

# Suggestions for Training of Contestants in the World Skills Competition

Jin Li<sup>1\*</sup>, Nie Feng<sup>2</sup>, Liang Pan<sup>2</sup>, Li Xiaosong<sup>2</sup>, Wang Pei<sup>2</sup>

<sup>1</sup>Jin Li, Chongqing Polytechnic University of Electronic Technology, Vocational Education and Industrial Development Research Institute.

<sup>2</sup>Nie Feng, Chongqing Wuyi Technician College, Champion of Hairdressing Project in the 43rd World Skills Competition.

<sup>2</sup>Liang Pan, Chongqing Technician College of Railway Transportation, Champion of Electronic Technology Project in the 45th World Skills Competition.

<sup>2</sup>Li Xiaosong, Chongqing Polytechnic University of Electronic Technology, Champion of Optoelectronic Technology Project in the World Skills Competition Special Competition.

<sup>2</sup>Wang Pei, Chongqing City Management College, Champion of Beauty Project in the World Skills Competition Special Competition.

\***Corresponding author:** JIN LI, Vocational Education and Industrial Development Research Institute, Chongqing College of Electronic Engineering. E-mail: 864712626@qq.com

**Citation:** Li J, Feng N, Pan L, Xiaosong L, Pei W (2024) Suggestions for Training of Contestants in the World Skills Competition. American J Sci Edu Re: AJSER-190.

**Received Date:** 31 May, 2024; **Accepted Date:** 06 June, 2024; **Published Date:** 13 June, 2024

## Abstract

China attaches great importance to the cultivation of skilled talents. General Secretary Xi Jinping [1] pointed out in his congratulatory letter to the first National Vocational Skills Competition: "Vocational skills competition provides a platform for the vast number of skilled talents to show their exquisite skills and learn skills from each other, which plays a positive role in strengthening the team of skilled workers and promoting economic and social development." The paper focuses on the challenges in the training process of the world skills competition contestants, and proposes to improve the scientificity of the training process, the pertinence of incentive policies, the synergy of participants, and the systematicness of policies and measures, so as to promote the implementation of training of skill competition contestants and help build a skilled society.

**Keywords:** training contestants, world skills competition, suggestion.

## 1. Introduction

In recent years, China has actively implemented the "Skilled China" initiative, continuously improving the training, utilization, evaluation, and incentive systems for skilled talents, and continuously improving the institutional environment and social atmosphere for the development of skilled talents. Skills competitions are not only a window to promote skills culture, but also a means to cultivate highly skilled talents. The World Skills Competition is the highest level of global professional skills competition, known as the "World Skills Olympics". The results achieved in the World Skills Competition reflect to some extent the level of skill and industrial development in this country or region. Participating in the World Skills Competition is related to the construction of China's high skilled talent team and is an important part of China's skilled talent work layout. It is important to fully leverage the influence of the World Skills Competition, ignite the enthusiasm of young people to learn and study skills, and help build a "skilled society".

Chongqing has trained four world skills competition champions until 2023. The four champions are currently working in different vocational colleges in Chongqing. They used to be contestants in skill competitions and now serve as coaches for skill competition contestants. The four champions have their own experience and insights on how to cultivate skills competition contestants. This survey conducted interviews with four world skills competition champions in Chongqing, focusing on factors that contribute to the cultivation of champion

contestants, challenges faced in cultivating champion contestants, and training suggestions.

## 2. China's participation in the World Skills Competition

The World Skills Competition is a stage for outstanding young skilled talents from around the world to showcase their talents. Because the World Skills Organization selects competition projects based on factors such as the overall available space for the competition, the required space for each project, and the number of participants in each project, the number of formal competition projects in each World Skills Competition varies, ensuring that all formal competition projects reflect the mission and goals of the World Skills Organization and represent the global economic demand for skills. The competition projects of the World Skills Competition are divided into six major fields, namely Transportation and Logistics, Construction and Building Technology, Manufacturing and Engineering Technology, Information and Communication Technology, Creative Arts and Fashion, Social and Personal Services.

Since China officially joined the World Skills Organization in October 2010, in order to organize and manage its participation in the World Skills Competition, Ministry of Human Resources and Social Security of the People's Republic of China has established the China Organizing Committee of World Skills Competition. China has participated in the 41st, 42nd, 43rd, 44th, and 45th World Skills Competition, as well as the 2022 World Skills Competition Special Competition. Although China

started relatively late in participating in the World Skills Competition, the Chinese delegation still achieved remarkable results that have attracted worldwide attention. China won consecutively the most gold medals in the 44th and 45th World Skills Championships and the 2022 World Skills Competition Special Competition. Breakthrough of zero gold or medal in multiple projects is achieved at the 2022 World Skills Competition Special Competition [2]. This fully demonstrates the achievements made by China in the field of cultivating high skilled talents. The 47th World Skills Competition will be held in Lyon, France from September 10th to 15th, 2024, and China will participate in all 59 competition events. On December 21, 2023, the Ministry of Human Resources and Social Security held a video conference to officially launch the training for the 47th World Skills Competition. The list of training bases and teams for the 47th World Skills Competition in China, as well as the list of leaders of the Chinese Technical Guidance Expert Group, have been announced. Provinces and cities have also launched preparations for the 47th World Skills Competition.

### **3. Factors Contributing the Cultivation of Skills Competition Contestants**

#### **3.1 Valuable Participation Experience**

World competition contestants regularly participate in various industry competitions to accumulate experience. Taking the hairdressing project as an example, before China participated in the World Skills Competition, the Ministry of Human Resources and Social Security had been organizing contestants to participate in the Asian Hair and Makeup Competition, abbreviated as the Asian Competition. Founded in 1976, the Asian Hair and Makeup Competition is currently the largest, highest level, and most influential event in Asia. Its high level has become a benchmark for the entire Asian fashion industry. The contestants sent by China have always achieved good results in the Asian Competition. In 2011, China participated in the 41st World Skills Competition for the first time. Among 46 projects, China chose to participate in 6 projects (CNC turning, CNC milling, CAD mechanical design, hairdressing, website design, welding). The hairdressing project was selected as the only service project because of its good accumulation in the Asian Competition in the early stage.

#### **3.2 A Professional Coaching Team**

With a team of highly professional coaches, players can avoid many detours. The coach is a former contestant who understands the growth process and psychological state of the contestants. With abundant global resources and experience, their training efficiency is relatively high. Usually world champions will join expert team. The expert team is conscientious and responsible, working together to interpret the national standards accurately, deeply understanding the spirit of the competition documents, dividing tasks according to module content, organizing each training session carefully, and transmitting the experience to the contestants without reservation. Different coaches have different knowledge, some know hardware and some know software, but in the end, they all integrate knowledge into the contestants, working together to cultivate them well.

#### **3.3 A Comprehensive Training Base**

China attaches great importance to the construction of training bases for the World Skills Competition. When China began preparing for the 44th World Skills Competition in 2016, the Chongqing Human Resources and Social Security Bureau allocated 5 million-yuan RMB for the construction of the main training base, and 3 million-yuan RMB was allocated to the auxiliary base. The institutions undertaking the base construction task also has performance bonus points. The platform of the skills competition training base is high. Under the training of specialized guidance teachers, contestants can systematically not only learn skills, but also grow in all aspects. The base make effort to support contestants to bring glory to the country. The base provides training subsidies and reimburses contestants for accommodation expenses, home tickets, tools and consumables expenses, as well as travel expenses for attending competitions and learning. Contestants for beauty project need to exercise their physical fitness, learn psychology, English, yoga, Tai Chi, and music. The base also equip contestants with psychological teachers to ensure their physical and mental health. The contestants at the national training base are all outstanding in the national competition. It is assumed that the top ten contestants in the national competition will enter the national training base, and only one contestant will represent the country in the world skills competition. The members of the training team communicate and compete with each other, creating a positive atmosphere that encourages them to work harder and make progress together.

#### **3.4 Individual Attributes of Contestants**

A good contestant needs to have the following attributes. Talent and passion. People have different talents and excel in different fields, you have to love skill first then you can make achievement. A tenacious spirit that never stops until the goal is achieved. The process of preparing for competition is very tedious, and each contestant spends years soaking in the training room for arduous training. Persisting requires motivation and perseverance. From preparing to becoming the world champion, all four champions worked hard for many years. Nie Feng and Liang Pan served as national team players for three consecutive terms before becoming champions. Wang Pei and Li Xiaosong persisted for four consecutive years from preparation to winning the championship. The spirit of craftsmanship that strives for excellence. Contestants should be able to immerse themselves and listen to advice, be careful but not overly focused. Careful contestants strive for excellence and earn more by doing the same tasks.

#### **3.5 Rewards and Honours**

For the winners of the skills competition, the Ministry of Human Resources and Social Security reward them in accordance with the "Interim Measures for the Management of Participation in the World Skills Competition". Local people's governments, industry regulatory departments, industry associations, and societies may refer to relevant national reward methods to commend local and industry participants, as well as institutions and individuals who have made outstanding contributions to the competition work. The Ministry of Human Resources and Social Security will reward the winner with bonus. For example, gold

medal winner of the World Skills Competition will be awarded 300000-yuan RMB. The expert coaching team will receive a 1:1 matching reward. The award-winning contestants will be awarded the title of "National Technical Expert" by the Ministry of Human Resources and Social Security. The contestant who wins the gold medal will be awarded the Senior Technician Professional Qualification Certificate by the relevant professional qualification recognition institution; contestants who have won silver, bronze, or winning medals will be awarded a technician professional qualification certificate by the relevant professional qualification recognition agency. When award-winning contestants participate in the selection of the Chinese Skills Award and the selection of personnel who enjoy special government subsidies from the State Council, they will be given priority under the same conditions. The trainees will be awarded an honorary certificate by the Secretariat of the China Organizing Committee of the World Skills Competition, and will be promoted to a higher level of professional qualification on the basis of the existing professional qualification level.

### **3.6 Positive Employment Prospects**

Both enterprises and institutions attach great importance to vocational qualification certificates, which are a bonus for student employment. Winning in the Chongqing Skills Competition can earn a technician certificate. Winning in the national competition can earn a certificate as a senior technician. Winning in the Chongqing Skills Competition or above can be assessed and admitted to public institutions. Undergraduate education is exempted from the examination, and employees can be recruited as introduced talents, enjoying the resettlement fee for high-level talent introduction and research start-up funds. The four world champions from Chongqing currently have official career positions. Champion contestants who enter the company will serve as the head of the Skills Master Studio and enjoy the treatment of Vice President. Chongqing provides many platforms and development opportunities, including sending skilled talents to study abroad, recommending positions in international competitions, providing opportunities to move to higher positions in world competitions.

## **4. The Challenges Faced**

### **4.1 Insufficient Social Publicity Efforts**

Promotion lectures are a very important channel to enhance the influence and visibility of skills competitions. The current promotion of reward policies for skilled talents is not in place, and the promotion of skilled celebrities is not in place. The public opinion has prejudice against skilled talents, generally believing that learning skills is inferior and not as good as regular education. For the winners of the skills competition, the Ministry of Human Resources and Social Security will reward them in accordance with the Interim Measures for the Management of Participation in the World Skills Competition. Local people's governments, industry regulatory departments, industry associations, and societies may refer to relevant national reward methods to commend local and industry participants, as well as institutions and individuals who have made outstanding contributions to the competition work. These policies are issued and implemented in the form of documents, but not many people at the societal level are aware of these

policies. On the other hand, the path to skill development is too narrow and has limited appeal to young people.

### **4.2 Difficulty in Selecting Contestants**

High quality technical and skilled talents grow through the integration of theoretical knowledge and practical knowledge. If theoretical knowledge preparation is insufficient, it will seriously affect the learning effectiveness and development momentum of learners. Participants in skill competitions need to possess a natural talent and passion for their skills. The process of preparing for the competition is very tedious, and contestants have to undergo rigorous training every day for several years. Contestants need to have the resilience to never give up until they reach their goals. Contestants need to possess a spirit of craftsmanship that strives for excellence, be able to calm down and not nitpick. Many vocational high school students are not mentally mature enough, have low overall quality, think they are a group that has been abandoned, lack confidence, have no interest in skills, and cannot persist in several years of training cycle. In addition, with the diverse forms of entertainment nowadays, students are often tempted and lack the spirit of hard work and research, making them more restless.

### **4.3 Long Training Cycle**

Since China formed a team to participate in the World Skills Competition in 2011, Chongqing has produced a total of four World Skills Competition champions in more than a decade, and the difficulty can be imagined. There are deep paths in skills that require repeated practice, and the training cycle is relatively long. For example, after teaching some basic techniques in the beauty project, the contestants will be interned in a beauty salon for 8 months to polish their techniques, and after the internship, they will be simulated for the competition. On average, it is estimated that gold and silver medal winners in the World Championships need to train for at least 5-6 years, while the top five winners in the national competitions need to train for at least 3-4 years. Different projects also have age restrictions on contestants, for example, the electronic technology projects requiring contestants to be under 22 years old. It is very difficult to select an excellent contestant who possesses both technical skills and a stable mindset. Vocational school students can have longer training time, but their theoretical foundation is not very good. Vocational college students are already 18 years old after completing their high school studies, their training time are limited, only have two or three years.

### **4.4 The Coaching Team Fail to Meet the Needs**

A coaching team with excellent professional qualities can help players avoid many detours. At present, the number of coaches is insufficient, their abilities need to be strengthened, and their remuneration needs to be improved. Most coaches do not come from frontline workers, they are not competitions before and they do not have professional backgrounds. They have certain technical problems and lack practical experience. The teaching staff needs to understand the competition and have experience in participating in it in order to accurately grasp how to carry out training. Small class teaching can better control the effectiveness of skill training, but the number of coaches cannot

meet the needs. From the perspective of teaching quality, the vast majority of coaches are former contestants with strong hands-on abilities. However, in the past, they knew the skill themselves, but now they need to teach the skill to others. The transformation from a contestant to a coach requires the support of educational and teaching literacy. As a practical teacher in the school, coaches have to undertake daily teaching tasks and train contestants, but there is no additional coach subsidy.

#### **4.5 Lack of Training Medium**

Skill learning requires a lot of time to stack, and contestants need to go from beginners to experts in a real work environment. Through the guidance of their master, senior and junior contestants motivate and learn together, compete, and achieve the goal of common improvement. Contestants accumulate experience by regularly participating in various industry competitions. The training base for the World Skills Competition plays an important role, and under the guidance of specialized instructors, contestants can systematically learn skills and make rapid progress. In 2016, China began preparing for the 44th World Skills Competition. The Chongqing Human Resources and Social Security Bureau allocated 5 million yuan to the main base of the competition and 3 million yuan to the auxiliary base. However, the number of eligible contestants to enter the base for training is very limited. The number of other platforms such as skill master studios and artisan workshops are limited. Currently, a vocational college only has one to two master studios and several artisan workshops, and the number of platforms is far from meeting the needs of skill talent cultivation.

### **5. Development Suggestions**

#### **5.1 Increase the Publicity**

Increasing publicity and changing people's traditional beliefs. Widely promoting the advanced deeds of the award-winning contestants who work hard. Creating vigorous an atmosphere that values labor, skills and creativity. Making the development platform and future of skilled players widely known, and changing people's biases towards skilled talents. Strengthening the integration of vocational education and liberal education and arranging trial learning. The World Skills Competition is not as well-known as the Olympics. It is recommended to strengthen the communication between liberal education and vocational education, carry out vocational enlightenment and vocational literacy education during the liberal education stage, arrange trial learning experiences during the middle school general vocational separation, and let vocational school teachers enter liberal education, or liberal education students enter vocational schools, sowing the seeds of skills in students' hearts.

#### **5.2 Establishing Platform**

Attracting enterprises and universities to jointly participate in the training of skilled talents, and promoting the construction of a community of industry education integration. Promoting the formation of an industry education integration community led by the real job standards of industry leading enterprises, based on the enrollment and training capabilities of universities, and linked by talent evaluation. Promoting the mutual empowerment of the industrial chain and talent chain. Implementing a plan to cultivate high skilled leading talents and accelerating the

selection and training of high skilled leading talents such as chief technicians and special level technicians. Increasing the number of craftsman workshops, master studios, and gold medal studios, establish department level, school level, city level, provincial level and national level skill studios. Students are assigned to different levels of studios for incubation based on their abilities. Innovating a dual apprenticeship system with Chinese characteristics. Providing more competition platforms for young students to showcase their skills. Providing opportunities for skilled talents to study abroad. Tafe College in Australia, the dual system in Germany, and the apprenticeship system in the UK have all provided new insights for the cultivation of skilled talents. The industry standards in Australia are very strict, requiring everyone to hold a certificate. To engage in skilled work, one must have a e vocational certification from a Tafe College. Tafe College adopts a flexible small class teaching model with flexible study and graduation times, and each class has 20 students. Learning in the form of a task list means completing specific tasks at different skill levels can lead to graduation. Each task must have signatures from teacher, manager, customer, and teaching supervisor to be considered completed.

#### **5.3 Competition and Training Dual Wheel Drive**

Providing more competition platforms, so that young contestants have more platforms and opportunities to showcase their skills and have the opportunity to advance through the skills track. The industry vocational skills competition held in Guangdong Province [3] involves more than 100 events, directly driving about 1.8 million people in the province to participate in job training and skill competitions every year. Promoting lifelong vocational skills training system. The training of new vocational skills talents is not limited to schools. Innovating the establishment of a social training evaluation organization, training guidance and selection mechanism, establishing an elimination mechanism and the selection of training institutions. Chongqing has vigorously implemented the action of enhancing vocational skills and cultivating industrial skilled talents. In the past four years, the city has carried out over 2 million subsidized vocational skills training, of which 70% are connected to pillar industries and 33 industrial chains, effectively promoting the resolution of structural employment contradictions. During the 14th Five Year Plan period, Chongqing will carry out government subsidized vocational skills training for 1.5 million people, leveraging the role of subsidized training. The average annual number of market-oriented and socialized training exceeds 1 million, providing technical and skilled talent support for the development of Chongqing's strategic industries.

#### **5.4 Strengthen the Teaching Staff**

Adhere to promoting training through competitions, teaching through competitions, learning through competitions, and construction through competitions. Adhering to benchmark of international skills competition standards, and providing a training platform for teachers to accumulate practical experience through organizing teacher professional ability competitions and strengthening school enterprise cooperation and integration. Recruiting world skills competition winners into the coaching expert group. They understand the growth process and

psychological state of the players, and the training efficiency is relatively high. Promoting the development and application of the results of the World Skills Competition, making the competition accessible to the public. Based on the transformation of "competition gold medals into skill brands, and skill brands into industry famous brands", Chongqing [4] has created 20 skill brands such as "Yuliren" in beauty and hairdressing, "Beautiful Appointment, Gold Chain Store", "Yujiajia" in home service, "Yunneng Ren" in intelligent manufacturing, as well as Yunyang Mian Gong and Wuxi Xiuniang. Through these brands as carriers, coaches and contestants can serve society, enhance their own skill quality, and strengthen skills in the minds of public. Introducing special policies to improve the treatment of coaches in skill competitions, so that more teachers have the motivation to join the team of skill coaches.

**Acknowledgement:** The article is funded by Chongqing Education Science "14th Five Year Plan" 2022 Major Research Project: " Strategies for Promoting the Construction of Skilled Society through High Quality Development of Vocational Education" (Project Approval No. K22YA309004).

**Conflict of Interest:** There is no conflict of interest.

**Author contributions:** JIN LI is the first author and corresponding author. The other four authors are champions of

the world skill competition, they contribute their experiences and insights in this article.

**Source of funding:** the article is funded by Chongqing Education Science "14th Five Year Plan" 2022 Major Research Project: " Strategies for Promoting the Construction of Skilled Society through High Quality Development of Vocational Education" (Project Approval No. K22YA309004).

## References

1. Congratulatory letter from Xi Jinping to the first National Vocational Skills Competition (baidu.com) [EB/OL]. <https://baijiahao.baidu.com/s?id=1685658384140728817&wfr=spider&for=pc>
2. Li Buyan. The Development history of Worldskills Competition and the road of China's participation in World Skills Competition [J]. Publishing and printing,2023(02):1-7. DOI: 10.19619/j.issn.1007-1938.2023.00.025.
3. Why does Guangdong become a gold medal province? "Skill Guangdong Army" brave to carry the banner of manufacturing (baidu.com) [EB/OL]. <https://baijiahao.baidu.com/s?id=1786405470520876224&wfr=spider&for=pc>
4. First gold! Chongqing girl wins beauty world champion (baidu.com) [EB/OL]. <https://baijiahao.baidu.com/s?id=1749522383804119552&wfr=spider&for=pc>

**Copyright:** © 2024 Li J. This Open Access Article is licensed under a [Creative Commons Attribution 4.0 International \(CC BY 4.0\)](https://creativecommons.org/licenses/by/4.0/), which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.