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Analysis of the Position of the Developed Human Being in the Fundamental Transformation Document of Iran's Education System

Seyed Morteza Afghah¹*, Leili Nour Alizadeh²**, Seyed Jalal Hashemi³***,
Abdolmajid Ahangari⁴****

* Associate Professor of Economics, Faculty of Economics and Social Sciences, Shahid Chamran University of Ahvaz, Ahvaz, Iran. (Corresponding Author)

** PhD student in Economics, Faculty of Economics and Social Sciences, Shahid Chamran University of Ahvaz, Ahvaz, Iran.

*** Assistant Professor, Educational Sciences and Psychology, Shahid Chamran University, Ahvaz, Ahvaz, Iran.

**** Associate Professor of Economics, Faculty of Economics and Social Sciences, Shahid Chamran University of Ahvaz, Ahvaz, Iran.

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CORRESPONDING AUTHOR'S:

Email:

Email: m.afghah@scu.ac.ir

 0000-0001-8903-6998

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Postal address:

Golestan street, Golestan, Department of Economics, Faculty of Economics and Social Sciences, Shahid Chamran University of Ahvaz, Ahvaz, Khuzestan, Postal code: 61357-93113, Iran

FURTHER INFORMATION:

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ABSTRACT

The purpose of this study is to analyze the concept of "developed man" and determine the degree to which attention is paid in the Fundamental Transformation Document (FTD) in education in Iran approved in December 2011. This concept has been developed based on the theoretical basics of classical economics on description of "economic man" and also the Engels's theory on the description of "modern man" and with regard to some of adapted and localized national and Islamic ideas and beliefs. What is meant by "Developed man" in this research is a person whose attitude and opinion has been developed and has the ability to turn the country's resources into wealth and prosperity for the people of society. The instrument by which one can measure it, is a researcher-made content analysis checklist that involves 25 characteristics for developed human, and its face reliability and validity have been also verified and ranked by subject matter experts. Shannon entropy indices have been used to determine the importance and ranking of developed human components. In order to achieve a valid explanation and transparent results in this study, some important and fundamental concepts and components that were analyzed in the literature reviewing this document and their frequency was determined, were selected, and their frequency was compared with the total frequency of developed human components in the transformation document text. By use of word-counting the whole text of the Fundamental Transformation Document of education system, it also became evident that only about 1% (113 words out of 10914 words available) of this 64-page document are dedicated to the components of developed human and as a result it can be said that with regard to the weight and importance of the economy and its related issues in the country (such as unemployment, weak attitudes and skills of wealth creation and lack of efforts to increase production and improve public living and poverty alleviation) from the leaders and policymakers viewpoint, especially. In recent decades, little emphasis and attention has been paid to developed human, and accordingly, it is worthwhile to pay close attention to these components in revision of the Transformation Document text.

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1- Introduction and problem description

Despite scientific advances and the expansion of social and economic knowledge, many countries have not been able to identify or overcome the forces inhibiting growth and development. All the factors that influence on growth and development, are not necessarily of economic type and in economic terms they are known as non-economic factors (S. M. Afghah, Ahangari, & Askari por, 2020).

Hozlitz believes that in addition to economic transformations, far-reaching changes are needed in all aspects of life. In response to the question, "Is economic development merely limited to changes in specific and apparent dimensions of behavior?", he states that:

I think that economic development, especially if it requires industrialization, is a rapid and (somehow) revolutionary process that, if it is considered to take root in a society, it must have wide and deep penetration and consequently affect its social and cultural structures. In other words, economic development not only involves a change in production techniques but also a change in orientations in social norms and values (Hoselitz, 1952).

Most of economists believe that development is a process during which the range of choices increases for human being (Baltes & Goulet, 1971). Arthur Lewis has a famous phrase that has been used in the writings of many later economists. The important thing about economic growth is that it gives man more power to control his environment, and with that dominance, the scope of his freedom expands, he says (Lewis, 1954). Walter Elkan has defined development as follows: Development is a process that increases an individual's well-being by expanding the scope of his/her choices. (Elkan, 1973).

Theodore Morgan quotes Bauer whilst supporting him as saying: Our criterion in judging economic development is that development has broadened the range of choices open to human beings (as consumers or producers). (Theodore J. Morgan,). But the scope for

achieving such goals is not clearly measurable," Bauer himself says. (Bauer & Yanni, 1957: 151).

Seers has questioned three key features of development: The questions to ask about a country's development process are: What has happened to poverty? What has happened to unemployment? What has happened to inequality? If there has been a decline in all three, there is no doubt that development has taken place in the community in question. But if one or two of these three fundamental problems are worsened, especially if all three have worsened, it would be strange to call the result of this process development even if per capita income has increased (S. Afghah, 2021; Seers, 1969).

Gaulet also states three basic components or three core values as criteria for economic development. These three core values that are pursued as core goals by each individual or community are: livelihood, self-confidence and freedom. This attitude towards development seems to have been the beginning of a fundamental change in the definition of development and the introduction of non-economic concepts into this definition. In other words, this definition of development includes not only economic factors but also non-economic factors.

What is meant by "developed man" in this study is a person whose attitude and opinion has developed and has the ability to turn the country's resources into welfare for the people of society (similar to what in the theoretical foundations of economics as an entrepreneur or economic opportunity has been introduced). The conceptual framework of developed man is based on the theoretical foundations derived from classical economics in describing "economic man" and Alex Inkeles's theory in describing "modern man" which it is localized based on some characteristics and Iranian national and religious beliefs (S. Afghah, 2021; Inkeles, 1969).

Hence, several non-economic factors affect the economic behaviors of individuals that the educational system cultivates those factors. In educational systems, basic economic and social insights and

attitudes are transmitted to citizens through textbooks and teaching practices and classroom teachers. Thus, a search of the country's formal education resources can demonstrate whether these teachings can help nurture human beings who can contribute to the country's economic growth and development (hereinafter referred to as the developed human being). Therefore, the present study tried to provide an answer to the question: has ever proper attention been paid to the education of developed human beings in the fundamental transformation document of Iran's education system, as an upstream document of the country's education system. It should be noted that all textbooks of the academic years in the country's educational system are written and formulated based on that transformation document.

Since in the existing background, articles and researches similar to the title of the present research have not been obtained, the following refers only to researches that are methodologically similar to the present research:

Rozi talab et al (2023) examined the impact of good governance on income inequality in selected developing and developed countries with emphasis on corruption control. The results of the model estimate show that corruption control and the rule of law in both groups of countries in the 25th, 50th and 75th quarters have a positive, negative and meaningful effect on income inequality, respectively. Political stability also has negative effects in both groups of countries in 25 and 50 countries and positive and meaningful effects in 75 countries, as well as tax revenues, inflation rates and GDP per capita in these countries have different effects on income inequality in selected countries (Roozitalab, Abounoori, & Maddah, 2023).

Mansouri et al. (2022) have examined the simulation of the Human Development Index in Khuzestan province with emphasis on healthy living and access to knowledge and comparison with Iran. According to the results, the Human Development Index of Khuzestan province reached a high level from 1996 with a value of 0.64 from the average level in 2006 to 2016, which is an acceptable growth in this

index. The Human Development Index without oil in Khuzestan province is also lower than the similar national index and shows the worse situation in Khuzestan province than in the country in this regard (Mansouri, Afghah, Aghaei Jannat-Makan, & sharifzadeh ahvazi, 2022).

Reza Vafaei et al. (2017) in an article entitled "Assessing the level of attention to the six constructs of educations in Fundamental Transformation Document in social studies textbooks for elementary school " using the content analysis method, showed that the scientific and technological dimensions with information load of 980 and importance factor of 178 has received the most attention. Meanwhile the economic and professional dimension with the information load of 733 and the importance factor of 133 has received the least amount of attention (Vafa'i, Fazlollahi Ghomshi, & Taleifard, 2017).

Najafi et al. (2015), in an article entitled "Explaining the dimensions and components of human spiritual growth and its analysis in the content of the Fundamental Transformation Document in Iranian education" using qualitative and documentary content analysis and Shannon entropy, found that spiritual growth has a total of 72 frequencies in the transformation document and among the components of spiritual growth, attention to the moral dimension with an information load of 0.839 and an importance factor of 0.373 has received the highest amount of attention, and the dimension of rationality with an information load of 0.670 and an importance factor of 0.298 had received the least amount of attention (Najafi, Vafaei, & Maleki, 2016).

Farahani et al. (2019), in an article entitled "Study of the place of Hayat Tayyeba in the Fundamental Transformation Document and explanation of the ways to achieve it in education system", with use of content analysis method, found that the frequency of the terms Hayat Tayyeba and righteous society in the philosophy of educations in Islamic Republic of Iran is 202 times, the frequency of the term Hayat

Tayyeba in the philosophy of formal and public education in the Islamic Republic of Iran is 57 times, and its frequency in the guidelines of the formal and public education system in the Islamic Republic of Iran is 71 times, which indicates the importance of Hayat Tayyeba in the fundamental transformation document of Iranian education system (farmahini farahani, hosseiniaee, & ahmad abadi arani, 2019).

2- Methodology

Quantitative content analysis method was used to answer the research question. Content analysis is the method of studying and analyzing relationships in an objective and quantitative systematic manner to measure variables, the steps of which involves preparing and organizing, reviewing and processing messages. Hence, once collected, data will be categorized and coded. The research analysis community is the eight chapters of the Fundamental Transformation Document in education system (approved by Secretariat of the Supreme Council of the Cultural Revolution, 2011).

Component coding and determination of indicators in this research has been done by box method, in which components are determined before conducting research. For this reason, it is also called a predetermined method (Nourian, 2010: 65). In this research, the theme is considered to be the unit of record, although attention has been paid to each word and phrase, but in the end, their content has been considered by the researchers of the present article. What is meant by theme, is a specific message that has been taken into account by the authors of the document. The counting method in this study is frequency (or number of counted components).

Data collection was done in two stages: first, determining the dimensions and components of developed human and ranking them in terms of effectiveness in creating the context of development followed by preparation of content review checklists.

3- The components of developed human:

Based on the theoretical foundations of economic human and with regard to the three scopes of knowledge, attitude and skill, a set of components for developed human have been extracted and then ranked by experts. In order to perform content analysis, the initial 25-component set were transformed and subdivided into sub-components or objective and behavioral manifestations of developed human, and accordingly, in a transparent and operational manner, a content review checklist was formed. It should be noted that in the research, the same sub-components are examined and counted, whether they have appeared explicitly (finding the very same concepts) in the text of the transformation document or they have been mentioned based on the theme (**Tabel 1**).

Tabel 1. Description of components and sub-components of developed human according to some domain along with component ranking
Source: Research Result

Sub-component	Component	Rank of Components according to experts	Area
Giving importance and using advanced tools and technologies and new ideas in personal and social life. For example, having a bigger house, a better car.	Developed human care about well-being and enjoyment in life and in general, material life.	1	Attitude
Searching new ways to earn and increase income, entrepreneurship and job creation.		11	
In general, he/she tries to make the most of the available facilities.		13	
He cares about his homeland and birthplace and serves the development of society. Respects the land, flag, cultural resources, native literature,	Developed human is a patriot and believes in a sense of patriotism as a	10	

celebrities and language of his nation and helps compatriot.	motivation to advance society.		
Tries to increase production and works hard and innovates to achieve it	Developed human pays attention to increase productivity and efficiency and seeks to find novel ways to do works.	3	
Seeks faster and more useful ways to get things done and avoid wasting time and resources.		12	
Tries to be the best at his job and duties.		8	
He does not leave his destiny to fate. He thinks, innovates and strives to improve his living conditions. He seeks to elevate its social class and avoids behaviors that do not contribute to progress or hinder the achievement of development goals.	Developed human runs counter to traditions that hinder progress and development	9	
Strives to use nature to increase its science and knowledge.	Developed man believes that man is able to overcome nature and must go through the steps of progress towards progress on a regular and continuous basis.	2	
Seeks continuous progress and never stops and does not settle for the acceptance of the status quo..		4	
Prefers larger amounts to less.	Man Development The finding is inherently extravagant: he tends to increase his well-being through work, effort, and investment.	5	
He saves and encourages others to save and avoid overconsumption. Uses capital and profits to reinvest.		6	

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He seeks practical and applied use of innovations in society.	Developed man believes in the importance of innovations and inventions in increasing the well-being of themselves and society.	7	
Tries to increase production and create new job opportunities that increase income and purchasing power and ultimately reduce poverty.	From a developed human viewpoint, poverty is reprehensible and seeks to reduce or eliminate it in society.	14	
Seeks to find ways to improve income distribution as well as apply appropriate tax methods to society to reduce poverty and inequality.		15	
attaches great importance to the preservation of man and all aspects of his existence, including: the provision of living needs, dignity, his time and place, his social, political and economic rights, his security and individual and social freedoms, and so on.	From a developed human point of view, man and all aspects of his existence (to us as human beings and regardless of his transcendental characteristics), is respected and honored.	16	
He gives importance to study science, expand research, improve the quality and quantity of educational centers and resources (such as textbooks and educational).	Developed human believes in science and knowledge as the only tool for the growth and development of the country.	17	
Preserves resources and strives to avoid wasting resources. He also tries to make better and more efficient use of available and scarce resources.	Developed human believes in the value of natural resources and the environment	18	
Gives importance to efficiency and improving the efficiency of production resources.		19	

<p>He considers irrational capitals (crude natural resources, oil, etc.) as potential and attaches the greatest value and importance to his manpower and intellect</p>		20	
<p>It supports the products of human thought, including scientific inventions, and is of particular importance to scientists, inventors, creators, creative teachers, and scientific educators.</p>	<p>Developed man knows that the only irreplaceable wealth of society is man and his intellect and innovations.</p>	21	
<p>He is the one who advises and supports productivity in production (in all three sectors of agriculture, industry and services).</p>	<p>Developed man knows the concept, value and importance of productivity.</p>	22	Knowledge
<p>He uses science and research to use nature to increase his well-being.</p>	<p>Developed human knows that the acquisition of science and knowledge is essential for the enjoyment of nature and the surrounding environment.</p>	23	
<p>He tries to teach the concept and importance of development to others.</p>	<p>The developed man has knowledge and awareness of the concept of development and cares about it.</p>	24	
<p>An individual is an investor or cares about investing in society.</p>	<p>Developed human is aware of the role of capital (human, physical and financial) in development.</p>	25	
<p>He is an educated person and calls others to acquire knowledge.</p>	<p>Developed human considers familiarity and mastery of knowledge and science necessary to achieve development.</p>	Ranking of components according to experts	

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Reinvests investments.	Developed human draws attention to sufficient knowledge about the importance of the issue of capital accumulation (financial and physical).	1	
Supports a strong and dynamic banking and monetary system.		11	
Prevents waste or improper and inappropriate allocation and their total loss		13	
He is extremely sensitive to environmental protection.		10	
He is a bold and risk-taking person.	Developed man tries to advance himself and society, seeks to test and perform new experiences and activities.	3	Skill
He uses innovations and inventions to produce goods and services and for the welfare of himself and society as a whole.	Developed human is an economic opportunity seeker.	12	
Gives great importance to the physical, mental and emotional health of oneself and society.	Developed human has the necessary capabilities for development and considers it necessary to provide it for all members of society.	8	
He will never give up on problems and will seek or find a new way to solve his problems and those of society.	Developed man is creative or cares about creativity and creating an environment to cultivate it.	9	
He is smart and creative, has genius, hopes or supports people with these qualities.	Developed human has special talents or provides the environment for cultivating these talents.	2	
He seeks to find newer, easier, and less costly ways to solve problems.	Developed human seeks to discover or invent new ways to advance oneself and society.	4	

Scott's (2012) method was used to calculate the reliability coefficient of this instrument. For the purpose, the content review checklist was distributed among several subject matter experts, and their agreement coefficient was calculated.

$$(1) \quad \lambda = \frac{Po - Pe}{1 - Pe}$$

Where:

Expected agreement percentage $Pe = 0.261$

Observed agreement percentage $Po = 94.44\%$

Reliability coefficient = 0.92

According to Scott's formula, the obtained coefficient for the content analysis form was equal to 0.92, and because it was above 70%, the agreement coefficient is acceptable.

After formulating the content review checklist and calculating its validity and reliability, content analysis was performed in a manner in which, at first, the Fundamental Transformation Document was studied completely and sentence by sentence. Afterwards, the themes of the expressions corresponding to and in line with the categorization system were identified and recorded in the checklist. Then the frequency of each component was counted and it was determined exactly how much each part of the document has paid attention to the dimensions of the developed human. This was done by the researcher and randomly checked by the supervisors to increase the validity of the findings (taking into account the similarity of the answers that were confirmed). It should be noted that the obtained data were analyzed using descriptive indicators in the Shannon entropy analytical process. This means that at first the frequencies of components in the content of the Fundamental Transformation Document were extracted and then inserted into the relevant table; Next, the research data were analyzed in the Shannon entropy analytical process (to normalize the frequency

table data, calculate the information load of the categories and to obtain their importance factor and rank), three steps of which are explained as follows.

4- Shannon entropy method

In this research, Shannon entropy method (as a widely used method for calculating the weight and rank of indices) has been used. This concept has been developed in various scientific fields, including physics, social sciences and so on.

In this method, some steps are defined sequentially, which are explained as follows:

Step 1: Firstly, the decision matrix was formed. For the purpose, it is enough to get the evaluation of each option from the verbal expressions of each criterion for qualitative criteria, and to put the real number of that evaluation for the quantitative criteria. In the formula below, columns and rows are criteria and options of decision matrix, respectively. For example, X_{12} is the score of the first option compared to the second criterion.

$$(2) \quad \mathbf{X} = [x_{ij}]_{n \times m} = \begin{bmatrix} x_{11} & x_{12} & \cdots & x_{1m} \\ x_{21} & x_{22} & \cdots & x_{2m} \\ \vdots & \vdots & \vdots & \vdots \\ x_{n1} & x_{n2} & \cdots & x_{nm} \end{bmatrix}$$

Step 2: Normalize the above matrix and call each normalized entry p_{ij} . Normalization is the division of each column by the sum of the columns.

Step 3: Calculate the entropy of each index: The entropy, E_j is calculated as follows and k as a constant value keeps the value of E_j between 0 and 1.

$$(3) \quad E_j = -k \sum_{i=1}^m P_{ij} \times \ln P_{ij} \quad i = 1, 2, \dots, m$$

where $p(x)$ is the probability distribution of the random variable X . An increase in Shannon entropy increases uncertainty and decreases information about a random variable knowledge. Another aspect of Shannon entropy is its maximum entropy property for uniform distribution.

Step 4: calculate the value of d_j (degree of deviation) that states how much relevant index (d_j) provides useful information for decision making to the decision maker. The closer the measured index values are to each other, the less different the competing options are in terms of that index.

$$(4) \quad d_j = 1 - E_j$$

Therefore, the role of that indicator in decision making should be reduced equally.

Step 5: calculate weight value, W_j . In fact, the standard weight is equal to each d_j divided by the total number of d_j s.

$$(5) \quad w_j = d_j / \sum d_j$$

It should be noted that in the present study, the number of frequencies confirms the degree of importance and attention, so the weights are calculated based on **EJ**s.

5- Findings:

After determining the components and domains, and preparing and approving the checklists, all the obtained results of counting the frequency of components were collected in tables (**Tabel 2**, **Tabel 3** and **Tabel 4**). In this section, after offering these tables, the information and the results of their analysis are summarized and an answer to the research question is provided.

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Table 2. Frequency distribution of attention (to three domains) and sub-components of developed human in the transformation document

Source: Research Result

Component	Some manifestations of the following components	Introduction and generalities	Chapter 1	Chapter 2	Chapter 3	Section 4	Section 5	Chapter 6	Chapter 7	Chapter 8	Total
1- Human welfare (attitude)	Development of life					1	1	1			3
	Entrepreneurship		2								2
	Maximum use and pleasure										
2- Patriotism (attitude)	Respect for the people and the land and the flag							2			2
3- Efficiency (attitude)	diligence		1								1
	Get things done fast							1			1
4- Contrary to the tradition of inhibiting development (attitude)	Being the best at work										
	Strive for your destiny	1									1
5- Continuous improvement (attitude)	Increase your knowledge										
	Rejection of the status quo	1									1
6- Increase welfare with work (attitude)	Prefer more amount to less										
	Savings up										
7- The importance of obedience in welfare (attitude)	Implement innovations in society										
8- Condemnation of community poverty (attitude)	Increase purchasing power and revenue										
	Balanced income distribution										
9- Respect for human beings (attitude)	The importance of health, dignity and respect										
10- Science is a tool for	Improving the quality of	1	2				1	3			7

overcoming nature (attitude)	educational resources											
11-Value of resources (attitude)	No waste of resources							2				2
	Importance to productivity											
12-The importance of human intellect (attitude)	Irreplaceable wealth wisdom	1			1							2
13-Productivity (knowledge)	Importance to scientists	1										1
	Supports productivity in all sectors											
14-The importance of knowledge in overcoming nature (knowledge)	Use science to serve nature											
15-Importance to the concept of development (knowledge)	Teach the concept of development to others	1										1
16-The role of capital types in development (knowledge)	It cares about investing in the community											
17-Is knowledgeable (knowledge)	Has been educated	1										1
18-The importance of capital accumulation (knowledge)	Reinvest to increase capital											
	Pro a strong banking system											
19-Scarcity of resources (knowledge)	It does not waste resources											
	It is the protector of the environment					1		1				2
20-Experience (skill)	It is bold and risky											
21-Economic Opportunity (Skills)	Application of the invention to increase production and prosperity											
22-Capable (skill)	It cares about physical, mental and intellectual health	1						1				2
23-Creative (skill)	Finds a new way	1			1			1				3
24-Special Talent (Skills)	He is smart							1	3			4

25-Inventing new methods (Skills)	Find a new way for society to progress										
Total		5	9	0	2	2	3	15	0	0	36
Percent%		13.9	25	0	5.6	5.6	8.3	41.7	0	0	100%

Table 2 identifies the number of components enumerated according to the three domains of the developed human being (attitude-based, knowledge-based, skill-based) and its subcomponent. For the attitude-based domain, a total of 22 frequencies of developed human components (60%) have been counted. In knowledge-based domain, a total of 5 frequencies of developed human components (14%) are considered. In skill-based domain, a total of 9 frequencies of developed human components (25%) are considered. The highest percentage of frequency is related to the attitude-based domain (the set of objectives that involve matters related to tendency, value, emotional effects and beliefs and the expected ideas, and pupils should also reinforce his/her desires, feelings, attitudes and beliefs about the subject matter).

Table 3 shows the frequency of components and sub-components developed of human according to the different chapters of the Fundamental Transformation Document.

Table 3. Frequency distribution of attention to components and sub-components of developed human in the Fundamental Transformation Document of Iranian education system
Source: Research Result

Item No.	1	2	3	4	5	6	7	8	9	Total					
1 Components	Document chapters	Introduction and generalities	season 1	Chapter 2	Chapter 3	Chapter 4	Chapter 5	Chapter 6	Chapter 7	Chapter 8					
1 Human welfare	0	2	Is an entrepreneur	0	0	1	He seeks prosperity and the expansion of livelihood	1	To Follow Welfare And	1	To Follow Welfare And(0	0	5	To Follow Welfare And ... creating employment and entrepreneurship A, B
2 Patriotism	0	0		0	0	0		0		2	Respect for water, soil, flags and people	0	0	2	Respect To Water And D

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3	0		1	He tries to increase production and hard work	0	0		0	0	3	Avoid wasting time	0	0	2	Increase production with hard work - Prevent From ... E, F
4	1	Contrary to the tradition of development inhibition	0	He does not leave his destiny to fate	0	0		0	0	0		0	0	1	He is against the traditions that forbid progress
5	1	continuous improvements	0	Hedoes not stand still and does not accept the status quo	0	0		0	0	0		0	0	1	Seeks continuous improvement J
6	0	Increase welfare with work	0		0	0		0	0	0		0	0	0	
7	0	The importance of obedience in welfare	0		0	0		0	0	0		0	0	0	
8	0	Condemnati	0		0	0		0	0	0		0	0	0	

on of community poverty																	
9 Honoring human beings	0		0		0	0		0		0		0	0	0			
10 science tools to overcome nature	1	It is important to study science	2	He cares about education	0	0		0		1	Giving importance to science and research	3	Importance to give To	0	0	7	Importance to give To Q
11 Valuable resources	0		0		0	0		0		0		2	No waste of resources and efficiency	0	0	2	No Waste Sources R
12 The importance of human intellect	0		2	Wisdom is the supreme wealth and cares about the position of teacher, professor and scientist	0	1	The wisdom of irreplaceable wealth	0		0		0		0	0	3	The wisdom of irreplaceable wealth and giving importance to scientists T, V
13 Productivity	0		0		0	0		0		0		0		0	0	0	

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14 The importance of knowledge in overcoming nature	0		0		0	0		0		0		0	0	0	
15 Importance to the concept of development	1	Knows the concept of development	0		0	0		0		0		0	0	1	Trying to teach the concept of development to others
16 The role of capital types in development	0		0		0	0		0		0		0	0	0	
17 He is All-Knowing, All-Aware	1	Educated and recommends to others	0		0	0		0		0		0	0	1	Educated and encourages education a
18 The importance of capital accumulation	0		0		0	0		0		0		0	0	0	

19 Scarcity of resources	0	0		0	0		1	He is the protector of the environment	0	1	Environmental Protection	0	0	2	Preservation Environment Jiy f	
20 to experience	0	0		0	0		0		0	0		0	0	0		
21 Economic Opportunity	0	0		0	0		0		0	0		0	0	0		
22 powerful	0	1	He cares about the health of body, mind and intellect	0	0		0		0	1	The importance of physical and mental health	0	0	2	Importance Health h	
23 Creative	0	1	Is an inventor	0	1	Is an inventor	0		0	1	He is an inventor and he is not disappointed and finds a new way	0	0	3	Inventor Been And j	
24 special talents	0	0		0	0		0		1	Intelligent and creative	3	With Intelligence And creative	0	0	4	With Intelligence And Creative I

**Analysis of the Position of the Developed Human Being
52 in the Fundamental Transformation Document of
Iran's Education System**



Inventing new methods	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Frequency	5	9	0	2	2	3	1	5	0	0	3	6			
Per cent %	13.9	25	0	5.6	5.6	8.3	4.1	7	0	0	10	0	0	10	0

Furtherly, in order to normalize the data and determine the information load and their importance factor, Shannon entropy method has been used. To apply the Shannon entropy method, at first, we draw a table of data related to the study of developed human components in Excel software and then we normalize the data. Next, using the formula in the second step of Shannon method, Entropy or amount of information load of each index (EJ), Degree of deviation of each index (DJ), weight of each index (WJ) and finally rank of importance of each component (RANK) in the transformation document for each of the components, the data will be evaluated. The results are presented in Table 6. It should be explained that, since the rankings are based on the subject of research, in terms of frequency, so in the entropy method, EJs are taken into consideration as the basis for calculating weights than DJs.

Table 4. Shannon entropy results for examining the degree of attention to human developed components in the fundamental transformation document
Source: Research Result

1 Human welfare	5	0.732	0.151	2
2 Patriotism	2	0.315	0.065	6
3 Importance of efficiency	2	0.315	0.065	6
4 Denial of false traditions	1	0	0	11
5 continuous improvement	1	0	0	11
10 science tools to overcome nature	7	0.885	0.183	1
11 Valuable resources	2	0.315	0.065	6
12 Gives importance to human intellect	3	0.5	0.103	4
15 knows the concept of development	1	0	0	11
17 Adequate mastery of development knowledge	1	0	0	11
19 He knows the scarcity of resources	2	0.315	0.065	6
22 He has the potential for development	2	0.315	0.065	6
23 He is creative	3	0.5	0.103	4
2 He has a special talent	4	0.630	0.130	3

Question: What is the level of attention to the 25-item components of developed human in different chapters of the Fundamental Transformation Document ?

As can be seen, based on the results obtained from Shannon entropy, the degree of attention and rank related to the importance of each developed human component in the Fundamental Transformation Document is as follows:

The tenth component (developed man believes in science and knowledge as the only tool to dominate nature and the environment, however without harming it) with an information load of 0.885 and an importance factor of 0.183 has been given the most importance.

The word counting method was also used to make the results clearer. The results of this word-counting are given in the table below:

Table 5. Word counting on the fundamental transformation document of Iranian education system.

Source: Research Result

Percentage%	Economic words in question	Total numbers of words in the document	Reference	Item No.
1,035	113	10914	Fundamental Transformation Document...	1

As can be seen from the results of the table, out of the total number of words counted in the text of the eight chapters of the document, about 1% is about the desired components of the research, namely, the characteristics of the developed human.

To examine the reliability of obtained results from the research tests, we proceeded to select several components not relevant to the research topic, to compare with the research results, the results of which are as follows (Note that the selected components are among the most frequent components in the Transformation Document, some of which are also mentioned in the Literature Review section).

Table 6. Comparison of the frequencies of some important and fundamental concepts in the transformation document with the developed human components
Source: Research Result

Frequency	Some of the concepts and components used in the Fundamental Transformation Document	Row
58	The word of Islamic standard system	1
176	The word and concept of ethics and religious and divine education	2
38	The word of Velayat Orientation	3
70	Paying attention to the branches of religion, chastity and hijab	4
12	The word of Mahdism and Waiting (for Mahdi)	5
275	Words and themes of Hayat Tayyeba (good life)	6
36	Total number of the themes about 25 components of developed human	7

As it is clear from the results of the frequencies in the table, there is a big difference between the amount of attention to categories such as Hayat Tayyeba (good life) and Foru’oldin (the branches of religion), hijab and chastity, etc. with the level of attention to the 25 counted components of developed human. Nevertheless, most of these other categories are obtained using word-counting and have been as both co-word and co-theme for developed human components. As mentioned in the research method, the unit of counting in this study is frequency, so as a comparison based on this criterion, the amount of attention to the components of the developed human is small compared to other categories.

Here, using the data shown in the table above for the Shannon entropy process, the importance factors and information loads of the selected control categories are calculated.

Table 7. Calculated entropy of selected control categories in the fundamental transformation document

Source: Research Result

The title of Components	Frequencies	Entropy or information load of each index (rounded)	Weights or importance factor (rounded)	Ranks (Obtained based on importance factors)
Islamic standard system	58	2.3	0.161	4
Ethics and religious and divine education	176	2.9	0.205	2
Velayat Orientation	38	2	0.144	5
Branches of religion, chastity and hijab	70	2.2	0.168	3
Hayat Tayyeba	275	3.1	0.223	1

As can be seen from the results obtained in Table 7, Hayat Tayyeba with information load of 3.1 and importance factor of 0.223 has gained the highest level of attention and **guardianship Orientation (Velayat Madari)** with information load of 2 and importance factor of 0.144 has received the lowest level of attention from among the five selected control categories in the Fundamental Transformation Document.

Here, to make the results clearer, a table is provided to compare the results of the research variables in terms of frequency as well as entropy results and importance factors with the results obtained from (selected control variables).

(In the case of the research components in the last row of the table, only the highest importance factor and information load is given among the 25 research components):

Tabel 8. Comparison of the frequency of developed human components with other selected important control components
Source: Research Result

Frequencies	Entropy or information load of each index (rounded)	Weights or importance factor (rounded)	Ranks (Obtained based on importance factors)
Islamic standard system	58	2.3	0.161
Ethics and religious and divine education	176	2.9	0.205
Velayat Orientation	38	2	0.144
Branches of religion, chastity and hijab	70	2.2	0.168
Hayat Tayyeba	275	1.3	0.223
The components of developed human of our study	36	0.885	0.183

As can be seen from the results of the above table, the frequency of only five components (Islamic standard system, morality and religious education, guardianship-orientation, branches of religion and chastity and Hijab, Hayat Tayyeba) is 617 times, despite they has been obtained using word counting and not theme-based, while the frequency obtained for 25 components of developed humans is only 36 times, and the highest information load and importance factor related to developed human is less than most of these components, which it is solely a reason for the negative response to the research question.

6- Summary and Conclusion

Based on the obtained results, with regard to attitude-based, knowledge-based and skill-based domains, a total of 22, 5 and 9 frequencies are counted, which they account for 60%, 14% and 25% of the developed human components, respectively.

As a result, the highest percentage of frequency is related to the attitude-based domain and the lowest percentage of attention is related to the knowledge-based one.

Attitudes, values and even skills should be formed based on the knowledge and awareness of people and in fact they should result from it, but as the results of research showed in the Transformational Document, science and knowledge have not been paid attention as much as the attitudes.

Based on the results obtained from Shannon entropy, the degree of attention and rank related to the importance of each component of developed human in the Fundamental Transformation Document is as follows:

The component of “developed human believes in science and knowledge as the only tool to overcome nature and the surrounding environment, of course with environmental considerations” with a importance factor of 0.183 and information load of 0.885 is given the most importance and it has been ranked first.

The lowest importance factor is related to the components of “tradition breaker, continuous progress, knows the concept of development, is knowledgeable and aware” each with zero information load and importance factor.

Given the small number of frequencies counted in all three areas of education, which are in fact various dimensions of human components developed, compared to competing concepts and categories in Table 10 (the components such as: Islamic standard system, ethics, divine and religious education, guardianship-orientation, etc.), it seems that in the Fundamental Transformation Document, not enough attention has been paid to the components of human beings, and therefore, this lack of attention and importance has been extended to the text of selected books. As a result, with this amount of attention, they will not be able to convey the sense of necessity of cultivating developed human beings who produce economic growth and prosperity to textbooks and, as a result, students.

Regarding word counting, the results showed that about 1% of the total content of the document has dealt with the subject of research, namely the characteristics of the developed human being.

Comparison of the importance coefficients of selected control categories (entropy table No. 9), that is 5 categories of “Islamic ethics and education, branches of religion and hijab, chastity and good life, orbital province and Islamic standard system”, versus the coefficients of importance and information load of human development components, the findings indicate that the information load and importance factors obtained from the entropy of selected categories are far higher than the human components developed. The larger the entropy of a number variable, the higher its weight and rank. And because initially, according to the definitions in the third chapter, high frequency of a word or theme indicates more attention and importance given to a component in a text message (book or any other media), so based on the results it can be judged that the higher coefficients obtained from the entropy of competing components indicated their greater importance from the point of view of the authors of the Fundamental Transformation Document.

If the results obtained according to Table (2), the ranking of human components developed based on the priorities set by the researcher, which was ranked according to the priorities and needs of the country and with the advice of a number of experts, are compared and interpreted, it should be said: a component that has won first rank in the entropy test (developed man believes in science and knowledge as the only tool to overcome nature and the environment, of course, with environmental considerations), it is ranked fourth in importance in the ranking table,. Therefore, not only the frequency number and attention to developed human components, but also the order of importance of each of them has not been sufficiently and expertly paid attention, and therefore it would be far from expected that such planning in upstream documents could provide manpower with developmental thinking in the education system.

As a result, the frequencies, percentages and poor results obtained indicate that the Fundamental Transformation Document pays little attention to these components and since textbooks in the Iranian education system have been prepared and compiled based on this document, so about the question that whether formal upstream educational resources in Iran can nurture human beings with developed thinking or not? It must be said, no.

Raising a developed human being who can be the source of growth, development and progress of society in the future, requires far more importance and attention than the results of what has been tested.

As a final point, it seems that the realization of developed human requires a human-centered view and more attention to human material life and needs, of course, religion itself is not indifferent to this issue. In Islam, both material and spiritual aspects of human beings have been considered, and in principle, Islam is a multifaceted religion and has never condemned or prohibited efforts to improve human material life, but many verses and hadiths recommend hard work for meeting human needs in it, but it seems that the authors of the Transformation Document are too focused only on the spiritual and otherworldly needs of human beings, and this way of thinking and attitude can be clearly seen and felt in the text of the document.

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