

## Investigating the Effective Factors and Consequences of the Curriculum with Entrepreneurship Approach for Top Talented Students in Iran

### Article info

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### Abstract

**Purpose:** The present study was conducted to investigate the factors and consequences of the curriculum with an entrepreneurial approach for gifted students in Iran.

**Methodology:** Research method in terms of purpose, basic-applied in terms of data type, mixed (qualitative) of exploratory type; In terms of data collection time, it was cross-sectional and in terms of data collection method or the nature and method of research was descriptive survey. The statistical population of the research in the qualitative section included all the heads of the provincial elite foundation and the heads of the talented departments of the General Directorate of Education and the provinces and 20% of the teachers implementing the Shahab project. 20 people were selected by purposive non-random sampling. Quantitatively, the statistical population includes high school students in gifted schools. The number of these students was 7000, which used the Cochran's formula, and based on this, 364 people were selected. Sampling method was done through multi-stage cluster sampling. In the qualitative part of this study, the Delphi questionnaire based on CVR and CVI forms was used and in the quantitative part, the questionnaire was used. The validity and reliability of the instruments were evaluated and confirmed.

**Findings:** The results of the study showed that the curriculum with entrepreneurship approach for top talents including environmental components, economy, entrepreneurs, entrepreneurship, factors affecting the implementation of this approach in the curriculum, including components of support, teacher, system policies and Factors influencing the curriculum with an entrepreneurial approach, including talent discovery, improving top talent and self-efficacy were introduced.

**Conclusion:** Implementing an entrepreneurial curriculum leads to talent discovery. That is, it identifies the top student talents and introduces them to continue their studies in related fields. These talents can also be introduced to various national and international centers.

**Keywords:** Curriculum, Entrepreneurial Approach, Top Talented Students

## Introduction

The ideal society is a society that always tries to provide opportunities for each of its members to develop talents by creating maximum facilities and facilities. In the meantime, identifying and nurturing elites is of strategic importance in educational systems. Elites are people who are smart, talented, creative, entrepreneurial and with intellectual genius who accelerate the growth and development of the country with their mental activity and creating innovation. Every educational system must provide a basis for identifying, strengthening the talents and abilities of elite individuals in a way that can pave the way for progress, creativity and development. Educational systems have chosen and used various methods to identify and nurture elites (Islami and Ayati, 2011).

By examining the educational status of high school students and those who passed the entrance exams, 60% of the brains escaped from the holders of world medals of scientific olympiads (report of the Elite Foundation, 94) and low participation of about 17,000 projects in Kharazmi festival in 1995 and program problems Curriculum, in each of the stages of identifying, attracting, retaining, training and applying top talents, education faces many problems and challenges. One of the approaches that can protect the country's education against these challenges is to pay attention to the phenomenon of entrepreneurship. In fact, one of the topics that has attracted everyone's attention in the current changing and evolving situation is the discussion of entrepreneurship and the use of creativity and innovation in the economic development and progress of countries. Entrepreneurship is a new and attractive phenomenon that plays a prominent role in a competitive and market-based economy as well as dynamic and evolving conditions influenced by new technologies. Only by using creative ideas and applying innovation in the workplace can we adapt to the conditions and move in the field of competition in sync and perhaps ahead of competitors. Thus, to a large extent, all active elements in the scene should be entrepreneurs and entrepreneurs for their part (Ahmed, et al, 2020).

Undoubtedly, in all countries of the world, developed or developing, the identification and training of brilliant talents and talented people with different philosophical motives and roots is considered. In some countries, the main motivation is the growth of intellectual powers and the development of special talents. But in others, the source of the effort is the emphasis on equal educational opportunities for all, while at the same time cultivating the full potential of individuals for self-actualization and meeting the needs of society. Therefore, the two main issues of elitism and equality are those that are considered from two different perspectives in terms of providing appropriate and sufficient educational facilities for brilliant talents. At present, in various political and economic systems, arrangements and facilities are made for brilliant talents, and although the words and expressions may be different, it is important that the views and executive plans are not so different from each other.

In order to educate talented students, each community has its own policy and planning, and therefore education cannot deny the need for this. In the country's education, whenever there is talk of superior talent, all minds are drawn to Sampadi students. Of course, the way it works and the emphasis on focusing only on gifted schools is a matter for reflection; because these schools are only a part of the process of educating the mentioned students. But what is certain is that there should be a comprehensive look at the education of students, based on which equal and comprehensive attention is paid to all students in the country to have similar opportunities in the field of education (Ali Pourleri and Soltaninejad, 2017). Talented schools, on the one hand, create labels for the students in this collection, and on the other hand, in some cases, the possibility of education for students whose families are more financially viable; more available than others. Therefore, following the economic conditions of the society, if this practice continues, talented students who do not have sufficient financial resources will be excluded from the education cycle in such schools. However, in our religious and educational teachings, special eating and gaining special benefits for people have been avoided.

It should be noted that currently the program of some SAMPAD schools is limited to focusing on the entrance exam and relies on a central exam. In this way, talent, in the true sense of the word, which is a mixture of creativity, richness of knowledge and skill, has been influenced by these programs and tests. Meanwhile, some time ago, those in charge of the educational system paid attention to the elimination of exams in schools, and in practice, the same procedure continued with the implementation of intelligence tests. While based on educational theories; Intelligence is a multifaceted category that cannot be accurately identified by some tests. Thus, we often see that valuable ideas

in the executive position have shortcomings that put this issue in opposition to the main goals of the program. Therefore, although it was expected that SAMPAD schools would appear as a support for other parts of the educational system and gradually the scope of such programs would reach ordinary schools across the country, but in practice it faced challenges (Fereyduni, 2015).

This doubles the need for careful entrepreneurship planning. Entrepreneurship is a category that today the whole world is trying to train entrepreneurs with special training, so that these people will be the driving force for the future of the country. According to Whesper (1990), entrepreneurship education has become a necessity in most developed countries and even in developing countries, and the idea that entrepreneurs have inherent characteristics has not been accepted. In other words, deepening and expanding the culture of entrepreneurship as one of the essential needs of society, requires basic attention to education in this field. Because many entrepreneurs who have no special training background necessarily leave it after several trials and errors and failures, and only a few of them will be able to continue operating (Koev, et al, 2019).

Entrepreneurship is a process that requires planning in the educational and research system, and the implementation of its programs has spread from the family and school level to universities and organizations, and makes people use opportunities and expertise and the power of initiative and creativity. And create capabilities, productive employment and income generation (Santos & Morris, 2019). The most important goals mentioned about entrepreneurship education and training programs that help the growth of independence and creativity in the education system are: gaining the necessary knowledge about entrepreneurship, gaining the necessary skills to use situational analysis techniques. Businesses and alliances with other action plans to identify the motivation, talent and skills of entrepreneurship, help and support all the unique dimensions of entrepreneurship, guide attitudes towards change and persuasion of newly established organizations and other business Entrepreneurial work (Othman & Othman, 2019).

Entrepreneurship is the main factor in creating creativity and innovation in today's organizations and organizations in most developed countries are transitioning from bureaucratic to organizational entrepreneurship. Schumpeter considers entrepreneurship as a driver of economic growth and refers to it as the basis of development (Sandeep and et al, 2007). In this regard, organizational entrepreneurship is a window to take advantage of sustainable competitive advantages, innovation and pioneering for organizations (Quartco, et al, 2005). Competition and struggle of organizations are required for some desirable outcomes such as customers, market share, organization rank or resources (Coulter quoted by Rahimnia and Hassani Rad, 2016).

But entrepreneurship education in schools must be included in the curriculum so that students can be expected to innovate through its content. On the other hand, the entrance exams to the top collections, such as the gifted, the Olympiads, etc., should be based on the level of entrepreneurship of the students, and not only on the basis of math and science questions, etc., which the students have read. Some have preserved. This is not the right way to measure ideas and does not practically identify talented Bratz students. The curriculum is, in fact, one of the main approaches in the educational system and plays an important role in students' learning outcomes. This program involves both informal processes and in fact involves both overt and covert approaches (Eilks & Hofstein, 2017).

Entrepreneurship-based curriculum means that all elements of the curriculum are designed based on entrepreneurial mechanisms and creating creativity and innovation for students, and students develop their skills, knowledge and attitudes based on entrepreneurship (Albarraq, et al, 2020). . This type of curriculum involves the environment, the economy, the school, the learner and the entrepreneur, and takes into account several elements. This type of planning, in fact, considers a framework in the three areas of learning for entrepreneurship, learning about entrepreneurship and learning through entrepreneurship, and bases lifelong learning on the social environment, because students are supposed to be trained to continue the path in the environment (Mazboohi, et al., 2012).

In line with the subject of the present study, Albarraq, et al. (2020) also conducted a study entitled "Inclusion of Entrepreneurship Curriculum in Pharmacy Students' Curriculum". This research is a quasi-experimental type and the results of the research showed that the entrepreneurship curriculum should change all the components of knowledge, skills and attitudes in entrepreneurship among students. This study showed that the implementation of entrepreneurship curriculum for pharmacy students provides many job opportunities for them in the hospital environment. . Liu et al. (2020) also conducted a study entitled "Entrepreneurship Education in China". This

research is of library type and its results showed that the three factors of entrepreneurial mentality, entrepreneurial interests or entrepreneurial expectations are the factors that should be considered in entrepreneurship education. In addition, in this study, the dimensions of entrepreneurship curriculum in China, including goals and philosophy, type of teaching and evaluation, were considered. Huang & Lan (2020) also conducted a study entitled "Study on Mock Teaching Methods in Innovation and Entrepreneurship in the Curriculum". This research is a quasi-experimental type and the results showed that the use of online training workshops in the teaching method and for the elite talents of students is a suitable method. Mook can influence the entrepreneurial category of these students with the agile and up-to-date information that is available to them. In addition, AAbolghasemi, et al (2019), in their study entitled "Designing and validating a segregated curriculum model for talented students in Isfahan" performed. This research is of a combined type and the results indicate that students have the desired content with conditions such as practical activity, attention to creativity, specialization of content, keeping up with the science of the world, the existence of supplementary books, reasoning and underlying logic of topics. They know the adolescent and the challenges he faces and pay attention to his personal interests and talents. The characteristics of the process element in the segregated curriculum also include practicality, use of teaching aids, active learning, specific method for each lesson, scientific and moral dimension of the teacher. The product element feature also includes continuous testing, attention to creativity, practical evaluation, project evaluation, technical principles of testing, and emphasis on deep learning. Examining the validity of the proposed model shows that professionals eliminate the specific method for each lesson, add attention to creativity in all elements of the curriculum, add support for independent learning to the element of the curriculum process, add multiple assessments and self-assessment to the element. The product evaluates the proposed pattern as having good validity. Gholami, et al (2019) conducted a study entitled "Designing and Validating the Appropriate Curriculum Model for the First High School of Talented Schools". This research is a combination and the results of element analysis showed that the element of educational materials and resources, teaching and learning strategies, learner activity and grouping of learners have the most explanatory power. Other elements such as time, content, purpose and evaluation are the significant explanatory title of this model was analyzed. And Shojaei, et al (2019) conducted a study entitled "Designing a model of entrepreneurial-oriented curriculum competencies in the field of educational sciences". The results of factor analysis showed that in this study, the variables of policy making and professional management of educational and learning business, information technology management, decision making and problem solving, effective interactions and communication, management and leadership and learning management and human resource development have a significant direct and positive effect. The structure of the curriculum is based on entrepreneurship in the field of educational sciences. Entrepreneurship curriculum is a topic that unfortunately is not given importance in education. Usually for various reasons such as teachers who are not experienced, a lot of uncreative content, school principals' lack of support for student creativity, the use of student innovation tools to raise the level of school in the region, lack of attention to different jobs in the knowledge curriculum Students, knowing a few jobs and orientation to choose future and money-making jobs for students, not using outstanding entrepreneurship professors in schools, etc. The school curriculum is not based on entrepreneurial training, and education is just as easy. , Students also lose top talent, because there is no plan to educate these students for the future of society. Based on what has been said, the present study intends to answer the fundamental question of what factors affect the curriculum with an entrepreneurial approach, given the challenges of the curriculum with an entrepreneurial approach, especially for the country's top talented students. Top talented students in Iran and what are the consequences?

## **Methodology**

Given that the present study identifies the factors and consequences of the curriculum with an entrepreneurial approach for top talented students in Iran, the research method in terms of the time of occurrence of the phenomenon is retrospective; According to the result, decision-oriented; Purposeful, practical; In terms of performance logic, deductive and inductive; According to the time of research, cross-sectional; Depending on the type of data, qualitative; Depending on the research environment, library; In terms of data collection method or the nature and method of research, it was descriptive-correlational and in terms of focus on the phenomenon was expansive.

The statistical population of the study included all heads of the elite foundations of the provinces and heads of talented departments of the General Directorate of Education and the provinces. 20% of the teachers implementing the Shahab project in the 2018-19 academic year Targeted sampling and saturation principle 20 people were selected as the sample size, Secondary school students in talented schools. The number of these students is 7000. In the quantitative part of the research, Cochran's formula was used and based on this, 364 people were selected. Sampling method was done through multi-stage cluster sampling. Thus, the country was divided into 5 parts based on geographical areas (north, south, east, west and center) and three provinces were selected from each section and 3 schools were selected from each province and 9 talented students from each school. Bratz was selected and answered the questionnaires. In this study, data collection was performed by library method, semi-structured interview. The data were collected using exploratory interviews, background research and research literature, then the conceptual model was explained using grounded theory method using three stages of open coding, axial coding and selective coding.

In order to ensure the validity of the qualitative part of the research and in order to ensure the accuracy of the findings from the researcher's point of view, the opinions of professors familiar with this field and experts were used. Also in qualitative studies to express the quality of the study, the term authenticity is often used. In this case, Guba and Lincoln have presented criteria that are considered in the present study (Guba and Lincoln, 1994). To the right are the qualities criteria for qualitative research, and to the left are the equivalent in quantitative studies that have been presented for better understanding.

1. Accuracy - reliability;
2. Validity versus validity;
3. Reliability against reliability;
4. Portability versus generalizability (external validity);
5. Verifiability against objectivity.

In the quantitative part, in order to determine the validity of the questionnaire, physical, content and structural validity were used. In the apparent validity of the questionnaires before distribution by the researcher, some of the sample members and experts mentioned above were examined in terms of structure, writing, spelling, etc. and the necessary corrections were made. Content validity in the form of a Delphi method with the help of CVR and CVI forms and with the help of ten experts including interviewed members, academic experts, several subjects and ... The content of the questionnaire in terms of additional questions or Correction of the questions was examined. In this study, reliability was calculated through Cronbach's alpha coefficient and combined reliability. The values of these two coefficients for all research variables were above 0.7, which indicates the reliability of the measurement tool. Based on the obtained data, the reliability of the dimensions is confirmed because Cronbach's alpha and combined reliability coefficient is above 0.7 and also  $AVE > 0.5$ . Convergent validity is confirmed because  $CR > 0.7$ ;  $CR > AVE$ ;  $AVE > 0.5$  and divergent validity is also confirmed because  $MSV < AVE$  and  $ASV < AVE$ .

Data were analyzed using Cronbach's alpha, tangent (AVE) tests, AVE root matrix, Kolmogorov-Smirnov test, confirmatory factor analysis and t-sample using lisrel software.

## Findings

In the present study, based on the views of the participants in the interview and based on the findings of data theory, and using MAXQDA software, the following categories have been identified as components of the curriculum with an entrepreneurial approach, causal conditions and its consequences.

Analysis of identified indicators and components:

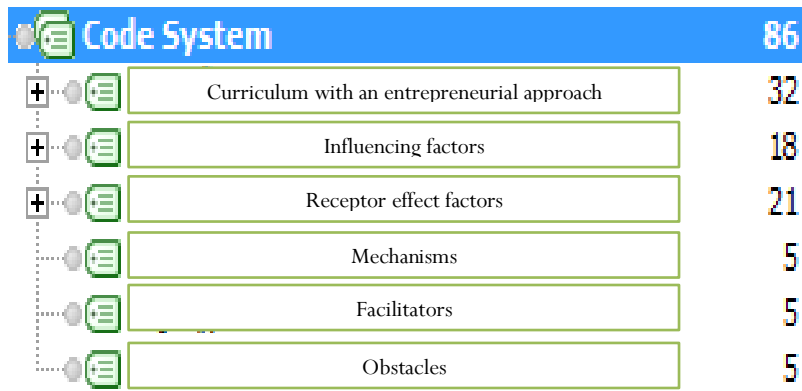


Figure 1. Frequency of codes

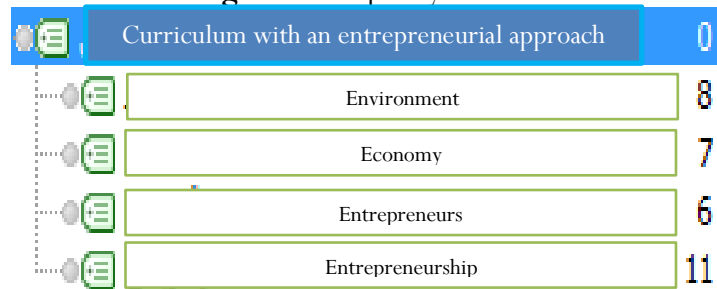


Figure 2. Frequency (numerical) of codes for each component of the curriculum with an entrepreneurial approach

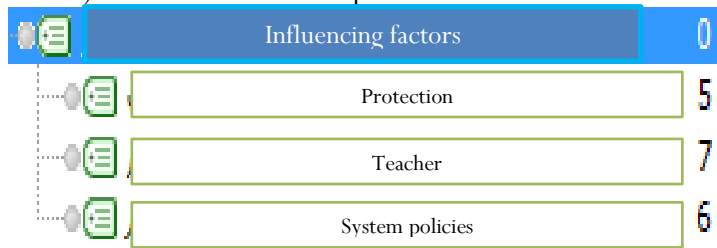


Figure 3. Frequency (numerical) of codes for each of the dimensions and components of the influencing factors

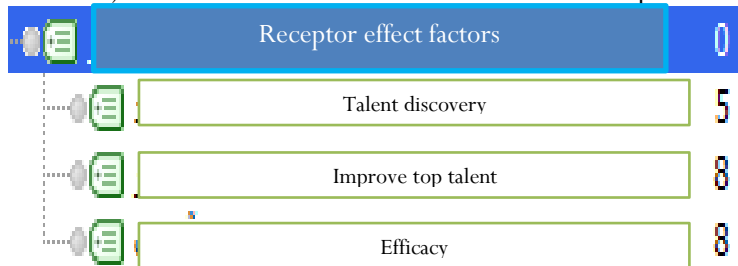
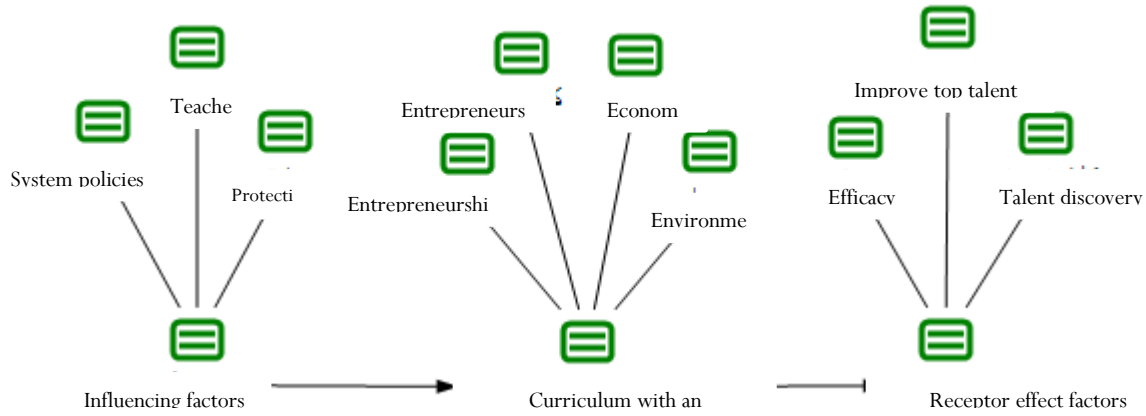


Figure 4. Frequency (numerical) of codes for each of the dimensions and components of influential factors

The above figures show the frequency of primary codes in identifying secondary codes. As shown in question one, after performing qualitative content analysis, 13 subcategories were discovered. The following is a conceptual model of the above categories.



**Figure 5.** Conceptual model of research

The table below shows the dimensions of causal conditions.

**Table 1.** Final coding of semi-structured interview technique

| Selective coding                            |   | Open coding (index)   |
|---|---|---|
| Curriculum with an entrepreneurial approach | Environment   | The curriculum helps to understand the environment.   |
|   |   | The curriculum demonstrates environmental opportunities to the student.                                   |
|   |   | Curriculum elements analyze the right behavior in today's situation.                                      |
|   |   | The curriculum takes into account attitudes towards working in the community.                             |
|   |   | The curriculum refers the student to a variety of resources in other settings.                            |
|   |   | The curriculum considers the student's relationship with the workplace and the community to be important. |
|   |   | The curriculum explores environmental threats to the student.   |
|   | Economy   | The curriculum introduces the student to the strengths and weaknesses of working in a social environment. |
|   |   | The curriculum shows the strategies needed to succeed in society.   |
|   |   | The curriculum always focuses on economic improvement.  |
|   |   | The curriculum pays special attention to cost-benefit issues.   |
|   |   | The curriculum encourages students to make a profit in a variety of ways.                                 |
|   |   | The curriculum considers the creation of new businesses as the basis of economic growth.                  |
| entrepreneurs                               | The curriculum is based on economic development.  |   |
|   | The curriculum supports how to relate to the environment to work with economic justification. |   |
|   | The curriculum develops the skills of entrepreneurs.  |   |
|   | The curriculum introduces many entrepreneurs to students.                                     |   |
|   |   | The curriculum identifies job difficulties for students by interviewing entrepreneurs.                    |
|   |   | The curriculum uses up-to-date resources to nurture young entrepreneurs.                                  |

|                     |                  |   |
|---------------------|------------------|---|
|                     |                  | <p>The curriculum considers the operational sections in order for the student to be present in various organizations and to associate with prominent entrepreneurs.</p> <p>The skill of becoming a top entrepreneur is included in the curriculum.</p>  |
|                     | Entrepreneurship | <p>Entrepreneurial skills are explained to students theoretically and practically.</p> <p>It is recommended for students to participate in entrepreneurship workshops for economic improvement.</p> <p>The impact of cultural factors on entrepreneurship is open to students.</p> <p>Curriculum creation of threats such as sanctions is at the heart of the curriculum.</p> <p>The curriculum encourages students to build an elite and entrepreneurial community.</p> <p>The curriculum considers entrepreneurship as part of national identity and encourages students to do so.</p> <p>The curriculum practically prevents the emergence of young talents.</p> <p>The curriculum not only promotes finding a job but also puts skill learning first.</p> <p>The curriculum encourages students to read entrepreneurship books.</p> <p>The curriculum considers international communication as the source of modern entrepreneurship.</p> <p>The curriculum considers entrepreneurship as a factor in the growth of the country and in this way, shows its need for elite students.</p> |
| Influencing factors | Protection       | <p>The curriculum is fully supported by education.</p> <p>All the necessary facilities for the implementation of the curriculum are provided among the elite students.</p> <p>Technologies. Up-to-date equipment is provided for teaching the curriculum to teachers.</p> <p>School principals provide the necessary material and spiritual support to the curriculum.</p> <p>The teacher is the main supporter of the elite students in learning the curriculum.</p>   |
|                     | Teacher          | <p>He is a skilled teacher.</p> <p>The teacher uses different mechanisms to understand the lesson material.</p> <p>The teacher also values non-formal learning and uses the facilities available for learning.</p> <p>The teacher encourages students to create jobs in the community.</p> <p>The teacher uses self-assessment and re-assessment to advance the higher goals of the curriculum.</p> <p>The teacher has the professional competence needed to teach entrepreneurship to top talent.</p>  |



|                         |                       |  |
|-------------------------|-----------------------|--|
|                         |                       | The teacher has provided in-service training to teach modern entrepreneurship.   |
|                         | System policies       | The government allocates the necessary budget for entrepreneurship to experts.<br>Government policies have always been based on the expansion of knowledge-based companies, using elite students in this direction.<br>The government has a bright future for the entrepreneurial elite.<br>In country documents such as the 1404 document, entrepreneurship is spoken of by the elite.<br>Government policies increase their commitment to elite students.<br>The government bears all the costs of elite education and research.   |
| Receptor effect factors | talent discovery      | The curriculum explores the hidden talents among elite students.<br>Students choose the job before entering the university.<br>There is competition among elite students.<br>New job needs are identified.<br>Students find new competencies.  |
|                         | Improving top talents | The government develops programs to discover and employ top talent.<br>In-service training is considered more appropriate for top talented teachers.<br>Top talent assessment methods are changing.<br>The future needs of the community are identified.<br>The loss of top talent is avoided.<br>Basic planning is done to prevent brain drain<br>The latest technologies are used in the world.<br>Talent empowerment is the top priority.   |
|                         | Efficacy              | Students find the skills needed for a future career.<br>students. They learn self-confidence in creating jobs.<br>Students see challenging problems and issues as a practice exercise.<br>Students become more interested in the activities in which they participate<br>Students feel committed to their interests and activities.<br>Students feel committed to the community in which they grew up.<br>Obstacles and fractures do not discourage them and they pass them very quickly.<br>Students believe that difficult tasks and situations do not exceed their abilities. |

The results of factor analysis show that out of 71 available indicators (items), 13 main components can be identified. The effective factors model is measured by 18 items. First, factor analysis test was performed on the influencing factors.

**Table 2.** Approved items of influencing factors

| dimension       | label | Item        | label | Factor load | The value of t | Condition | Priority |
|-----------------|-------|-------------|-------|-------------|----------------|-----------|----------|
| Protection      | A1    | Question 1  | Mtb33 | 0.65        | 14.07          | Confirmed | 5        |
|                 |       | Question 2  | Mtb34 | 0.82        | 18.20          | Confirmed | 2        |
|                 |       | Question 3  | Mtb35 | 0.82        | 18.32          | Confirmed | 1        |
|                 |       | Question 4  | Mtb36 | 0.73        | 15.43          | Confirmed | 4        |
|                 |       | Question 5  | Mtb37 | 0.81        | 18.06          | Confirmed | 3        |
| Teacher         | A2    | Question 6  | Mtb38 | 0.71        | 14.90          | Confirmed | 2        |
|                 |       | Question 7  | Mtb39 | 0.69        | 14.37          | Confirmed | 5        |
|                 |       | Question 8  | Mtb40 | 0.70        | 14.60          | Confirmed | 4        |
|                 |       | Question 9  | Mtb41 | 0.58        | 11.63          | Confirmed | 7        |
|                 |       | Question 10 | Mtb42 | 0.74        | 15.79          | Confirmed | 1        |
|                 |       | Question 11 | Mtb43 | 0.71        | 14.85          | Confirmed | 3        |
|                 |       | Question 12 | Mtb44 | 0.68        | 13.95          | Confirmed | 6        |
| System policies | A3    | Question 13 | Mtb45 | 0.51        | 9.97           | Confirmed | 5        |
|                 |       | Question 14 | Mtb46 | 0.55        | 10.90          | Confirmed | 4        |
|                 |       | Question 15 | Mtb47 | 0.42        | 8.09           | Confirmed | 6        |
|                 |       | Question 16 | Mtb48 | 0.85        | 19.56          | Confirmed | 3        |
|                 |       | Question 17 | Mtb49 | 0.91        | 21.75          | Confirmed | 1        |
|                 |       | Question 18 | Mtb50 | 0.86        | 19.89          | Confirmed | 2        |

The following table lists the most important and common fitting indicators. As can be seen in the table, almost all indicators are statistically sufficient. Therefore, it can be concluded with great confidence that the researcher has achieved a complete fit about these indicators.

**Table 3.** Selection of important fit indicators of the drawing model

| Indicator                          | Index name   | Abbreviation | the amount of | Acceptable fit   |
|------------------------------------|--|--------------|---------------|------------------|
| Absolute fit indicators            | Covered surface (Chi-square)                         | -            | 305.20        |                  |
|                                    | Fit goodness index                                   | GFI          | 0.95          | Greater than 0.9 |
| Comparative fit indices            | Modified fit goodness index                          | AGFI         | 0.93          | Greater than 0.9 |
|                                    | Adaptive Fit Index                                   | CFI          | 0.98          | Greater than 0.9 |
| Affordable fitting characteristics | The root of the mean squares of the estimation error | RMSEA        | 0.059         | Less than 0.1    |

The model of influential factors is measured by 21 items. First, factor analysis test was performed on the affective factors.

**Table 4.** Approved items of influential factors

| dimension             | label | Item       | label | Factor load | The value of t | Condition | Rank |
|-----------------------|-------|------------|-------|-------------|----------------|-----------|------|
| talent discovery      | P1    | Question 1 | Mtb51 | 0.83        | 19.02          | Confirmed | 4    |
|                       |       | Question 2 | Mtb52 | 0.85        | 19.91          | Confirmed | 2    |
|                       |       | Question 3 | Mtb53 | 0.87        | 20.37          | Confirmed | 1    |
|                       |       | Question 4 | Mtb54 | 0.84        | 19.27          | Confirmed | 3    |
|                       |       | Question 5 | Mtb55 | 0.59        | 11.88          | Confirmed | 5    |
| Improving top talents | P2    | Question 6 | Mtb56 | 0.71        | 15.25          | Confirmed | 5    |
|                       |       | Question 7 | Mtb57 | 0.71        | 15.23          | Confirmed | 6    |

|          |    |             |       |      |       |           |   |
|----------|----|-------------|-------|------|-------|-----------|---|
|          |    | Question 8  | Mtb58 | 0.70 | 15.09 | Confirmed | 8 |
|          |    | Question 9  | Mtb59 | 0.77 | 17.07 | Confirmed | 3 |
|          |    | Question 10 | Mtb60 | 0.71 | 15.20 | Confirmed | 7 |
|          |    | Question 11 | Mtb61 | 0.76 | 16.78 | Confirmed | 4 |
|          |    | Question 12 | Mtb62 | 0.79 | 17.72 | Confirmed | 2 |
|          |    | Question 13 | Mtb63 | 0.79 | 17.81 | Confirmed | 1 |
| Efficacy | P3 | Question 14 | Mtb64 | 0.75 | 16.33 | Confirmed | 5 |
|          |    | Question 15 | Mtb65 | 0.76 | 16.72 | Confirmed | 4 |
|          |    | Question 16 | Mtb66 | 0.78 | 17.43 | Confirmed | 3 |
|          |    | Question 17 | Mtb67 | 0.75 | 16.46 | Confirmed | 7 |
|          |    | Question 18 | Mtb68 | 0.75 | 16.49 | Confirmed | 6 |
|          |    | Question 19 | Mtb69 | 0.81 | 18.33 | Confirmed | 1 |
|          |    | Question 20 | Mtb70 | 0.66 | 13.91 | Confirmed | 8 |
|          |    | Question 21 | Mtb71 | 0.80 | 18.13 | Confirmed | 2 |

**Table 5.** Selection of important fitting indicators of the drawing model

| Indicator                          | Index name   | Abbreviation | the amount of | Acceptable fit   |
|------------------------------------|--|--------------|---------------|------------------|
| Absolute fit indicators            | Covered surface (Chi-square)                         | -            | 486.30        |                  |
|                                    | Fit goodness index                                   | GFI          | 0.93          | Greater than 0.9 |
| Comparative fit indices            | Modified fit goodness index                          | AGFI         | 0.91          | Greater than 0.9 |
|                                    | Adaptive Fit Index                                   | CFI          | 0.96          | Greater than 0.9 |
| Affordable fitting characteristics | The root of the mean squares of the estimation error | RMSEA        | 0.061         | Less than 0.1    |

The research model is investigated using the model of confirmatory structural equations.

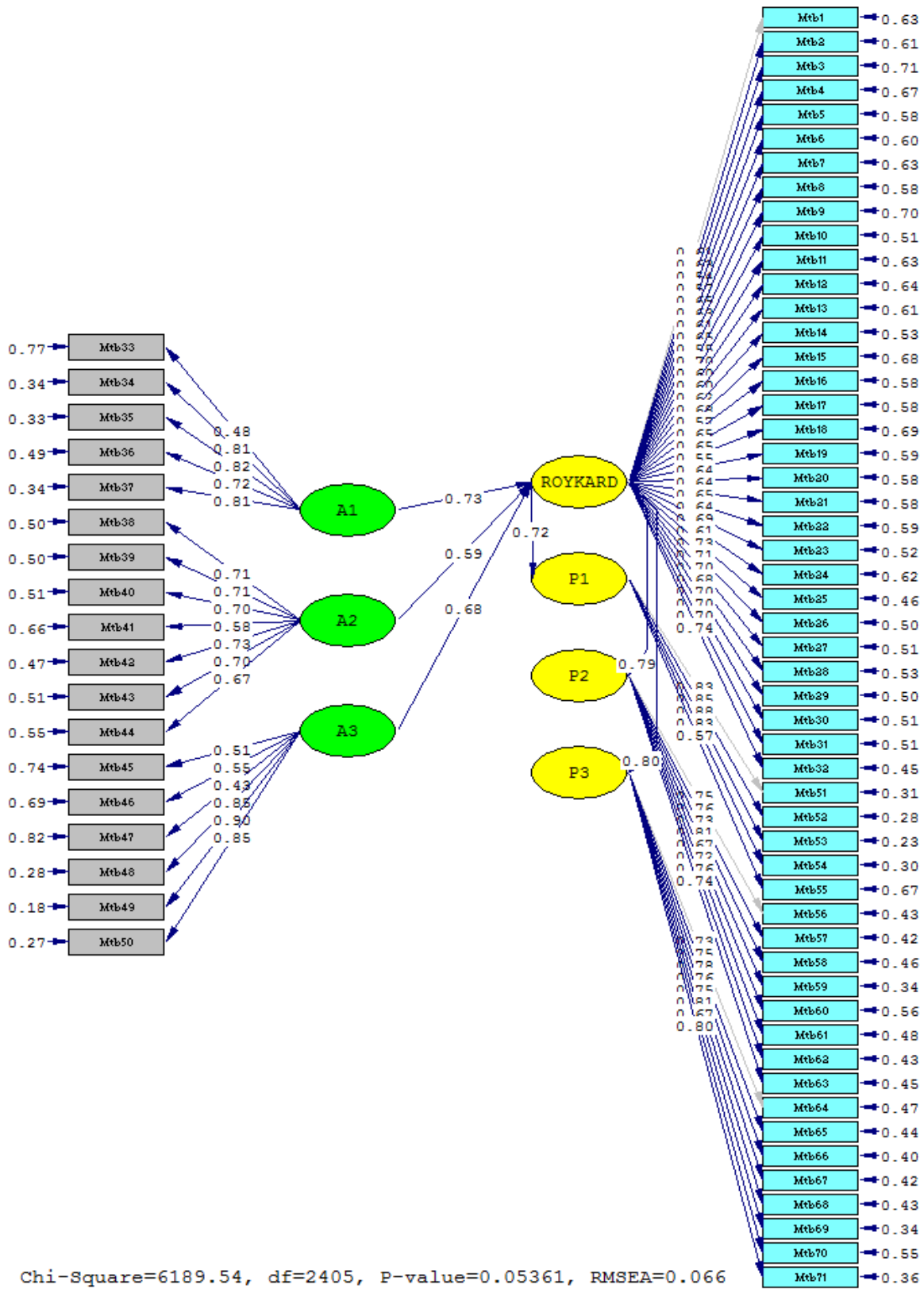
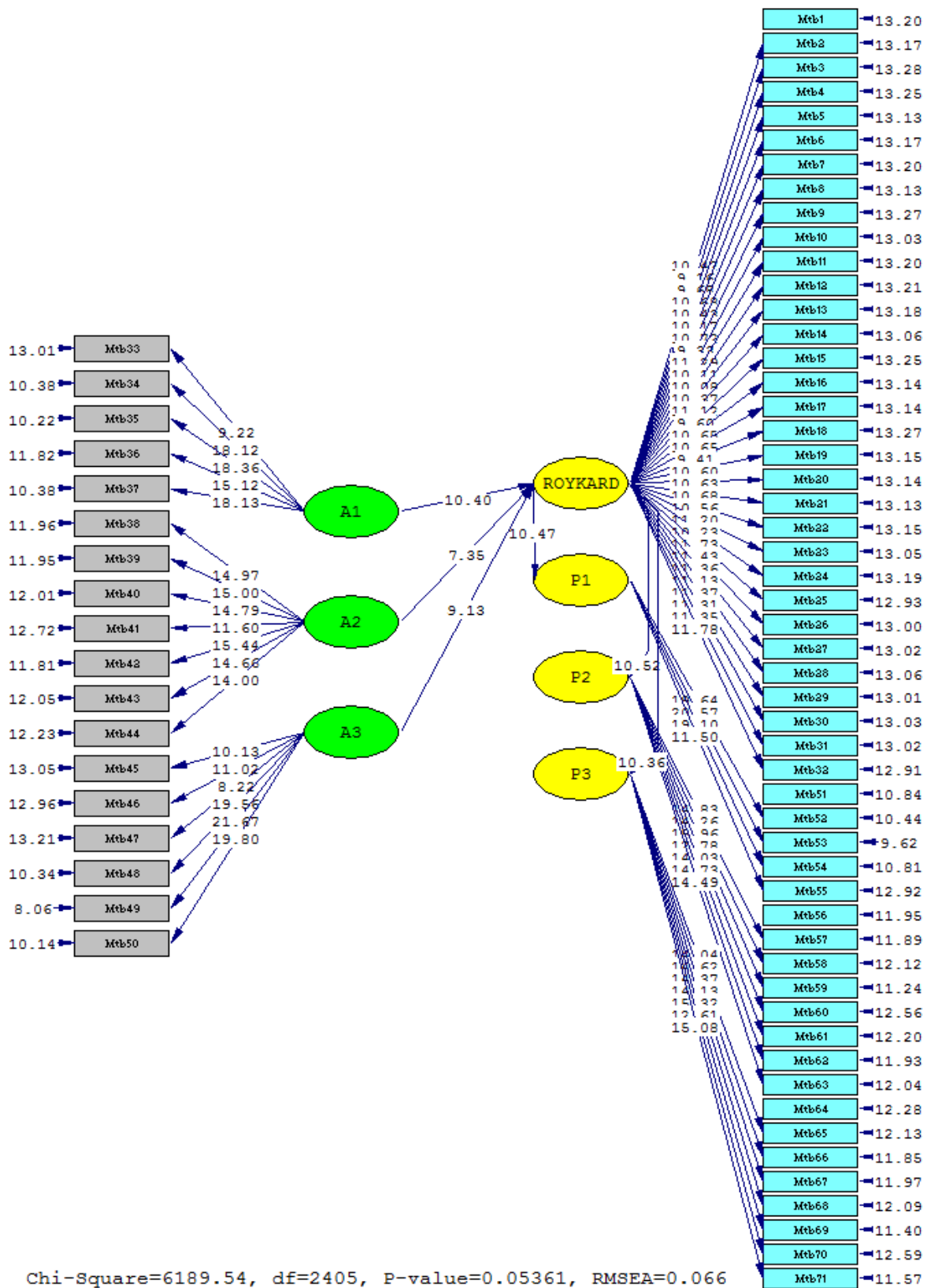


Figure 6. Structural model of research in the form of standard coefficients



**Figure 7.** Structural model of research in the significant state of coefficients

In the table below, the path coefficients are given along with significant values. As can be seen, all routes are accepted. In the last column, each item is prioritized based on the path coefficient

**Table 6.** Path coefficients, significant values and their status

| Route                    | Path coefficient           | The value of t | Condition | Priority  |   |
|--------------------------|----------------------------|----------------|-----------|-----------|---|
| Protection               | → Curriculum with an       | 0.73           | 10.40     | Confirmed | 1 |
| Teacher                  | → entrepreneurial approach | 0.59           | 7.35      | Confirmed | 3 |
| System policies          | →                          | 0.68           | 9.13      | Confirmed | 2 |
| Curriculum with an       | → talent discovery         | 0.72           | 10.47     | Confirmed | 3 |
| entrepreneurial approach | → Improving top talents    | 0.79           | 10.52     | Confirmed | 2 |
|                          | → Efficacy                 | 0.80           | 10.36     | Confirmed | 1 |

## Conclusion

This research was based on the ideas obtained from the views and opinions of 20 experts. In the following, we will review the results of the effective factors and consequences of the curriculum with an entrepreneurial approach for the most talented students in Iran:

To deduce this finding, we must first take a look at the entrepreneurship-based curriculum. As noted in the research literature, X and Hofstein (2017) stated that entrepreneurship education in schools should be included in the curriculum in order to hope that students will be innovative through its content. On the other hand, the entrance exams to the top collections, such as the gifted, the Olympiads, etc., should be based on the level of entrepreneurship of the students, and not only on the basis of math and science questions, etc., which the students have read. Some have preserved. This is not the right way to measure ideas and practically does not identify top talented students. The curriculum is, in fact, one of the main approaches in the educational system and plays an important role in students' learning outcomes. The program involves both informal processes and, in fact, both overt and covert approaches. What is certain is that entrepreneurship is at the forefront of the world today. Education does not make sense without entrepreneurship.

Entrepreneurship-based curriculum means that all elements of the curriculum are designed based on entrepreneurial mechanisms and creating creativity and innovation for students, and students, their skills, knowledge and attitudes are based on entrepreneurship (Al-Baraq, et al., 2020). This type of curriculum involves the environment, the economy, the school, the learner and the entrepreneur, and takes into account several elements. This type of planning, in fact, considers a framework in the three areas of learning for entrepreneurship, learning about entrepreneurship and learning through entrepreneurship, and bases lifelong learning on the social environment, because students are supposed to be trained to continue the path in the environment (Mazboohi, et al., 2012).

For the entrepreneurship curriculum, special attention must first be paid to the learning and teaching environment. The environment in which students work the entrepreneur cannot be expected to be innovative and entrepreneurial if it does not reflect entrepreneurship. The curriculum used in schools, if it has the right entrepreneurial content, leads students and even teachers to this valley and ensures success. This type of curriculum recognizes the environment and shows the environmental opportunities to the student and helps the student to choose the best option for his / her progress. Also, appropriate behavior teaches these opportunities to the student. Unfortunately, what is observed in schools is the lack of a suitable environment for students to become entrepreneurs, and the student is usually in a confused atmosphere. There is a big discrepancy between what is expected of him and what he sees in the environment. Communication with different sources and recognizing environmental threats and opportunities are some of the factors that provide a suitable entrepreneurial environment for students.

Attention to economics is the second constituent factor. Obviously, the entrepreneurial curriculum should show the strategies needed to succeed in society. In this case, students become familiar with different models of entrepreneurship, commercialization and profit. This has consequences such as economic improvement in society and economic learning. So to become an entrepreneur, there is an urgent need to improve the economic dimension of the curriculum. What is seen in our students' textbooks, and which teachers provide to students as approved content, is usually devoid of such a dimension. It is a mistake to forget the economic dimension of the country's education curriculum, and students do not receive useful information about it. This issue can be clearly seen from

the back row of the miners who are in the mirage of studying and getting a suitable government job. Students must learn to look at the benefits of what they do so that they can become professional entrepreneurs in the future. Another factor is paying attention to the entrepreneur. The curriculum designed for students should encourage students to do research on these entrepreneurs by introducing outstanding entrepreneurs in different disciplines. Students at different levels of education, especially in high school, are looking for role models. Patterns for future jobs and even patterns for lifestyle changes the curriculum can introduce them to appropriate patterns and entrepreneurs. The curriculum provides the necessary mechanism for students to participate in entrepreneurial activities. This is done by introducing top entrepreneurs and attending various factories and organizations. Entrepreneurship is another factor that should be considered in the entrepreneurship curriculum. The next entrepreneurship is comprehensive, which should cover all the details of students' lives. Entrepreneurship ethics, culture building, entrepreneurship trust are all features that should be considered in the curriculum. Students must be able to comprehensively understand entrepreneurship and to accept and implement it as a comprehensive culture. In addition to the components of the curriculum that were addressed, in the present study, the effective and influential factors have also been mentioned. The components of support and policies of the system and the teacher, respectively, affect the curriculum with an entrepreneurial approach. This shows that in order for the entrepreneurship curriculum to be properly implemented and successful, it must first be supported by administrators, planners, teachers and all those involved in education. Entrepreneur-oriented curriculum, if not supported by education, cannot be successful, because all matters, resources, mechanisms, etc. are in the hands of the education organization, and if this organization does not provide the necessary support, the curriculum fails. What can be seen shows that despite the great emphasis on the transformation document and education policy makers in creating an entrepreneurial environment for students, but those involved in this organization do not pay attention to entrepreneurship. System policies are another factor that affects the curriculum. Government policies should be based on entrepreneurship and elitism. The expansion of knowledge-based companies is one of the strategies that system policymakers should consider. The policies of the system can be clearly seen in the published organizational documents. These policies are contained in the Fundamental Transformation Document. If entrepreneurship is discussed in this document and strategies for its promotion are described, it can be hoped that the policies of the system are also based on entrepreneurship. The teacher is another factor in the tire. This factor is one of the main pillars of education, but it can continue to work in the shadow of managerial support and policies approved by the system. Teachers are the main element of education and deal directly with the curriculum. The teacher must believe in entrepreneurship and then pass it on to the students. The teacher should use different methods to present the curriculum. The teacher also needs to know what evaluation methods to use for their work to train entrepreneurs. In addition to the influencing factors, in the present study, the influencing factors have also been mentioned and these factors have been identified. The components of self-efficacy, improvement of top talents, talent discovery were in order of priority among the influential factors of the curriculum. This shows that if the entrepreneurship curriculum is implemented in schools, the first consequence is self-efficacy. Students become self-sufficient by learning entrepreneurship. By offering an entrepreneurship curriculum, students gain the skills needed for a future career and gain confidence in creating a job because they see challenging problems and issues as a practice exercise, and this improves their self-confidence. . By offering this type of curriculum, students feel a sense of commitment to their interests and activities, and ultimately to the community in which they grew up. Improving top talent is another consequence of the entrepreneurial curriculum. Implementing this curriculum in schools will help top talents to improve and grow better. In the environment in which this type of curriculum is offered, talented students are identified and good solutions are provided for their excellence. Providing these programs will enable teachers to receive the necessary training and gain professional qualifications. These programs enable education to meet its expectations, and the government develops programs to discover and employ top talent. Implementing an entrepreneurial curriculum leads to talent discovery. That is, it identifies the top student talents and introduces them to continue their studies in related fields. These talents can also be introduced to various national and international centers.

According to the obtained results, some suggestions are presented, which are:

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- Use experts to develop a curriculum for top talents and introduce the strengths and weaknesses of work in the social environment to students.

Curriculum, pay special attention to cost-benefit issues;

- The curriculum should consider the operational sections in order for the student to be present in various organizations and to associate with prominent entrepreneurs.

- The impact of cultural factors on entrepreneurship is open to students and experts are used to describe these issues.

- Provide up-to-date technologies and equipment for teaching the curriculum for teachers

- Government policies are always based on the expansion of knowledge-based companies and in this direction, elite students should be used.

- The teacher should use self-assessment and other assessment to advance the higher goals of the curriculum

- Students learn confidence in job creation in schools. These should be done in schools using school counselors.

- The future needs of the community should be identified and the required information should be provided to students during various sessions.

It is recommended to future researchers: Do similar research in other educational levels and compare the present results. Use other statistical methods to analyze the data.



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