

An Introduction to Avicenna's thoughts on Educational Methods

Reza Ali Nowrozi¹, Hassanali Bakhtiyar Nasrabadi², Kamal Nosrati Heshi*³, Hossain mansoori⁴

1. Assistant Professor, Department of Educational Sciences, Faculty of Educational Sciences and Psychology, University of Isfahan,
2. M.A. Student, Department of Educational Sciences, Faculty of Educational Sciences and Psychology, University of Isfahan,
3. Associate Professor, Department of Educational Sciences, Faculty of Educational Sciences and Psychology, University of Isfahan,
4. M.A. Student, Department of Educational Sciences, Faculty of Educational Sciences and Psychology, University of Isfahan,

* E-mail of the corresponding author: kamalnosrati1367@yahoo.com

Abstract

The goal for this article is to express the views proposed by Avicenna regarding the methods for training and education. The current study has taken advantage of a qualitative approach with a qualitative-analytical method, and has analyzed and inferred the views held by Avicenna regarding education and civilizing methods. The educational methods inferred from his perspectives are as follows: The education method as in collective-cooperative, observation-experiment and examination (the opportunity for practical learning), the rewarding and punishment method for the learners and the rules and notes with that respect, modeling methods, repetition and practice of the learned materials, discussion and debate methods, questioning and answering methods, memorizing and retaining the information, ways to advise and guide the learners, game plays, self-discipline, moral refinement, and finally declaring love for the learners.

Key Words: Moslem Scientist, Avicenna, Method, training.

Introduction

Method means variability and diversity in philology, such as: rule, policy, style, manner, fashion, etc. It has been defined as: method is referring to a set of methods and contrivances that are used for understanding the truth and avoiding any stumbling. More precisely, method includes three things: a set of rules that helps humans to discover the unknowns and solve tactical problems; a set of rules that must be applied during study and investigation for the truth; and a set of tools and techniques that help us achieve knowledge from unknown (Saaledi: 2007, 5). Mr. Hooshyar says: method can be the way, style and tools for achieving goals based on a certain educational framework and plan; of course, adoption of educational methods is based on the educational principles and goals of each school of thoughts. Method is the way or manner that is stretched between the principle and the goal and disciplines the educational action and causes the instructor to achieve his goals (Hooshyar: 1952, 22). In addition, Ghaemi in defining "method" says that method is a set of efforts and tools under that shadow of which we are able to transfer the educational contents to the children in a faster pace (Ghaemi: 1999, 200) and in Mr. Mortazavi's definition, method consists of the way to do a work or the way of using tools for achieving the targeted goals; in other words, the manner for implementing educational principles (Mortazavi: 1990, 42). From the above definitions we can conclude that method consists of all the efforts and tools and ways that deliver us to our goals and it is a connection between the educational principles and educational goals. Of course, methods have an instructional and practical nature and advise us on how to act to achieve our goals.

Considering that the goal in education is to actualize the talents, realization of talents into actions is in pawn of observing some correct educational methods, because methods are efforts, tools and ways that help us achieve goals; i.e., transformation of talents into actions. As a result, for the high position of method in helping humans reach their goals, the current study is after discovering some educational methods derived from Avicenna's works. This is because Muslim thinkers, from philosophers to others, in the light of humanistic teachings of Islam have taken great interests in issues of human, perfection, and prosperity and ways to achieve them. They have established some disciplines of thoughts for answering the questions regarding human and his ethical issues and in doing this, they have taken advantage of religious teachings and also the teachings by other philosophers. Among these philosophers, Avicenna is one of the scientists who has focused on the issues related to human, perfection and prosperity. His educational methods in training humans and helping them achieve salvation can be noted. Therefore, in this study we are looking at some of the inferences taken from the works of Avicenna. In addition, in the process of each country's education we must look at the cultural needs of that country's learners

that are in agreement with that country's culture. This is another reason for discovering the educational methods in the view of Avicenna.

To briefly introduce the position and importance of this Muslim scientist, we can say that Abu-Ali Sina Hossein ibn-e Abdullah (370 – 428 Lunar Islamic calendar / 980 – 1037 AD) The great world-known philosopher and doctor of the Islamic world was born in Bokhara and following the learning of Koran and Arabic Literature, he studied the basic sciences near some of the masters who lived in his hometown, such as Nateli. Avicenna studied philosophy and logic and in a very short time mastered the medical sciences and following the treatment of Amir Nooh-ibn-e Saamaani gained a lot of fame. After some time he dedicated himself to some governmental work and in around 392 joined the Kharazm-Shahian court. During a political unrest, he headed to the city of Gorgan and after the removal of Ghaboos-ibn Voshmgir from the office he set off for the city of Ray. He then had a ministry position in the Booyeh's government in Hamedan and Isfahan and was not away from the dangers of the position (Beyhaghi, 1930, p. 38-58). His life was full of exertion, activities, and change. He was always committed to studying, teaching and writing, and left many works behind. As Joozjani (one of his students) claimed, on some of his trips while he did not have access to any source or references, he authored up to 50 pages of text and this is an indicator of his powerful memory, innovation and inexhaustible will in writing. For translated books, Avicenna is known to have over 100 works. In a comprehensive glossary gathered by Yahya Mahdavi, 131 original works and 111 attributed works (Mahdavi, 1934).

Teaching, continuous studies, pleasure, traveling, prison and authoring to the extreme made him weak – to the extent that he got a cold and could not survive it. After a time, he withdrew from his treatment and on the first Friday of Ramadan of 428 Hijri calendar at the age of 58 died and was buried in Hamadan (Ibn-e Assir, 1986, Vol. 8, P. 225; Ibn-e Almaad Hanbali, 1979, Vol. 3, P. 235 and 236; Safa, 1952, Vol. 1, P. 37 and 38). In this study, the focus was on the Avicenna's ideas of educational methods; however, we noticed that there have not been extended and comprehensive reliable sources available in this regard. Next, we will provide a summary of the researches around his educational perspectives: Ziba-kalaam Mofrad and Heydari (2007) in a study entitled "A Review of the Avicenna's Notions on Education and Ethical Training with a qualitative/analytical approach" reached a conclusion that in Avicenna's view education must take place under the umbrella of religion, with an emphasis on reasoning and thinking. As a result, we can conclude that he looks at education with an intellectual approach but with an ultimate divine ending. In our study, we have focused on the goals, principles, and bases of education and ethical training from the Avicenna's perspective. Davoodi (2008), in a study by the title of "Learning and its Important Effective Factors from Avicenna's View with a qualitative and analytical approach" announces that Avicenna has left some educational notions that are compatible with Islamic culture. These notions can also be utilized in a modern native educational theory in the present time. He explains "learning" as acquiring a knowledge that was not known before and divides it to three types: direct learning without any mediation, intellectual based learning and learning by illusion. Among the three types of learning, what can help make the psychology of learning native is the first one which has been ignored in the contemporary theories of learning psychology. In explaining the process of learning, Avicenna believes that educational activities only lay the foundation for learning, and the only cause for learning is the result of an active mind. Besides talent, he also takes the occupation and egotistical attachment, power, and honor into account which again have been neglected in the modern psychology. Paying attention to these points can enrich the researches on the topic of learning. Badkoobeh Hezaveh (2009) in a study titled as "An Introduction to Avicenna's Notions for Educational Methods in an analytical and documented approach" concludes that education and ethical training have some goals, principles and bases that must be observed when you are training the learners.

Javidi and Jafar Abadi (2005) in their work of "The Approaches of Islamic Philosophers on the Self and their Educational Implications" (Avicenna, Eshragh Sheik and Molla Sadra) with an analytical and expressive tone reveal that getting to know "the human" and "awareness of his/her characteristics" are the main sources for extracting and compiling educational goals and scientific, philosophic, religious and mystical strategies for "human identification". In this article, to compile some educational goals in an Islamic society, a philosophical approach on human self has been considered. To do this, the theories by Avicenna, Eshragh Sheik and Molla Sadra were considered based on the following three bases: the essence of the self, the proofs for the existence of the self and the relation between the self and the body. So based on the studies of human nature, the above thinkers have drawn the goals of education and ethical training. Upon the researches conducted, it has become obvious that no deeply rooted and comprehensive study on the educational realms of the Avicenna's view been yet performed. Because of this lack of studies, we are trying to light up some of Avicenna's views on educational methods. **Finally, the goal of this study is to find out about the methods of ethical education in the view of Avicenna.** We have then focused on the works of Avicenna using an analytical and descriptive approach.

Methods of Ethical Training in Avicenna's Views

1. The Collective/cooperative method:

Collective learning is referring to a method of education in which the students work together to reach a common goal, and not only does the learner feel responsible for his/her own learning but also for his/her teammate learning. Therefore, Avicenna puts an emphasis on collective learning and believes that children must acquire knowledge in a collective manner. He says: "it is well-deserved that the child is accompanied with other children of notables with honorable behavior, because children learn from each other." (Avicenna, 1983, 38). Avicenna believes that this method of ethical training and education will have some useful results:

A) **Ethical training:** collective education will make children take up the good deeds and habits of their peers. Avicenna notes that collective training effects will result in ethical purification of the children and will stimulate their efforts and good habits.

B) **Social training:** the child is getting ready for his or her future social life. From Avicenna's writing we can infer that collective education and the relationship and friendship of the child with his or her peers in school will develop the manners in these children and the way to relate to others and will facilitate the socialization process in them (Araafi, 1998, Vol. 1, 285-286).

C) **Cognitive and intellectual actualization:** When children converse with each other and narrate their interesting events and experiences for each other, it will help the development of their cognitive and intellectual power. This will also stimulate the surprise feeling in them and causes them to memorize the story heard and reiterate it for others (Avicenna, 1926, 39). He has also considered competition, envy, and pride among children and believes that these factors can encourage children for more learning.

D) **Satisfaction of emotional needs:** Avicenna points out that collective teaching along with playing games, friendship and conversation with peers will bring happiness for children. By persuading the collective learning method, he is trying to satisfy the emotional needs of the children and believes that children seclusion and private training will not fulfill these needs (Avicenna, 1927, 39, 89). In conclusion, collective learning can result in the most amount of learning, with the condition that the collective goals will match with personal goals. This will also imply that each member of the group is responsible for realizing and achieving the learning goals. This method is the main focus of many education practitioners in many countries around the world today.

2. Observation, experiment and examination method:

In Avicenna's view, the desired and suitable method in learning about the nature is the inductive and experimental observation. He as a great philosopher, doctor and physicist is one of the advocates of experimental method in his research works. Some of the things that he has reported in Shafa as his personal experiences are recounted here: in a chapter in Shafa (one of his books- translator) about "the crescent" and "rainbow" writes about his experience as follows: "I have experienced this many times" (Avicenna, 1984, p. 266). In a chapter related to animals, he writes: "this matter has been experienced and has become popular" (Avicenna, 1984, p. 414). And in the fifth branch of Shafa about asteroids that sometimes reach the earth reminds us: "in the Kharazm region I melted one of these stones and some greenish colorful smoke was continuously dissipated to the point that just some ash was left behind" (Avicenna, 1984, p. 249-250).

As it became clear, Avicenna used the Observation, experiment and examination method to learn about the natural phenomena. So this method can be used to train the learners and persuade them into Observation, experiment and examination method. The advantage of practical learning has been proved over the theoretical learning. Since the learning by this method has been achieved by direct experimentation, the learning is more stable and effective compared with that when learning happens by theoretical methods. In this method, students experience the learning objectives by experimenting and working through practical means and for the sweetness of these experiments, the learners will be bored less frequently. In the end, we can utilize the experimental method of Avicenna in educating and training the learners.

3. The reward and punishment method:

The reward and punishment method is a suitable method in stimulating humans toward good deeds and preventing them from the evil deeds. If this method is applied appropriately, it can serve a very good and effective role in training and constructing human character. The reward and punishment method is a different educational method and must have some features to be effective. These two techniques can prevent spoiling of children if they are used correctly and in a timely manner. After persuading the children's instructors to good morals and preventing them from wicked acts and habits, Avicenna recommends the reward and punishment method as a way to guarantee his advice. The instructor's reaction must always be in proportion to the student's behavior and morality, both qualitatively and quantitatively. For example, in response to inappropriate behavior,

he should first shun the student, then show moroseness, and then intimidate and finally punish him (Avicenna, 1926, p. 36). He then utters that the reward and punishment can be implemented in various ways, and the instructor should not use a particular method to punish or reward all the time. He can use verbal encouragement and praise for his good behavior and then can establish a close and friendship with the child (Avicenna, 1926, p. 36). Avicenna finds corporal punishment as an acceptable method if it is necessary, but sets some conditions for applying it:

A) The first round of punishment must be very harsh and painful so it can intimidate the child and notify him of more painful punishments if he continues his wrong doings. On the other hand, if the first punishment is light, it will not gain the expected results and will not stop the child from committing the bad behavior in the future.

B) The corporal punishment must be after a harsh intimidation. Perhaps, the reason for this Avicenna's condition is to impress the child's memory to stop him from committing this action again.

C) Corporal punishment must be implemented after providing some mediators for intervening and requesting for forgiveness. It seems that the reason for this condition is prevent the child from doing abnormal behavior and not taking revenge. If Avicenna recommends a very harsh punishment for the first time, it is for its preventive purpose so that it won't be needed again. So some mediators are required to intervene and stop the punishment when it seems to be sufficient (Avicenna, 1926, p. 36-37). In conclusion, the reward and punishment of children must proportional with the children's behavior, and all the conditions must be met before implementing them to achieve the best possible results.

4. Modeling method:

humans instinctively aim for absolute perfection, and look for models and for this reason, one of the best and shortest methods for educating children is to provide them with some model and practical ethical training. In this method, an actual model is provided and can be inoculated and obeyed if the model is accepted by the learners. He then tries to adopt all aspects of the model to be as similar to the model as possible. This method, for its reality and imperceptibility, is a very effective and fast method in education. The more perfect the model, the more attractive and practical it will be for the learners. So the best model is a perfect and complete version of a human figure.

Regarding the effect of this method, Avicenna writes: considering the model taking and attention of children to model each other's behavior, children must be collectively and along with their peers and especially those grandees and the ones who know about appropriate behaviors and habits and try not to fall behind from others (Ramezani and Heidari, 2012, p6) and the instructor must have good character and be void of evil morality. He must be gentle and patient and insipidity, and be humane and noble (Avicenna, 1926, p. 37-38). It is obvious that a person without these qualities cannot inspire such qualities in his students. So the instructor, not only in personal level, but also in social level and in relation with others must have high moral standards. He must have socialized with other noblemen and noblewomen and also be aware of the other members of the society. He must know the manners for eating, speaking and socializing with others (Avicenna, 1926, p. 38). Therefore, one of the other important methods in educating and ethical training is modeling, and the more important issue for teachers, instructors, fathers and mothers is to help the students to have the required insight for identifying the correct characteristics in their models, and not to idolize their models and be misled from righteousness.

5. The repetition and practice method:

The repetition and practice method is an effective method for learning, and is widely used in classrooms today, by the teachers. This method helps learning to be more rooted in the person's memory. Looking at Avicenna's works, we find out that he strongly believed in the repetition and practice method. This method can be used to enforce a good quality in the self, or remove a bad quality from the self. Morals, whether beautiful or nasty, are all attained; that is, a person can attain a behavior or moral quality which has not had it before, by repeating and practicing. Also, with the help of will, he can convert a quality to its opposite (Avicenna, 1988, p. 373). Avicenna defines "temper" as: temper is an angel that helps some deeds and actions be issued from the self with ease and certainty (Avicenna, 1983, p. 429). Avicenna, as his predecessors, identifies the source of temper of the self in habits, and habits are defined as: numerous iterations of actions in a long time and in a similar condition (Avicenna, 1988, p. 373). As a result of repetition, some human deeds and behaviors like anger, imagination and feeling take up a shape and form that we call it "temper" (Avicenna, 1982, Vol. 2, p. 306).

In explaining this, Avicenna says: the relation between the soul and body causes an interaction between them. The body and the its powers require some affairs and the self also causes some affairs, using the mental powers, which sometimes are in opposition to those affairs required by the body. Therefore, sometimes the soul pulls the body and forces it to do something and sometimes it surrenders to the body and accepts the body affairs and needs. When the soul continuously surrenders to the body, a condition appears in which the soul cannot stop the body's movements and wants. On the other hand, if the soul prevents the body's movements and wants, a

condition appears in which the body cannot easily pursue its desires (Avicenna, 1988, p. 355). Therefore, the position and importance of repetition and practice in forming the human's behavior shows how it can be utilized in educating the learners.

6. Discussion and debate method:

Discussion has an important role in making the work more effective because it allows students to speak as they wish and make statements and makes them more active learners. This method is mostly used for materials of knowledge base. The teacher must have set the goals and subjects and plans, and must predict the result of the discussions, beforehand. He must also monitor and lead the discussions, phase by phase so that they do not diverge into any solid results or just empty talks. (Jahanshahi, 1971, p112). Avicenna has also used this method to discuss important matters with great scientists of his time such as Sheik-o-Reiss and Abolhassan Kharghani and Abu-Saied Abul-Kheir (Froozanfar, 1955, p. 185).

7. The Question and Answer Method:

One of the methods used in educational activities and teaching programs is the question and answer method. The question and answer method is to create motivation, and stimulate curiosity, and empowering the mind and activating the students in class. As a result of some analysis on Avicenna's works it becomes clear that he used this method in his personal life to correspond with great intellectuals of his time like Abu-saeid Abul-kheir and Abul-hassan Kharghani. In these correspondents, Abul-saeid Abul-kheir has asked some mythical questions and received his responses (Froozanfar, 1955, p 185). In some other places, Abu-Saied has asked questions about fulfillment of prayers, the quality of pilgrimage, its truth and its effect on the soul and has described the response by the Sheik as "supreme" and "impeccable" (Avicenna: 1988, p388). In addition, in another article, Abu-Saied Abul-Kheir has asked the Sheik to guide him. The Sheik writes some few sentences with regard to faith, blasphemy, and Islam and when the response reaches him, he praises him (Avicenna: 1988, p398). Applying this method will help increase the student participation in educational activities. This will help to diversify the class and increase the students' self-confidence and all these will facilitate the teaching and learning process. It is obvious that teachers who are well familiar with the question and answer method can gain considerable results in their teaching work.

8. The memorization method:

another method used by Avicenna for educating his students was to memorize the materials. The memorization method is one of the oldest educational methods. In this method, the most important task is to memorize the material by repetition. A teacher with a good command on his lessons mentions some part of the lesson and expects his or her students to practice that by repeating and return the material back to him on the next session or in an exam. Studying Avicenna's works, we realized that he has used this method for teaching his students. Some sentences can be the evidence for this claim: the child must first memorize some simple poems (Rajaz or Paeon) and then continues to memorizing odes. Since the hemistiches of paeans are shorter than those by odes, and it has a simpler rhyme, they are learned must faster and easier than odes. Therefore, children must learn paeans first. The verses memorized by the child must include the rules and principles of good behavior and love for fellow humans motivating high moral standards in him or her (Alnaghib, 1996, p. 39). As a result, in this method teaching consists of delivering the concepts orally or written by the teacher and the repetition and memorization and recalling by the students.

9. The advice, counseling, and guidance method:

among other methods for training the students, which also has a lot of applications, is the advice, counseling, and guidance method for the learners. The great wisdom of teaching and training lies in advices given. Guidance and advice are two positive measures in ethical training. The parents and teachers, reformists and authorities of the Islamic society must use this method to train their children, because the durability and strength of human life depends on advice and guidance, and nobody is free from want of advice and guidance. One of humans' responsibilities and rights to each other is to advise and remind. Avicenna in his book titled "home management" refers to the advice, counseling, and guidance method and has viewed it as one of the educational methods. He says: giving advice and counseling must be done wisely and with softness. When advising, you must speak softly and in a very private place (Avicenna: 1926, P. 24 & 34). Finally, the advice, counseling, and guidance method is one of the most useful methods for training children and students, but you must observe the important rules when giving advice.

10. Playing method:

Playing is one of the initial and necessary needs of the children. The more opportunity to play healthy and constructive games, the more physical, mental and cognitive development is achieved. It also helps them to develop their social skills. There is no time better than the first few years of life for games to show their influence on the children's growth. So, paying attention to childhood years and playing effects are very essential

matters. Avicenna has also paid significant attention to the educational role of playing and recommends it for the beginning years of life. He explains that sports and playing can be different for different children depending on the age and ability of the children. Exercises can be very calm and relaxing or very intense and exciting. Each one of these sports and games has a special place in the youth's life (Al-naghib: 1997, P.37). With regard to this matter, Avicenna says: when a child wakes up, the best thing is to take a shower and then let him or her to play for an hour, then feed him and then let him play some more, then shower again and again food. Playing is very important in this stage of a child's life by which he can develop the physical and motor skills in the child and teaches them how to work together in a group (Al-naghib: 1997, P.39). Playing games is essential for students, too, and develops their social relations, participation, confidence and cooperation. Playing games provides a balancing process that can help achieve all the goals for growth such as observation, experimenting, problem solving and creativity. It helps expand physical, articulating and social skills; and most important of all, it helps learning as an enjoyable phenomenon in them and creates a constant motivation for going to school and receive academic teachings.

11. The self-discipline and self-refinement method:

despite laying a lot of emphasis on the importance of intelligence, he finds intelligence incapable of learning about the truth and points to observation, discovery and intuition as the required tools for insight. This conclusion was reached at around the end of Avicenna's life. Therefore, for training the learners the method of self-discipline is recommended for salvation and prosperity. He says: to acquire knowledge and insight, the tools are not in the realm of intellect, feeling, and experience alone, but a type of intuitive insight can be achieved that the tools for it are self-discipline, self-refinement and liberation from want.

By self-discipline and joining the world of angels, the learned soul can receive insight. As Avicenna believes a disciple moves on with the help of self-discipline and reaches to a level that a constant and continuous dialogue is provided to him (Avicenna: 1996, Vol. 3, P. 385). Therefore, teachers can use this method to educate their students and encourage their students to self-discipline and self-refinement to achieve a knowledge that in no other way can be achievable.

12. The expression of love to the learners:

of the other methods of education is that a teacher expresses love and kindness to his or her pupils. By doing this a very strong, deep and bilateral bond is formed between the two. This will persuade the students to listen to the teacher's words and feel responsible for doing the homework assignments. Thus, the trainability of a child depends on the level to which he or she feels to be loved and as a human and a member of family or school is counted for. This is because humans are inherently inclined to kindness and attention by others. Kindness is an authentic psychological need in humans and attention by others to this need can add a very special sweetness to their life and well-being. Avicenna was also aware of the importance of expressing love and kindness; although, he was focusing on the marital relationship, but this can be extended to the relationships between the teacher, pupils, parents and children. So Avicenna says: kindness and friendship will lead into the strength and continuity of the family. He also declares that if the nature of two people does not contain any kindness and friendship towards each other, whatever effort is put in order to unite them, no result but evil and separation will not be achieved (Avicenna: 1983, p. 449). So, teachers and parents can get their learners' trust and establish a friendly relation with them, to achieve educational goals, in turn.

Conclusion

By what was said we can conclude that by education we provide the humans an opportunity to develop their talents and gradually actualize and crystallize. Therefore, fulfillment of talents and achieving goals without paying attention to the right methods of education will not be possible. It is with the help of right training that humans reach prosperity. As a result, method is the total efforts, tools, and ways that help us achieve our goals and it tells us how to act in order to reach the desired results. For the importance of helping humans to achieve the desired ends, this study has focused on the works of Avicenna. The Muslim scientists have had various insights on human and his prosperity, due to their extensive studies on the subject. Avicenna is one of these Muslim scientists who has authored many works in this matter.

In the study conducted, 12 educational methods were inferred from Avicenna's works that are: First, teaching in a collective way in which students participate in small groups to achieve some common goals. Avicenna believed that this method causes some ethical, social, mental, cognitive, self-satisfaction changes in the learners. Second, it is the method of observation, experimenting, and examination. By this, direct experimenting and practical methods are used to help students achieve their educational goals. They also learn about the ways to experiment and understand the process. Third, it is to encourage and punish the learners. This method has the most efficient method that must be applied by paying attention to its manners and principles. Fourth, it is to provide a suitable model. By this method, a tangible sample and model which can be inoculated and obeyed will

be provided for the learner and the learner will try to look like the model in every possible way. Fifth, it is the repetition and exercise method. This is another method taken from Avicenna's works and in it the learners can create an admirable quality in them or remove an unpleasant quality from them. Sixth, it is to create an atmosphere of discussion and debate in the classroom. This will cause students to get out of the sole listener mood and be more active learners. Seventh, it is taking advantage of the question and answer method in the process of teaching. This method can be used in all educational activities and teaching methods. Using this method can increase the student participation in educational activities. Eighth, it is to memorize the educational contents, which is considered as one of the oldest methods of teaching. In this method, the teaching occurs by teacher's presentation of oral and written concepts to the students and by student's practice and repetition. Ninth, it is the method of giving advice and guidance to the learners. Avicenna has suggested some conditions so that the learning will take place the best by the learners; such as, giving advice by soft voice. Speaking during giving advice and counseling must be soft and in private. Tenth, it is learning by playing games and Avicenna had great interest in teaching through playing, and recommended it for very young children. Eleventh, it is the self-discipline and self-refinement method that was recommended by Avicenna during his late years of his lifetime. This method had some mystical approach, and despite Avicenna's emphasis on the importance of intelligence, in his late years of life, he found the theoretical intelligence weak in understanding the truths and suggested the self-discipline and self-refinement as ways of getting access to insight. Finally, expression of love and kindness to learners is offered as the twelfth method of education that helps to establish a deep relationship between the teacher and the pupil, and causes the pupil to listen to his teacher's words and feel responsible for his homework assignments.

Finally, it is important to mention that with the exception of a few, most of the methods suggested here are inferred from Avicenna's works. For example, the observation, experimentation and examination were not directly introduced in his works but could be inferred from his words and personal life.

So, it is essential to pay attention to the result of such studies and make use of the results, because these are the result of the reflections by intellectuals who had a comprehensive knowledge of human nature and spent most of their lives to do research on scientific works.

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