Iranian Journal of Educational Sociology

Journal Website

Article history:
Received 28 February 2025
Revised 19 May 2025
Accepted 27 May 2025
Published online 28 July 2025

Iranian Journal of Educational Sociology

Volume 8, Issue 3, pp 1-12

Quarterly
Iranian Journal of Educational Sociology

E-ISSN: 2645-3460

Olympiad Plan for Vocational and Technical School Students in the Shanghai Cooperation Organization (SCO)

Leila. Ahmadi[1*]

[1] MA, Department of Management, Nima Non-Profit University, Mahmoudabad, Iran

*** Corresponding author email address**: Leilaahmadi5252@gmail.com

A r t i c l e I n f o

Article type:
Review Article

How to cite this article:
Ahmadi, L. (2025). Olympiad Plan for Vocational and Technical School Students in the Shanghai Cooperation Organization (SCO). *Iranian Journal of Educational Sociology, 8*(3), 1-12.
https://doi.org/10.61838/kman.ijes.8.3.9

A B S T R A C T

Purpose: This study aims to explore the theoretical and practical interrelationship between the proposed Technical and Vocational Education Olympiad (TVET Olympiad) for vocational school students and the strategic framework of the Shanghai Cooperation Organization (SCO), emphasizing regional cooperation, convergence, and educational development.

Methods and Materials: The research adopts a qualitative and analytical approach, utilizing documentary analysis and theoretical modeling. Primary sources include foundational documents such as Iran's Fundamental Transformation Document in Education, national curriculum plans, and official SCO charters. Secondary sources consist of academic literature related to convergence theory, regional integration, national interest frameworks, and comparative international education policy.

Findings: The study reveals that the TVET Olympiad aligns strongly with the strategic interests of Iran and other SCO member states. It fosters skill development, entrepreneurship, and knowledge-based economic participation among youth aged 15 to 18. The Olympiad model is shown to advance regional educational convergence by promoting mutual capacity-building, workforce mobility, and socioeconomic innovation. Furthermore, the SCO's demographic scale, resource advantages, and market integration capacities offer a unique platform for institutionalizing the Olympiad. The initiative supports cultural alignment, reduces youth unemployment, and enhances geopolitical cooperation through education diplomacy. The formation of educational consortia and cross-border skill-sharing mechanisms are also highlighted as feasible policy pathways.

Conclusion: The proposed TVET Olympiad serves as a transformative initiative for linking national educational strategies with multilateral regional development agendas. It has the potential to reinforce Iran's active engagement in the SCO, contribute to sustainable development, and offer scalable educational solutions to shared economic challenges across the region.

Keywords: *Vocational and Technical Schools, TVET Olympiad, Knowledge-Based Foundations, Regional Convergence, Shanghai Cooperation Organization, Student Entrepreneurship*

1. Introduction

Education is one of the most important social institutions in a country, and its transformation can lead to improvements in various dimensions of society. In the developed countries of the world, whenever weaknesses are observed, they resort to reviewing the structure of education for improvement and reform. This highlights the fact that effective education is the foundation for sustainable development and serves as the driving force of the social system. The mission of education is to transform human resources into human capital and to nurture developed individuals. This heavy responsibility is realized and materialized within an effective educational system (Kamarei et al., 2021). Promoting and advancing the culture of skill development, work, and entrepreneurship, achieving sustainable job opportunities, turning knowledge into wealth, and guiding and expanding skill-based education based on continuous use of information and communication technology and modern knowledge in a more scientific and goal-oriented manner are the core objectives of the "Global Olympiad of Technical and Vocational Skills for Vocational School Students." This Olympiad will first be implemented among the member countries of the Shanghai Cooperation Organization (SCO), with its global expansion as one of the goals of this article.

1.1. Concepts

Vocational Schools: Understanding the concept of vocational schools is essential for making the right choice in career paths. Vocational schools are specialized institutions that focus on training students in a specific field such as computer science, electronics, visual arts, physical education, and more. The diversity of vocational fields is vast, offering a wide range of options based on different tastes. Generally, attending a vocational school offers the following benefits:

- Specialized education
- A wide variety of vocational fields
- Networking opportunities
- Practical opportunities

Types of Vocational Schools:

a) Technical and Vocational School: The goal of this category is to train technicians and prepare students for further studies in applied sciences. Students who intend to pursue further studies in this category generally have a conventional and inquisitive personality. These individuals should possess strong visualization skills and excel in both theoretical and technical subjects. Additionally, applicants for this educational track must have an interest in tools, techniques, and tasks related to technical, engineering, and mechanical fields.

b) Vocational and Work School: The aim of the vocational and work category is to train skilled and semi-skilled workers for quick entry into the job market. Students who wish to pursue this educational track typically have a conventional personality and show less interest in theoretical subjects, focusing more on technical and practical tasks.

Since the quality of education depends on several factors, one of the most important being human resource management, this research aims to answer two fundamental questions:

1. Why is the "TVET Olympiad for students aged 15 to 18" proposed for the target community of vocational schools?
2. Why can the "TVET Olympiad" be implemented within the Shanghai Cooperation Organization? (Mousavi et al., 2019).

Many developing and developed countries have introduced Technical and Vocational Education and Training (TVET) as a priority for their Ministry of Education. The reason for this is the significant role of TVET in reducing poverty and promoting national development (Arabi et al., 2022). These countries believe that TVET motivates youth to progress and provides a path through which they can earn income. Moreover, the skills that are valued in the global and local economy foster economic growth, employment, and income (Arabi et al., 2022). Knowledge is always changing, and an educator must stay updated on the knowledge relevant to their field to teach in line with the needs of today's industries. Therefore, the culture of skill enhancement and lifelong learning has become an established concept for both teachers and students, with the continuous acquisition of theoretical and practical knowledge being a crucial element of education (Sobhaninejad & Tezdan, 2015). It must be acknowledged that many problems in educational systems, especially in third-world countries, share similar underlying principles and issues, and if a solution to any of these challenges is discovered in one part of the world, its implementation in equivalent conditions elsewhere is sure to yield similar results. In this era, known as the age of the explosion of information across all human societies, the question arises: Have the conventional methods of education been able to meet the needs of individuals in society at the end of the third millennium? What transformations are necessary for

Iranian Journal of Educational Sociology
E-ISSN: 2645-3460

education to align with the needs of today's society and be considered effective and constructive? How well have the economic goals in education, such as employment and workforce development, been realized? Clearly, the answers to these questions do not address the needs and challenges of today's students. There is a need for an international update considering the latest global sciences and technologies, knowledge-based foundations, and the use of artificial intelligence capabilities in order to make significant progress and foster the talents and abilities of our children in a healthy competitive environment. Based on this, the proposal to implement the "TVET Olympiad" for the target community (in Group Three, Vocational Schools for students aged 15 to 18) of all male and female students wishing to choose one of the subjects in technical and vocational education is presented as a feasible project within the Shanghai Cooperation Organization (Machinechi et al., 2011).

1.2. Shanghai Cooperation Organization

The Shanghai Cooperation Organization (SCO) is an intergovernmental organization for multilateral cooperation in security, economic, and cultural affairs. China and Russia play the primary and decisive roles in the organization. Currently, the SCO has 9 member states: Iran, Uzbekistan, Tajikistan, Pakistan, Kyrgyzstan, Kazakhstan, Russia, China, and India, and 3 observer countries: Mongolia, Belarus, and Afghanistan. Several countries, such as Armenia, Azerbaijan, Cambodia, Nepal, Turkey, and Sri Lanka, are dialogue partners (Moshfeq, 2022). The SCO is a permanent international intergovernmental organization established on June 15, 2001, in Shanghai (PRC) by the Republic of Kazakhstan, the People's Republic of China, the Republic of Kyrgyzstan, the Russian Federation, the Republic of Tajikistan, and the Republic of Uzbekistan. Its predecessor was the Shanghai Five mechanism. In 2002, the SCO Charter was signed at the Summit of Heads of State in St. Petersburg, and it came into force on September 19, 2003. This Charter specifies the organization's objectives, principles, structure, and areas of main activity.

The objectives of the SCO are:

• To strengthen mutual trust, friendship, and good-neighborliness among member states.

• To encourage effective cooperation among member states in areas such as politics, trade, economy, science and technology, culture, education, energy, transport, tourism, environmental protection, etc.

• To jointly ensure and maintain peace, security, and stability in the region.

• To promote a new, democratic, just, and rational international political and economic order.

Internally, the SCO adheres to the Shanghai spirit, which emphasizes mutual trust, mutual benefits, equality, consultation, respect for cultural diversity, and pursuit of common development. Externally, the organization supports non-alignment, non-interference in the affairs of other countries or regions, and openness. The highest decision-making body of the SCO is the Council of Heads of State (CHS). Currently, the SCO member states include:

9 Member States – India, Iran, Kazakhstan, China, Kyrgyzstan, Pakistan, Russia, Tajikistan, Uzbekistan.

3 Observer States – Afghanistan, Belarus, Mongolia. In 2022, at the SCO Summit in Samarkand, the process of elevating Belarus's status within the organization to that of a full member began.

14 Dialogue Partners – Azerbaijan, Armenia, Bahrain, Egypt, Cambodia, Qatar, Kuwait, Maldives, Myanmar, Nepal, UAE, Turkey, Saudi Arabia, and Syria.

The SCO focuses on cooperation with international and regional organizations.

1.3. Review of Research Background

The 21st century is the era of knowledge and skills. The world today, in the view of thinkers and scholars, is known as the "Information and Communication Age" and the "Knowledge-Based Society." It is measured by the development of knowledge based on skills, creativity, and human innovation abilities. At higher levels of education, in the first and second stages of secondary education, or in vocational and technical schools, education continues. Entry into vocational schools should be seen as a gateway to the world of sciences and technologies, communications and information, knowledge-based technologies, entrepreneurship skills, scientific and skill-based research in knowledge-based foundations and knowledge industries, artificial intelligence, and skill-building workshops (Bagheri Far & Salehi, 2015). It is evident that in order to adopt an effective strategy for educating students, it is essential to design educational programs that align with the values, principles, and philosophies of the educational system, scientific and cultural developments, and the needs of the learning society. A static and unprogressive educational system without necessary infrastructural changes and modernization will lead to wasted time and reduced

Iranian Journal of Educational Sociology
E-ISSN: 2645-3460

efficiency (Arabi et al., 2022). Advanced education for higher levels of diploma programs is provided by the Ministry of Science and Technology, as vocational school graduates can continue their studies in technical colleges, applied science universities, and other higher technical institutions (Arabi et al., 2022). The various levels of education in Iran's technical and vocational system are presented in Table 1.

Table 1

Levels of Education in the Technical and Vocational System (Arabi et al., 2022)

Technical and Vocational Education Levels	Age Group	Characteristics
Secondary (Work and Vocational Education)	14-17 years	Technical education through high school programs
Higher Education (Technical and Vocational College)	17+ years	Programs focused on practical solutions for the job market
Lifelong Learning (Technical and Vocational Organization)	15+ years	Short-term courses focused on acquiring new skills

"Skill Houses" are scientific centers established in Iran for summer camps where Olympiad elites and top students can meet, exchange experiences, and enhance their skills in current professions and technologies. They will also engage in creating new sciences and technologies for the future, considering knowledge-based topics and market demands.

1.4. Theoretical Foundations of the Study: The Impact of the Interrelationship between the Olympiad and the Shanghai Cooperation Organization

A purposeful examination of the Shanghai Cooperation Organization (SCO) and Iran's engagement with it can be analyzed under the framework of convergence theory and regionalism in international relations. Through this perspective, Iran's national interests can be articulated and evaluated (Jafari et al., 2017).

National interests in every country are determined according to its geopolitical and historical context and are aligned with the core values and fundamental principles accepted by society. These fundamental principles are derived from a nation's philosophy, mysticism, culture, history, customs, and traditions. Krasner considers national interests an inescapable option, and according to Lord Palmerston, national interests are eternal standards in foreign policy. He believes national interests are perpetual, and our duty is to follow them. National interests are closely tied to foreign policy (Ranjdoost & Azimi, 2020), and in Joseph Nye's terms, they refer to a set of shared priorities considered in international relations (Jafari et al., 2017).

A set of background conditions prepare the social, economic, and psychological environment necessary (though not necessarily sufficient) for the formation of a security community with convergence, such as:

- Mutual compatibility of core values related to political behavior (e.g., democracy, human rights, etc.);
- The existence of a distinct and attractive way of life (e.g., Western, Asian, Islamic lifestyles);
- The expectation of achieving stronger, more profitable economic links or shared rewards through new connections;
- Significant increase in political and administrative capacities in at least some participating units;
- Superior economic growth in at least some of the participating units compared to surrounding areas outside the target convergence region;
- The existence of strong and enduring social communication ties beyond the shared borders of the territories meant for convergence, as well as across key internal social strata;
- Expansion of political elites within at least some of the political units, and for the larger collective society;
- Relatively high geographic and social mobility among individuals, particularly within politically significant classes;
- A broad scope of communication flows and reciprocal exchanges;
- A high level of predictability in mutual behaviors;
- Reciprocity in the rewards within communication and exchange flows among the units aimed at convergence (i.e., all parties benefit, rather than one gaining and another losing).

The development of an international information and communication exchange network, grounded in science and technology, knowledge-based foundations, and the use of artificial intelligence, particularly within the domain of the Shanghai Cooperation Organization—which enjoys three key advantages: population, energy, and consumer market—provides the rationale for proposing the Technical and Vocational Olympiad under the following themes:

Iranian Journal of Educational Sociology
E-ISSN: 2645-3460

1. Training entrepreneurial and efficient individuals with a rich culture of ethics and work ethics.
2. Enhancing skill capacities and generating wealth through knowledge and knowledge-based systems.
3. Upgrading the knowledge and skills of the workforce in SCO member states.
4. Accelerating the productivity of economic enterprises through improved efficiency and achievement of maximum output performance.
5. Increasing self-reliance in SCO member states through skill-based scientific research in knowledge-based fields and industries.
6. Promoting sustainable economic development, job creation, the ability to generate innovative ideas, and, importantly, the commercialization of those ideas, ultimately advancing social justice.
7. Addressing the demand for skill-based technical and vocational education tailored to market needs.
8. Providing rapid education and employment opportunities for youth in Iran and SCO member countries at minimal cost to governments and families.
9. Establishing a global business and marketing management network—especially within the SCO, which possesses the following within its territory:
    - a) **Energy resources**,
    - b) **Production capabilities** (industrial and agricultural), accounting for 23% of the Earth's geography,
    - c) **Consumption power**, with the region's population representing 45% of the world's total population.

Building upon the historic legacy of the Silk Road, the SCO is well-positioned to serve as a foundation for new global trade exchanges (Jafari et al., 2017).

2. Methods and Materials

This article is a research study with an applied objective. The data collection method is a combination of a literature review, qualitative data analysis, and library research, using various domestic and international sources. The collected materials were first analyzed and then incorporated into the article's structure. The statistical population of the study includes all accessible related resources, books, articles, and references.

3. Knowledge-Based Economy and the Technical and Vocational Education Olympiad

Investment in knowledge occurs across all sectors of a country's economy and is not limited to advanced industries or solely through research and development. In other words, a nation's investment in wealth creation increasingly depends on investing in strengthening the "knowledge triangle," which consists of education, research, and innovation. A significant challenge in technical and vocational education is meeting the changing skill demands of individuals and the labor market (Shari'ati et al., 2019). Knowledge is acquired from experienced and specialized individuals, and since knowledge is considered the ability to maintain assets and a capability in achieving goals, a significant portion of these assets is made up of trained and educated human resources (Nemati et al., 2019). These educational programs must take place in environments that encourage active learning forms. Instead of repetitive tasks, reconstructing what has been done before, and imitating previous activities, students should be able to explore new information, show creativity, and understand that learning is a lifelong process.

Vocational schools should be a space for active student participation to:

1. Learn skills.
2. Serve as growth centers for skill exchange and idea-sharing among Olympiad elites at the international level.
3. Act as centers for commercializing the projects of research-oriented Olympiad students.
4. Create a space aligned with new research findings and serve as an organized social network for international scientific, technological, information, and communication exchanges.
5. Be a space that facilitates work practice and an environment ready to accept and compensate for students' failures in a way that these failures become stepping stones for later success rather than discouraging the students. Indeed, future education and training will rely on creativity, knowledge, and the power of critical thinking (Haji Aghaei & Khalghali, 2020).

4. A Look at Vocational Schools Worldwide

In every country, the educational system is one of the most important social institutions. The mission of this system, besides transferring cultural heritage and human

Iranian Journal of Educational Sociology
E-ISSN: 2645-3460

experiences to the new generation, is to bring about desirable changes in the knowledge, attitudes, and ultimately the behaviors of children, adolescents, and young people. To achieve these goals, substantial investments are made in the education of children, adolescents, and young people in every country. The way work is conducted and the effectiveness of educational institutions require understanding the goals, principles of education, student and teacher characteristics, curricula, teaching methods, and policies governing each level of education, which differ in every country (Machinechi et al., 2011).

It appears that bridging the gap between educational and economic systems and linking education with the world of work is one of the key goals of educational systems, and the new secondary education system in our country has been designed and implemented with these objectives in mind.

5. The Importance and Necessity of Implementing the International TVET Olympiad

Today, globalization has introduced new challenges for education systems, such as rapid changes, program restructuring, and mass knowledge transfer (Allahkarami & Monajati, 2014). The global trends in educational transformations indicate that in the 21st century, secondary education will see greater growth compared to other educational levels, involving various economic dimensions, and necessitating the formulation of new strategies and programs.

These goals include:

● Strengthening technical and vocational education as an essential component of lifelong learning.

● Directing technical and vocational education toward sustainable development.

● Providing technical and vocational education for all.

The gap in the competencies of vocational school graduates becomes increasingly apparent in society, and this is explicitly reflected in the employment system, such as the reluctance to employ vocational graduates and other forms of market demand. Therefore, to address this critical challenge in education and the employment of vocational school graduates, the proposal for implementing the "International TVET Olympiad" is introduced. This Olympiad, in various skill areas, can be the foundation for new industries and the development of entrepreneurial skills worldwide for children under 18 in knowledge-based sectors such as:

- Artificial Intelligence
- Nanotechnology
- The expansion of nuclear sciences in plant and pharmaceutical branches
- The development of technological sciences and innovations in information and communication technologies, etc.

The implementation of the Olympiad is aimed at achieving the following objectives:

Since one of the goals of this program is to realize material incentives (selling products, producing student-made goods and services), the main objectives are:

a) Teaching global science and technology and skill enhancement.

b) Promoting entrepreneurship and creating self-employment opportunities.

c) Generating income from the production of vocational school students' products and services.

These objectives involve identifying market demand, creating new educational programs, and refining existing curricula to better align with market needs. These skills should be developed more comprehensively and widely to meet demand, with a focus on:

- Enhancing business opportunities
- Teaching marketing skills
- Teaching market management
- which plays a crucial role in achieving the "Student Olympiad" program's goals.

To successfully implement the student Olympiad and present it at the international level, it must be introduced in organizations and unions that consider not only security and political alignment but also economic, commercial, scientific, and cultural matters. The Shanghai Cooperation Organization (SCO) is a multifunctional organization that presents an opportunity to raise the profile of the technical and vocational Olympiad in international discussions on education, information and cultural exchange, and more. This would further enhance regional convergence at the highest levels (Kamarei et al., 2021). Additionally, it provides a suitable platform for implementing the Olympiad between Iran and all SCO member states, which could strengthen and expand the potential for commercial, scientific, and research development across all fields of international communication.

Iran's foreign relations with regionalism have three distinct approaches:

1. Geographical and geopolitical (Persian Gulf and Middle East) – Iran's political, economic, and security life is dependent on these regions.
2. Cultural and historical (Central Asia)

Iranian Journal of Educational Sociology
E-ISSN: 2645-3460

3. Ideological (Islamic world)

Among these three approaches, the cultural and historical approach is the primary one, with the ideological approach coming second in relevance to the Technical and Vocational Olympiad topic. The geographical approach serves as a guiding force for all countries under the overarching goals of the Ministry of Foreign Affairs. Consequently, the relationship between politics, culture, economy, security, scientific interests, and more is a multifaceted and crucial matter that has significant implications in various areas of global communication (Tabatabai et al., 2020).

6. Reasons for the Existence of the Olympiad in the Shanghai Cooperation Organization (SCO)

The Shanghai Cooperation Organization (SCO), as the most powerful mechanism for regional cooperation in Central Eurasia, strives to play a significant role in shaping the framework for collective cooperation in this region (Koulai & Tisheh Yaar, 2013). An important achievement of the SCO for Iran and its member countries is the establishment of the "Joint Banking Council." The aim of this council is to facilitate access to the capital needed for the implementation of joint projects within the organization. The TVET Olympiad plan within the SCO is aligned with the objectives of the "Joint Banking Council" and facilitates the financial resources and banking exchanges necessary to implement the Olympiad project among the member states. Utilizing the goals and resolutions of the council to guide and advance the accepted TVET Olympiad plan will serve as a springboard for all members of the SCO, not just for Iran. Introducing the TVET Olympiad in the international SCO context represents a form of "guaranteed trade" beneficial to Iran. For the reasons mentioned above, there is a significant and deep gap between Iran's technological and vocational knowledge and the advanced skills and technologies available worldwide, both in theoretical sciences and practical skills. By introducing this issue at the SCO level, through the exchange of scientific and practical experiences, Iranian students, and ultimately basic industries and other sciences, will gain access to guaranteed knowledge in competitions and tests. This serves as a form of win-win agreement in the realm of skill enhancement and access to scientific and technological foundations from which Iran has been excluded due to sanctions. The TVET Olympiad in the SCO can offer Iran the opportunity (Source: Author) to, first: plan to utilize cooperation capacities with its eastern and northern countries; second: use the potential of these countries to combat sanctions and threats and address certain technological needs and the advancements in global sciences. A look at the member countries of the organization shows that they have the potential to become one of the largest global hubs for economy, trade, foreign investment, energy, and military power in the coming decades. The region's population provides a vast market for industrial and agricultural products. Lower transportation costs compared to other costs reduce the expenses for expanding this regional grouping, providing members of the organization a natural advantage due to their geographical proximity. In fact, members are geographically close to each other and are natural commercial partners (Hosseinpour, 2023).

7. Geographical and Demographic Position of the Shanghai Cooperation Organization

Table 2

Population Size, Growth, and Share of the Global Population in SCO Member States

Description	Population and Global Share (Million and Percentage)	Percentage of Urban Population to Total	Population Growth Rate
China	1990: 1128.8 (21.3%) 2000: 1247.8 (19.2%) 2007: 1305.7 (19.6%)	1990: 27.9% 2000: 36.4% 2007: 43.0%	00-95: 0.91% 00-05: 0.67% 05-01: 0.58%
Russia	1990: 147.4 (2.8%) 2000: 144.0 (2.2%) 2007: 142.5 (2.1%)	1990: 73.3% 2000: 73.0% 2007: 72.8%	00-95: -0.23% 00-05: -0.48% 05-01: -0.51%
Kazakhstan	1990: 15.0 (0.28%) 2000: 15.2 (0.23%) 2007: 15.2 (0.23%)	1990: 56.3% 2000: 57.3% 2007: 57.8%	00-95: -1.25% 00-05: 0.34% 05-01: 0.71%
Kyrgyzstan	1990: 4.9 (0.09%) 2000: 5.2 (0.08%) 2007: 5.3 (0.08%)	1990: 35.4% 2000: 35.8% 2007: 36.1%	00-95: 1.49% 00-05: 1.01% 05-01: 1.10%
Tajikistan	1990: 6.2 (0.12%) 2000: 6.6 (0.10%) 2007: 6.7 (0.10%)	1990: 25.9% 2000: 24.7% 2007: 24.4%	00-95: 1.34% 00-05: 1.19% 05-01: 1.51%
Uzbekistan	1990: 24.7 (0.47%) 2000: 26.6 (0.41%) 2007: 27.4 (0.41%)	1990: 37.3% 2000: 36.7% 2007: 36.7%	00-95: 1.52% 00-05: 1.46% 05-01: 1.44%
Total Members	1990: 1327 (25.06%) 2000: 1445.4 (22.2%) 2007: 1503 (22.5%)	- - -	- - -

Iranian Journal of Educational Sociology
E-ISSN: 2645-3460

India	1990: 860.2 (16.2%) 2000: 1046.2 (16.1%) 2007: 1169.0 (17.5%)	1990: 25.5% 2000: 27.7% 2007: 29.2%	00-95: 1.84% 00-05: 1.62% 05-01: 1.46%
Pakistan	1990: 113.0 (2.13%) 2000: 144.0 (2.2%) 2007: 163.9 (2.5%)	1990: 30.6% 2000: 33.1% 2007: 35.7%	00-95: 2.44% 00-05: 1.82% 05-01: 1.84%
Iran	1990: 56.7 (1.07%) 2000: 66.1 (1.01%) 2007: 71.2 (1.1%)	1990: 56.3% 2000: 64.2% 2007: 68.0%	00-95: 1.22% 00-05: 0.97% 05-01: 1.35%
Mongolia	1990: 2.2 (0.04%) 2000: 2.5 (0.04%) 2007: 2.6 (0.04%)	1990: 57.6% 2000: 56.6% 2007: 56.9%	00-95: 0.66% 00-05: 0.88% 05-01: 0.96%
Total Observers	1990: 1032 (19.5%) 2000: 1259 (19.3%) 2007: 1406 (19.3%)	- - -	- - -
Grand Total	1990: 2359 (44.6%) 2000: 2704 (41.5%) 2007: 2909 (43.6%)	- - -	- - -
World	1990: 5294 (100%) 2000: 6514 (100%) 2007: 6671 (100%)	1990: 43.0% 2000: 46.0% 2007: 49.0%	00-95: 1.37% 00-05: 1.24% 05-01: 1.17%

For former Soviet Union countries in the SCO, the years 2000 and 2005 are used instead of 1990 and 2000. The SCO member countries, with a population of over 2.9 billion people, constitute 43.62% of the global population and are the world's largest regional player in terms of population size, with a dominant weight among other regional arrangements. Among the members, China has the largest population, containing 19.57% of the global population and 44.87% of the SCO's population in 2007. After China, India, Pakistan, and Russia follow. Together, these four countries accounted for 95.58% of the SCO's population in 2007 (Hosseinpour, 2023). The organization makes decisions by consensus, and initiatives and proposals from member countries can only be executed if approved by all others. Most economic cooperation within the organization has occurred as a result of initiatives proposed by different countries. The organization's charter outlines the promotion of regional economic cooperation in various forms, the gradual creation of an environment conducive to trade and investment, and the free flow of goods, capital, services, and technology among member economies as a key objective (Shari'ati Nia, 2022). The TVET Olympiad plan within the organization can be framed similarly to an "economic union," which is the highest level of regional integration. This would pave the way for fundamental changes in industries, factories, and meeting market demands. (Just as in an economic union, members not only create a shared market among themselves but also harmonize and standardize monetary, financial, economic, transportation, and other policies). The SCO's interbank consortium, established in October 2005 following the decision of the organization's heads to create a financial support mechanism for member countries' projects, has supported 59 projects with a total of $10.7 billion in loans (Najafi & Mahdi, 2022; Najati & Belaghi Inalo, 2021).

8. Benefits of Implementing the TVET Olympiad for Iranian Students

In the Fundamental Transformation Document, which was formulated and finalized in December 2011 in 8 chapters, the statements of the Leader of the Islamic Revolution of Iran within this document contain significant and prominent points that reflect his concerns about the transformation of education. In Chapter 4, titled "The School in the Horizon of Vision," it is emphasized that, based on the vision for 2025, "The school should reflect the realization of the stages of a good life, be the center for providing educational services and opportunities, enable students to understand and reform their situations, and help in the ongoing development of their identity according to the Islamic framework and the philosophy of the official educational system of the Islamic Republic of Iran."

The proposal to form the "TVET Olympiad" (FAHK), as an international scientific and skill-based standard and ranking system for TVET qualifications, aims to evaluate the scientific and professional skills of all educational factors involved in schools specialized in "training elite TVET students" who are "responsible for meeting the diverse needs of sectors such as industry, mining, agriculture, medicine, services, etc." Additionally, it provides a framework for training students, employing vocational school graduates, and managing international activities related to the TVET Olympiad based on:

1. Identifying market demands, responding to customer needs for products and services, and updating training programs based on changes in information and communication technology.
2. Creating, expanding, and nurturing lifelong education in the fields of global sciences, technologies, and skills, with attention to the specificities of time, place, and accessible resources

Iranian Journal of Educational Sociology
E-ISSN: 2645-3460

in Iran and at the international level (SCO member countries).

3. In line with Iran's ideological, cultural, economic, and social conditions, the "TVET Olympiad" research institution operates according to the set goals and submits quarterly field reports of all activities carried out.

8.1. *Members of the Scientific Board*

The scientific board members of this institution are responsible for updating the scientific information and practical skills of students, maintaining extensive communication with academic staff from other countries to achieve the goals of the "TVET Olympiad." Additionally, the duties of the scientific members include:

a) Establishing a continuous and organized research system in various sectors such as industry, agriculture, services, etc., aligned with vocational school curricula, conducting fundamental research on theoretical and skill-based foundations, and improving these foundations over time in response to global scientific and research changes.

b) Establishing effective and continuous communication with academic-research departments of universities and providing spaces for scientific and skill-based activities in workshops, industries, factories, etc., where active, elite, and Olympiad-bound students can engage in knowledge enhancement and skill acquisition for preparation in international "TVET Olympiad" competitions.

8.2. *Financial Consortium of the TVET Olympiad*

The Shanghai Cooperation Organization (SCO) is a "cooperation-driven" and "initiative-based" organization. It is neither homogeneous nor in conflict and tends to focus more on the initiatives of its member states (Shari'ati Nia, 2022). According to a report by the International Monetary Fund, by 2023, the economic potential of the SCO region will surpass that of the G7 economies. The economic goal of the SCO is to form a common market and a free trade zone to increase business and commercial opportunities for its member countries.

8.3. *Benefits of the TVET Olympiad for Students from Other Countries*

The "TVET Olympiad" serves as an intermediary between education and the world of business, with the goal of establishing effective international connections with objectives including:

- Providing opportunities to gain global experiences and exchange scientific and skill-based experiences between students in Iran and other countries.
- Enhancing and expanding the professions and skills currently taught in schools.
- Developing new sciences and technologies for the future, focusing on knowledge-based industries, artificial intelligence, and its application in knowledge enhancement.
- Teaching business and marketing management, based on supply and demand market needs both inside and outside of Iran.

This new structure serves as a link between schools and international universities for teaching and acquiring scientific and skill-based experiences beyond the level of ordinary TVET schools.

- Formation of a "Research Consortium" in the "TVET Olympiad" project, which can be presented within the SCO framework to: Establish a database and communication network, fostering domestic and international cooperation at the student level. This would effectively form an educational consortium with financial support, skilled instructors, providing new scientific technologies, and equipping students with tools and materials for workshops. It includes sharing theoretical knowledge and skill-based experiences for students aged 15 to 18.

The educational consortium would be an agreement for investment in education and skill enhancement, guiding communities toward knowledge, capability, income generation from knowledge, and wealth creation from human resource abilities. This plan not only addresses the theoretical learning of students but also focuses significantly on skill enhancement within knowledge-based industries and key scientific areas and skill development. The educational consortium is an agreement among the ministries of education in SCO member countries to integrate skills, commercialize ideas, create small businesses based on knowledge-based industries, and complete student projects through mutual cooperation. The relationships between ministries involved in the "TVET Olympiad" plan, such as the Ministry of Education, Ministry of Industries, Ministry of Foreign Affairs, etc., will be formalized within the framework of international laws and contracts. The main objective of implementing the "Educational Consortium" is to cover the scientific and skill-based weaknesses of SCO members by facilitating government efforts for networking.

Iranian Journal of Educational Sociology
E-ISSN: 2645-3460

Networks are the places where knowledge and skills are shared, and wealth is generated.

9. Discussion and Conclusion

In the knowledge economy and globalization era, reconstructing traditional approaches in educational systems and using modern methods in the teaching and learning process is more important than ever (Allahkarami & Monajati, 2014). Education, as one of the foundational institutions in society, plays an undeniable role in preparing and distributing individuals in appropriate positions within society. A skilled workforce is key to achieving economic strength across various sectors of society. Therefore, investing in vocational and technical education is an investment for the future. Countries that have realized the importance of education and its role in the future economy, and are concerned with development, prioritize the enhancement of educational systems (Kashti Aray et al., 2012). Among various types of education, those that serve the economic and social development of society and act as its driving force have the greatest impact and benefits. Technical and vocational education and training in various sectors, such as industry, agriculture, services, medicine, and paramedicine, aims to create employment opportunities, enhance skills and expertise, increase efficiency, and improve productivity. These trainings are designed based on economic sectors and aim to increase the ability, knowledge, skills, and analytical capabilities of workers in order to improve their job performance. After acquiring skills and expertise, individuals will be able to secure suitable job opportunities or ultimately create jobs for themselves. These types of education focus on nurturing "self-employment" and "entrepreneurship" (Najafi, 2022). The proposal for the TVET Olympiad could positively impact the realization of Iran's benefits in the SCO's interbank consortium and also benefit Iran in the SCO Business Council. Income generation and wealth creation from knowledge are key discussions in the knowledge-based economies of the world. The knowledge market and knowledge-based industries are essential for economic development. Implementing the TVET Olympiad will create scientific, economic, and other opportunities (Esmaeili & Mohammad Ali, 2014).

9.1. Suggestions

The proposal for the TVET Olympiad, especially in the early stages of Iran's formal membership in the SCO, is a positive phenomenon for culture, civilization, science, and knowledge. Additionally, the TVET Olympiad can direct positive attention from the World Energy Club toward Iran. Suggestions to facilitate the implementation of the plan and achieve better and more outstanding results from the TVET Olympiad include:

• Establishing an international financial banking network or opening special international financial accounts (for scientific and workshop purposes) such as SWIFT to facilitate student financial transactions.

• Creating a "Skill House of the Father's Home" to nurture Olympiad elites and create a bridge between schools, universities, scientific and industrial centers, workshops, and factories, enabling Olympiad students' entry and exit into "workshop-university" and "industrial factory centers." Additionally, familiarizing students with university student experiences and factory workers' insights and fostering relationships with higher scientific centers will provide Olympiad students exceptional and valuable opportunities for hands-on experience.

• Given that knowledge-based economies are considered the final phase of global economic restructuring, designing, developing, and enhancing training for students in technical and vocational fields, which are the main pillars of innovation, is necessary so that Olympiad elites can play a significant role in developing industries with advanced technologies and creating employment for other TVET school graduates.

• Another aspect of the TVET Olympiad includes organizing educational and skill-building camps for 2, 3, 6 months to 3 years (for students aged 15 to 18) in SCO member countries.

• Organizing international exhibitions for TVET Olympiad students and inviting representatives from SCO member countries to visit.

• Accepting orders and generating income from student-run businesses by opening a showcase for school products and supporting students who aim to enter the global business and income market.

• It is recommended that students accepted into Olympiad schools should be provided with health insurance and work insurance records (from their second year of secondary school, students should have work records). This will encourage students to strive harder and boost their motivation for learning and creative skill enhancement.

• Students should always be the center of attention and at the core of the TVET system for the following reasons:

• a) To meet the academic and financial needs of the students.

Iranian Journal of Educational Sociology
E-ISSN: 2645-3460

• b) To create an appropriate educational environment and methods that align with individual interests and abilities; this is the best path to success.

• An organization should be established to evaluate training programs and issue national certificates for skill qualifications, which would be awarded to top students and Olympiad students. This awarding of qualifications should be done by more than one organization to provide a larger and more competitive selection for students, trainees, vocational trainers, employers, and instructors.

• Establishing a system for recording the scores and academic degrees of Olympiad elites.

Authors' Contributions

Authors equally contributed to this article.

Declaration

In order to correct and improve the academic writing of our paper, we have used the language model ChatGPT.

Transparency Statement

Data are available for research purposes upon reasonable request to the corresponding author.

Acknowledgments

None.

Declaration of Interest

The authors report no conflict of interest.

Funding

According to the authors, this article has no financial support.

Ethical Considerations

Not applicable.

References

Allahkarami, A., & Monajati, S. (2014). The Role of Information Technology in the Success of Technical and Vocational Schools and Colleges. *Journal of Educational Engineering: Technology and Educational Design*, *3*(4), 31-44.

Arabi, S., Hosseini, R., & Azizi, M. (2022). Designing an Entrepreneurial Education Model in Iran's Technical and Vocational Education System. *Journal of Curriculum Studies in Iran*, *17*(66), 113-138. https://www.jcsicsa.ir/article_138904.html

Bagheri Far, A., & Salehi, K. (2015). Challenges of Skill Training and Entrepreneurial Development of Students in Technical and Vocational Schools: A Phenomenological Study. Fifth National Conference and Fourth International Conference on Skills Training and Employment,

Esmaeili, M., & Mohammad Ali, M. (2014). *Examining the Technical and Vocational Education Convention*. Social Studies Office, Research Center of the Islamic Consultative Assembly.

Haji Aghaei, H., & Khalghali, A. (2020). Explaining the Phenomenon of School as an Accelerator. *Journal of Innovations in Education*, *19*(73). https://noavaryedu.oerp.ir/article_107720_2ff31df628b041ac3129cd228c6f7733.pdf

Hosseinpour, M. (2023). *Cultural and Economic Challenges in Technical and Vocational Schools and Colleges*. Office of Publications and Educational Technology.

Jafari, A., Bolabasi, M., Esfandiar, S., Salimi, J., Jalali, R., Ali Fam, H., & Hasani, M. (2017). National Interests and Iran's Membership in the Shanghai Cooperation Organization Examining the Shanghai Cooperation Organization and the Impact of Iran's Membership in It. *Biannual Scientific-Research Journal of Political Science*, *13*(2), 163-200. https://ensani.ir/fa/article/383407

Kamarei, A., Khorshidi, A., Hamidi Far, F., & Mahmoudi, A. A. U. S. a. M. (2021). A Research Article on the Professional Development Model for Managers of Technical and Vocational Schools (Using the Emergent Grounded Theory Approach). *Journal of Educational Technology*, *15*(3), 531-544. https://www.sid.ir/paper/374887/fa

Kashti Aray, N., Yousefi, A., & Mousavi, S. (2012). Alignment of Industry Needs with Technical and Vocational Training in Girls' and Boys' High Schools (Case Study: Falavarjan County). *Scientific-Research Journal of New Approaches in Educational Management, Islamic Azad University, Marvdasht Branch*, *3*(2), 119EP - 138. https://www.sid.ir/paper/168892/fa

Koulai, A., & Tisheh Yaar, M. (2013). The Role of Security in the Shanghai Cooperation Organization Regarding Afghanistan. *Scientific-Research Quarterly Journal of Global Politics*, *1*(2), 61-84. https://journals.guilan.ac.ir/article_731.html

Machinechi, A., Mansouri, A., & Hassan Zadeh, H. (2011). Comparative Education in Iran, Germany, Japan, and France. National Conference on New Achievements in Education, Psychology, Law, and Socio-Cultural Studies,

Moshfeq, Z. (2022). Membership in the Shanghai Cooperation Organization and Its Economic Dimensions. *Monthly Scientific Journal "Economic Security,"* *10*(9), 71-78. https://es.tesrc.ac.ir/article_701791.html

Mousavi, M., Pour Karimi, J., & Naranji Sani, F. (2019). A Model for Professional Competencies of Instructors in the Technical Vocational Sector. *Management of Organizational Education*, *8*(2), 253-285. https://journalieaa.ir/article-1-136-en.pdf

Najafi, F. (2022). Clarifying the Effective Indicators in the Development and Empowerment of Knowledge-Based Educational Programs (Case Study: Technical and Vocational Schools in the Country). First International Conference and Fourteenth National Conference on Education, Shahid Rajaee Teacher Training University, Education Conference,

Najafi, R., & Mahdi, M. (2022). *Pathology of Technical and Vocational Education in Secondary Education (Technical and*

Iranian Journal of Educational Sociology
E-ISSN: 2645-3460

Vocational Schools and Colleges) and Providing Corrective Solutions. Research Center of the Islamic Consultative Assembly, Office of Educational and Cultural Studies.

Najati, M., & Belaghi Inalo, Y. (2021). Analyzing the Benefits of Iran's Membership in the Shanghai Cooperation Organization: A Calculable General Equilibrium Approach. *Journal of Economic Research (Growth and Sustainable Development)*, *22*(3), 89-117. https://ecor.modares.ac.ir/article-18-56252-fa.html

Nemati, M., Khodabakhshi, M., & Heydari, A. (2019). The Relationship Between Knowledge Management and Human Resource Management and Its Impact on Organizational Competitive Advantage. Sixth National Conference on Management and Humanities Research in Iran,

Ranjdoost, S., & Azimi, M. (2020). Explaining the Components of Competency-Based Professional Education and Analyzing Its Position in the Textbooks Related to Non-Technical Competencies in Technical and Vocational Secondary Education. *Scientific Quarterly Journal of Innovations in Education*, *19*(73). https://noavaryedu.oerp.ir/article_107723.html

Shari'ati, F., Amin Bidakhti, A., & Najafi, M. (2019). A Model for Quality in Technical and Vocational Education: Considering the Requirements of a Knowledge-Based Economy. *Journal of Research in Educational Systems*, *13*(47), 41-54. https://ensani.ir/fa/article/author/202720?ArticleSearch%5BsortBy%5D=mostViewed

Shari'ati Nia, M. (2022). Iran's Permanent Membership in the Shanghai Cooperation Organization: Security and Economic Consequences. *Scientific Quarterly Journal of Political and International Approaches*, *13*(3), 35-56. https://piaj.sbu.ac.ir/article_102450.html

Sobhaninejad, M., & Tezdan, A. (2015). *Determining the Framework of Required Competencies for Instructors and Trainers (Technical and Vocational Education Teachers) in Technical Schools*.

Tabatabai, M., Pour Roshan, A., Daniali, T., & Lotfi, H. (2020). Pathology of the Outlook on Iran's Convergence with the Member Countries of the Shanghai Cooperation Organization: A Case Study of China. *Scientific-Research Journal of Geography (Regional Planning)*, *10*(2), 567-592. https://www.jgeoqeshm.ir/article_109458.html

Iranian Journal of Educational Sociology
E-ISSN: 2645-3460