deals with all types of designed media. In other words, the use of technology in education is the same as the popular concept of educational technology, i.e. the use of audio-visual devices, monitors and computer keyboards. The general domain of audio-visual devices includes two separable parts: one is hardware and the other is software. The hardware part deals with physical and real equipment, such as overhead projectors, slide projectors, tape recorders, and televisions. The software section includes many items that are used for the aforementioned equipment and devices, such as overhead transparencies, slides, audio tapes, videotapes, etc. The use of technology in education and training is one of the important aspects of technology. The main role of educational technology is to help improve the overall efficiency of the teaching and learning process. In education and training, this efficiency can be improved and can appear in various ways. for example:

1- Increasing the quality of learning, or mastering it. 2- Reducing the time used by learners to reach the desired goals 3- Increasing the efficiency of teachers in terms of the number of learners they are taught, without reducing the quality of learning 4- Reducing costs, without affecting the quality 5- Increasing the independence of learners and the flexibility of educational facilities (Sakhaei and Dehghani, 2014).

Application of educational materials and tools in teaching and learning

None of the educational media alone can handle all the services, but a proper combination of them can always help teachers in teaching and students in learning. As for the role of materials and equipment in teaching and learning, it has been a long time since educational researchers and scientists have been trying to reveal the role of such materials and equipment in education through research and research. The authority of the teachers and educational affairs officials. This insistence is more important for them because, firstly, the teachers did not use educational media under the influence of unconscious imitation, secondly, the officials, planners and decision-makers of educational affairs in general, considering their undeniable role in providing credit and providing such materials and The means not only did not spend unnecessary fatigue, but also did not hesitate to help and help as much as possible.

The role of educational materials and equipment

Today, educational aids, both simple and complex, are used as a tool to facilitate teaching and learning in educational systems. These devices are important in that they combine theory and practice, make learning permanent, consolidate findings and provide variety in the classroom. According to the scientific and technological advances in the present era, educational aids as an interface have been able to play their role well. It is obvious that if teachers have the necessary skills to use these devices, their effectiveness will be better. Today, experts and thinkers of the world emphasize the important and determining role of educational technology in the teaching-learning process and they believe that the optimal use of educational aids instead of teachers will have constructive effects in improving the quality of education. The correct use of educational aids by teachers facilitates the learning process and because it makes the learning tangible and objective, it plays an important role in fixing the learning materials in the minds of the students, stabilizing the learning and encouraging the students to study. Slow (Zolqader Nasab et al., 2014).

The right way to use educational media

A- The effect of media on students' learning methods: About 98% of all the information we get enters the brain through the senses. There is also the fact that more than 87% of learners prefer to

learn visually and by touching an instrument, so we have guidelines for future educational planning, although the beginning of every education is by listening.

B- The effect of media on students' learning motivation: According to Jenson (1997), abstract interactive learning that includes the use of media types, compact pages, the Internet, distance learning, or virtual reality requires the use of memory and quantitative types. Motivation is natural, while traditional forms of education have many costs and need more natural motivation to be effective. Also, students should try to do traditional learning activities that are not meaningful for them.

C- The effect of the media on the control of students' behaviour: Most of the disciplinary problems in the classroom are caused by factors such as marginal work, incorrect understanding of information and incorrect learning methods. The students who enter our class have a part of the multimedia world with them from the time of their birth until now. Today, three-year-olds can insert videos or DVDs into their respective devices and watch them, or if they want to find out about something, they can do so by searching the Internet, so it should not be surprising that they cannot They should sit quietly during classes with low technology facilities and not have disciplinary problems. We are saddened by the fact that our students are weak in learning mathematics, but we still teach this main lesson in the form of lectures and assignments. If we can find ways to help this student learn how to do math and use it in the real world - outside the classroom - we can expect students to improve in math. The media can help us to achieve this goal quickly.

D- The effect of the media on reaching high levels of thinking: Many websites teach and encourage high-level thinking (such as creativity, problem-solving, comparison and confrontation, and evaluation) and if we teach them to our students Let's not introduce that we have wronged them. The use of media is the key that leads students to high-level thinking. Teachers and students should be familiar with how to use the Internet and many software programs that lead them to achieve high-level thinking skills. We need to guide students to try harder in using media and provide feedback on their work. The use of media in the world outside the classroom leads students to problem-solving and decision-making. Harold Van. In the study he conducted about the effect of media on students' learning, Glinki concluded that when computers are used to solve problems in high-level mathematical concepts are used together with teachers who have the necessary skills to guide students to achieve results. Let's say, the use of computers is associated with useful and meaningful learning (Kargar and Ghasemi, 2015).

Learning Assist Tools

Educational aids refer to tools and facilities that are used by teachers and students during teaching for a better understanding of course materials and effective learning. These teaching tools take the mode of mere lectures and make learning easy and possible by using different senses.

Educational aids have a special place in terms of coordinating theory and practice. The use of educational aids by the teacher during teaching makes the student achieve meaningful learning.

Unfortunately, the regular and principled use of educational aids under any heading is forgotten in school, and the lack of use of educational aids is often justified by the lack of time and lack of equipment. The use of educational aids causes mobility and dynamism in the educational system.

How to use educational media appropriately and inappropriately

The first step: identifying learners (analyzing the characteristics of learners)

The first step of this model is to know the learners. Learners can be examined according to their general characteristics and special competencies of knowledge, skills and attitudes about the subject. In the classification of general characteristics, it is intended to specify and identify learners from aspects such as age, class level, and cultural, economic, and social factors. These factors help the teacher to determine the level of the lesson and choose examples that convey the main purpose to the learners. For example, non-print media may have a great impact on students who do not have sufficient reading skills.

Second step: Statement of educational goals
The second step in this model for using educational media is to express educational goals. What kind of learning objectives should learners achieve? In fact, what new ability should the learner acquire at the time of completing the training? The goals that the teacher expresses must be exactly achievable.

Third step: Selection of media and educational materials
The media selection process points to two points:
A) Choosing the right medium for implementation.
b) Selection and design of new educational materials.
Choosing the right media is a complicated task because no one has asked the question, of which of the media is more useful in education. He has not given a complete answer. Each of the educators and leaders in the field of education has tried to answer this question differently. However, it is certain that if the media are chosen correctly, they will be effective in teaching. In choosing the media, attention should be paid to the tendency of the students towards the desired media, their perception in terms of the amount of learning through that media and the choice of the media by the students themselves, and in each case, the necessary predictions for the selection of the media should be made. Sometimes the special characteristics of the content require a special type of media.

Fourth step: Effective use of media and educational materials
After the media and teaching materials are chosen, the teacher should think about how to use them and how much time is needed to use them properly. Sometimes it is not possible to use a medium in a limited time and this causes another medium to be chosen which is at the lowest level in terms of achieving the goals. Also, at this stage, the class and the necessary equipment for reading should be prepared. In this context, the following can be mentioned:
A) Preparation of the learner: If the learner does not pay attention to the teacher's lesson and does not cooperate with the teacher in the implementation of educational activities, teaching will not take place in its real and practical sense. The attention of the student and his cooperation also require preparation for the activity.
b) Preparation of the teacher: One must be prepared to do anything, education is not exempt from this rule. The teacher should consider what he wants to say in the class, how he wants to start the lesson, how he wants to use the educational media, what goals he wants to pursue, how to create motivation in the class and continue this motivation until the end of the class. Finally, how to finish the lesson.
Fifth step: implementation by the learner
The fifth step in this model is to prepare opportunities for learners to learn practically. It took a long time for educators to understand that participation in the learning process enhances learning.
The sixth step is: evaluation
The last step of the model for effective learning is evaluation. The evaluation of most of the lessons learned is of the type of pencil and paper (written) tests. The purpose of most of these studies is to measure the academic progress of students.

The role of new educational technologies in changing and transforming educational methods
The application of information and communication technology is expanding rapidly in the current era and has changed all aspects of life, including education, in its different forms. New technologies in the programs of the education and training system have effective and material steps that can lead to the qualitative evolution of the goals of the programs, methods, and as a result, the effectiveness of education and training. Choosing the needs of the audience affects the centrality of students and their interests in learning and changing the role of the teacher as a guiding factor, as well as achieving continuous and lifelong learning; Of course, what is the missing link of educational

thinking and paying attention to it is of particular importance is the accuracy in the positive and negative use of new technologies in the education system. The 21st century is the century of knowledge. In other words, it is a century of change from an industrial society to a post-industrial society or information society. With the growth and expansion of information technology, intangible assets, especially knowledge, play a more colourful role and create added value. If the teaching-learning culture in the education system does not change, not only the introduction of information technology into this system will not bring about any changes, but it will lead to the strengthening of the conservative traditions of education because it is not information technology that alone causes change. Rather, it is these people who are considered to be the main cause of transformation. The development of information technology in an efficient educational system is not just a choice but an undeniable necessity and is considered an important step in the reform of educational systems (Bakhshi, 2013).

Characteristics of educational technologies

One of the important features of the information and communication technology phenomenon is that it facilitates and improves the relationship between man and man, as well as between man and the environment. Information and communication technology has an important role in knowledge transfer due to its transformative power and ability to establish dynamic communication with students. Among the features of educational technology in education, the following can be mentioned:

A- Personal learning: In personal learning, a person chooses his favourite field and searches and researches about it on the Internet.

B- Collective learning: In collective learning, we try to use different tools such as discussion halls and internet chats. Students are present on the Internet at the same time and discuss and exchange opinions about the subjects of the course or the exercises and research provided by the professor.

C- Virtual classes: Virtual classes have been mentioned as the best and most effective method of electronic education. In this method, the teacher and student see each other's image and exchange opinions.

Investigating strategies for the development and promotion of information technology in the educational environment

Education and how to do it has always been desired by theorists and philosophers since ancient times, especially in the present era when science is increasingly moving towards specialization and experience, and therefore the transfer of new findings to new generations is very important. It is important nowadays to facilitate education and clarify education, to diversify teaching tools and to clarify course materials, the use of educational aids by teachers is inevitable, according to the findings of the psychology of learning, students through Seeing and using different tools make learning easier and easier, because teaching aids make education more realistic, practical and pleasant by activating different senses of students. The emergence of the amazing phenomenon of information technology in two decades. The end of the 20th century and its development in the formal education system of leading countries has led to the expansion of learning opportunities and easy access to educational and learning resources, educational aids, both simple and complex, as a tool to facilitate teaching and learning. They are used in educational systems. These devices are important in terms of combining theory and practice, making learning lasting and diversifying in the classroom.

Discussion

Many teachers and trainers believe that in the matter of education and teaching, many cases and topics cannot be well conveyed to students and learners in the traditional and old way. Therefore, nowadays, to clarify the issue of education, diversify the means of the teaching process, and clarify

the subject matter, the use of educational aids by teachers is inevitable. By using educational aids, students objectify the learning and teaching process and learn new things easily during the teaching process. Exploratory presentation requires the discovery of superior skills including skill and perception components by the student. Discovery is through direct experience in which the student learns the skill by trying to do it, or through vicarious experience in which he learns the skill by thinking about the case study (written or video). In any case, it has been proven that guidance in the form of guiding questions reduces the time of discovering a superior skill, without reducing the depth of its processing. After a skill is discovered, the learner should receive feedback on the relative merits of their skill compared to other discoverable skills, and the skill should have practice with feedback so that the learner can apply it to the full range of situations that require that skill. We know that to have a successful and powerful teaching in which students can receive and analyze the presented materials in the best way, it is necessary to use principles, methods and facilities to help facilitate and strengthen teaching and learning. One of these methods and facilities is educational technology. Educational technology solves educational problems by using the findings of all sciences. Its main goal is to create more effective and sustainable learning change the quality of learning and increase educational efficiency. Therefore, we found out what effect educational technology has on students' learning and also how we can use educational technology in the best way for more success in teaching.

References

1. Bagheri Far, Musa and Ebrahimi Shahroudi, Kulthum and Dehwari, Farhoud and Kordzabelli, Farhanaz, comparison between education and training today with education and training of the past, Proceedings of the National Conference of Modern Researches in Management, Economics and Human Sciences, Kazarun, 2016.
2. Bakhshi, Hamed, The role of new technologies in education, collection of articles of the first national electronic congress of Iran's new technologies to achieve sustainable development, 2013.
3. Sakhaei, Shahnaz and Dehghani, Marzieh, the necessity and importance of educational technology in deepening learning, collection of articles of the first international conference on management, economics, accounting and educational sciences, Sari 2014.
4. Shakib, Alireza (2019) "Teacher, yesterday, today, tomorrow" taken from his blog.
5. Aliabadi, Khadijah, 2013, Introduction to educational technology, 19th edition, Tehran, Payam Noor publishing house.
6. Faradanesh, Hashem, 2010, theoretical foundations of educational technology, Tehran, Samt Publications.
7. Kargar, Ehsan and Ghasemi, Amin, investigating the effect of educational media in optimizing the teaching and learning process, International Congress of Islamic Sciences and Humanities 2015.
8. Gold and Kolb, 1384, Culture of Social Sciences, translated by Mohammad Javad Zahedi, second edition, published by Maziar.
9. Walter Willinger, Ramesh Govindan, Sugih Jamin, Vern Paxson, and Scott Shenker (2002). Scaling phenomena in the Internet, in Proceedings of the National Academy of Sciences, 99, suppl. 1, 2573–2580