The Theory of Five Minds and Its Implications in Education

Mahmood Sabahizadeh¹*, Narges Keshtiarai² and Mohammad Hosein Yarmohammadian³

1. PhD Student in Curriculum, Islamic Azad University, Khorasgan Branch, Isfahan, Iran
2. Associate Professor, Department of Education, , Islamic Azad University, Khorasgan Branch, Isfahan, Iran
3. Health Management Research Center, Isfahan University of Medical Sciences, Isfahan, Iran.

Corresponding Author:*Email: mahmoudsabahi@yahoo.com

Abstract

Howard Gardner is a psychologist who has proposed the theory of five minds. These include: The Disciplinary Mind, The Synthesizing Mind, The Creating Mind, The Respectful Mind, and The Ethical Mind. This article aims at investigating the implications of this theory in education, using various printed and electronic resources available. The findings show mind development is necessary for the success of individuals, communities, and organizations. Educational organization can have a significant role in development of minds through changing educational goals, contents, and methods.

Keywords: Mind, Education, Curriculum, Five Minds.
Introduction

Until the third decade of life, people spend most of their time at school. Students are more in contact with classmates and teachers than parents and siblings. Teachers have a sensitive role as students contemplate about the behavior of teachers, their attitude towards their profession, and how they interact with supervisors, colleagues, and associates. They also pay attention to the way teachers react to questions, responses, and homework done by students. In 2011, Howard Gardner, a contemporary psychologist, published a book titled “Five Minds for the Future” in this book, Howard Gardner shows how we will each need to master "five minds" that the fast-paced future will demand. These include: The Disciplinary Mind, The Synthesizing Mind, The Creating Mind, The Respectful Mind, and The Ethical Mind. Gardner, who has also proposed the theory of Multiple Intelligence, believes being equipped with the five minds enables an individual to face predictable and unpredictable factors of his or her life. Those who are unable to develop their cognitive abilities find their destiny in the hands of forces which are out of their control (Gardner, 2011). Since this theory is new, unfortunately, there are few English and Persian sources available. In this article., the first part introduces and explains the five minds, and the second part investigates its implications in educational system in order to inspire changes and improvements in the system. Therefore, the main aim of the present study is introducing the theory of five minds and its implications in educational system of Iran.

Part one: explaining the five minds

According to Gardner, those who are unable to develop their cognitive abilities find their destiny in the hands of forces which are out of their control. These people are surrounded with large amounts of open information and they do not know what to do with them. In addition, those who do not develop their cognitive skills may be replaced by computers and smart equipment. It is therefore essential for individuals to take the following items into consideration:

a) Each individual should have at least one specialty to survive and have success in the future;
b) Each individual should get plenty of information from various sources and mix them based on their line of interests
C) In the future, those who are able to create a specific intellectual framework and reflect beyond that will succeed.
D) The world of today is different from the world of tomorrow. We should know this difference. We should respect those who have different views from us exactly as much as we respect those who have a lot in common with us. The Ethical mind is able to merge roles at work and as a citizen and act consistently with those conceptualisations, striving towards good work and good citizenship.
E) Citizens and social workers should have an ethical approach to work and life. It means they should look beyond their personal interests and make decisions based on the conditions. Without having at least one expertise, the person has no choice than be a follower forever.

Another mind is the synthesizing mind. The synthesising mind is able to select crucial information from the copious amounts available, arraying that information in ways that make sense to self and others. The ability to knit together information from different sources into a coherent whole is vital today (Gardner, 2011).

The creating mind is the next mind. It is able to go beyond existing knowledge and synthesis to pose new questions, offer new solutions, fashion works that stretch existing genres or
configure new ones. The next mind is called the respectful mind. It responds sympathetically and constructively to differences among individuals and among groups, seeking to understand and work with those who are different, extending beyond mere tolerance and political correctness.

These five minds are different from multiple intelligences. Unlike multiple intelligences, which can be measured by computer calculations, the five minds are function-based and can be developed at school, university, and work. However, each of these mind benefits from one or some intelligences. For instance, showing respect to others demands interpersonal intelligence. Creative minds benefit from one or some intelligences as a poet needs linguistic intelligence and an architect needs to have spatial one. Similarly, a therapist needs linguistic and logical intelligences. A good example is Picasso’s work called Guernica, which is the result of his synthesizing mind (Gardner, 2011).

Table 1: the features of each mind

<table>
<thead>
<tr>
<th>Main features</th>
<th>Kind of mind</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. the ability to think in ways associated with major scholarly disciplines such as history, math and science, and major professions like law, medicine, management, finance</td>
<td>The Disciplined Mind</td>
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<td>2. Having expertise in at least one field</td>
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<td>3. Trying to update one’s knowledge</td>
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<td>4. Fighting with old habits</td>
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<td>5. Being accustomed to continuous progress</td>
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<td>6. the ability to apply oneself diligently, improving steadily and continuing beyond formal education.</td>
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</table>

Development time: It starts before teen years but it never stops.

<table>
<thead>
<tr>
<th>Main features</th>
<th>Kind of mind</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. The synthesizing mind is able to select crucial information from the copious amounts available</td>
<td>The synthesizing mind</td>
</tr>
<tr>
<td>2. It can find the similarities</td>
<td></td>
</tr>
<tr>
<td>3. It tries to do a project in a framework</td>
<td></td>
</tr>
<tr>
<td>4. It can array the selected information in ways that make sense to self and others.</td>
<td></td>
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</tbody>
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Time of development: It starts from childhood and gets a more conscious nature over time and then is organized like a habit

<table>
<thead>
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<th>Main features</th>
<th>Kind of mind</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. is able to go beyond existing knowledge and synthesis to pose new questions, offer new solutions, fashion works that stretch existing genres or configure new ones.</td>
<td>Creative mind</td>
</tr>
<tr>
<td>2. Is risk-taking</td>
<td></td>
</tr>
<tr>
<td>3. Is energetic</td>
<td></td>
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<td>4. Is not defeated</td>
<td></td>
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<td>5. Is a leader not a follower</td>
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<tr>
<td>6. Starts again after each failure</td>
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</tbody>
</table>

Development time: It starts from childhood and should be formed after synthesizing mind

<table>
<thead>
<tr>
<th>Main features</th>
<th>Kind of mind</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. The respectful mind responds sympathetically and constructively to differences among individuals and among groups</td>
<td>The respectful mind</td>
</tr>
</tbody>
</table>
2. It seeks to understand and work with those who are different
3. It is easier to be developed in childhood rather than adulthood
4. Teachers play the most important role in it
5. Flattering is not respect
   Development time:
   From birth, individual must be in an environment with respect

1. The Ethical mind is able to merge roles at work and as a citizen and
   act consistently with those conceptualizations, striving towards
   good work and good citizenship.
2. It starts from family
3. Parents are models
4. Religion has a positive effect in having ethical mind
5. The reaction of teachers to students’ questions is effective
6. Family, teachers, and peers play a crucial role
   Development time:
   After one can reflect about his or her professional duties in an abstract
   way.

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### Part 2: educational implications of the theory of five minds

Scientific theories cannot be translated into specific executable instructions and application. So various scientific methods are inspired by a scientific theory. In other words, scientific theories cannot be expected to prescribe special methods (Mehr Mohammadi, 2009). Such theories just guide and lead decision-making and can be shaped by teacher’s creativity (Harris, 1988). Gardner's theory is no exception and therefore there is no single instruction for school systems extracted from it. In this part, the overall analysis of the implications of Gardner's theory in the field of education will be addressed, but first five principles derived from this theory will be discussed.

The first principle: as the theory has been introduces by a psychologist interested in mental processes, it suggests that our behavior, actions, and thoughts are more or less associated with the brain. However, instead of using the word “mind”, other words such as mental characteristics, subjective view, or mental abilities can be used (Gardner, television interview).

The second principle: individuals do not have similar minds. Mental abilities of different people are different (Mehr Mohammadi, 2009).

The third principle: the five minds introduced are associated with at least one intelligence (Hans, 2014).

The fourth principle: like multiple intelligences, these minds can be developed. However, since they have a functional nature, they cannot be measured. They can be developed in school, university, and family (Patrick, 2013).

The fifth principle: it is wrong to develop the minds in a sequential manner. They exist when the person is born and show themselves in different periods of growing up (Gardner, 2011).

Here, the applications and implications of the theory of five minds will briefly be discussed:

First application: enhancing competency and qualifications of teachers and students:

Chief education should make efforts to train students as good citizens and develop their qualifications and competence to become future leaders and be able to respond to needs of
today's world and tomorrow’s. These five minds can be developed in the form of five competencies.

The second application: improving educational goals
The goals set in educational systems of developing countries are retrospective. Current formal education still prepares students primarily for the world of the past, rather than for possible worlds of the future. We need to train individuals who can take steps in the future. Therefore, the theory of five minds can pave the ground for modifying educational goals and setting long-term goals.

The third application: improving educational content
As educational goals are modified, contents need to be modified, as well. It should be remembered that hidden and indirect training is highly effective in developing these minds, especially the respectful and ethical minds.

The fourth application: teachers should consider these minds and the ways of developing them in their pre-teaching, teaching, and post-teaching activities. As role models, teachers can develop these minds.

Conclusion
One thing is clear. Whatever their importance in times past, these five minds are likely to be crucial in a world marked by the hegemony of science and technology, global transmission of information, handling of routine tasks by computers and increasing contact between diverse populations. Those who succeed in cultivating the pentad of minds are most likely to thrive in the world. Eisner, the famous educational expert, believes educational system should not train individuals who are similar to each other; rather it should try to train unique individuals who each are different from the others. Its approach should not be like an industry (Eisner, 2002 quoted by Mehr Mohammadi, 2009). Eisner 1994 believes the view Gardner has introduced in the form of multiple intelligences can be beneficial to all those involved in education. The writers of the present article believe since the five minds have practical applications, the importance of them is greater than that of multiple intelligences. The theory of five minds is a new paradigm which faces the authorities with a new perspective in executive plans and policies (Sabahizadeh and Kashtiaray, 2013). The implications of this theory do not limit to those mentioned in this article. Therefore, this idea should be welcomed.

Final words are that Howard Gardner's theory of the five minds opens new perspectives for curriculum planners.
References

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