Reform of Freight Forwarder Course Docking World Skills Competition Standards

Weixuan HU\textsuperscript{a,} and Zhongying JI\textsuperscript{b}

Wuhan Technical College of Communications, Wuhan, Hubei, China
\textsuperscript{a}363612417@qq.com, \textsuperscript{b}417652317@qq.com

\textbf{Key words:} World Skills Competition, Freight Forwarders, Curriculum Reform

\textbf{Abstract.} The World Skills Competition, as the world's highest level professional skills competition, has led the world's training standards and direction of skilled personnel. It is an important proposition that how the education make the reform to meet the World Championship standards and train more high-quality skilled talents for our country. Focused on the world skills competition freight forwarding, this paper discusses some issues including the docking of competition and specialty, the correspondence of the game with curriculum system, the connection between the curriculum standard and the competition technical criteria, the cognition of training means and the daily teaching methods, and the connection of talent cultivating concept of the World Competition ideas. The purpose of the research of this paper is to promote the professional training of the international freight forwarding professional skills system and contribute more outstanding practical talents to the society.

\textbf{Introduction}

The reform of education and teaching is a common concern in the world \cite{1,2}. 2018 is a special time point for the 40th anniversary of curriculum reform in China. The curriculum reform can be roughly divided into two stages of 20 years \cite{3}, of which the first stage is mainly about the exploration of school reform and the reform and adjustment of the national curriculum plan, while the second stage is primarily about the comprehensive development and reflection of the new curriculum reform. Innovation will have the possibility of success or failure. In any case, China has accumulated a lot of experience in curriculum reform over the past 40 years, which has the value of guiding the future direction of education.

The World Skills Competition, which enjoys the reputation of "Skills Olympics", is an important platform for members of the World Skills Organization to display and exchange professional skills, which leads the training criteria and purposes of the world's skilled talents \cite{4,5}. How to meet the World Championship standards, train a large number of high-quality workers with both professional skills and craftsmanship in the process of training high-quality skilled talents in China, complete the improvement of skills inheritance and go at the same time with the final competitive arena, and provide a strong guarantee for promoting Made-in-China to "China Intelligent Manufacturing", which is one of the vocational education reforms, and worth to be an important topics deserve further study \cite{6}.

\textbf{World Skills Competition Idea Docking Talents Training Concept}

The traditional concept of skilled personnel training is often limited to the narrow "application" and "professional view". The former lacks the training of professional development ability, while the latter ignores the systematicness and complexity of the practical work flow, and only touches on the cultural form at the school level, and seldom closely combines with professional accomplishment and corporate culture.

The competition questions of the World Skills Competition (or, WSC, as it abbreviated) originate from enterprises, but are higher than those of enterprises. The assessment contents are all comprehensive tasks, including all aspects of the profession. Competitive requirements reflect the high degree of precision of operation in the world today, mainly examining the technical application
ability, standard execution ability and task completion ability of the competitors. There is no special theoretical examination item in the World Championship [7]. The understanding of theoretical knowledge is completely permeated into the operation, emphasizing the application and flexible application of theoretical knowledge [8].

**Talents Training Target Compatible with World Championship Standard**

It is significant to deeply study the technical standard documents, competition rules and procedures of the World Skills Competition, integrate them into the training standards of skilled personnel, and effectively improve the quality of personnel training [9]. In the process of training professional talents, the college should accurately match the world competition standards and set the goal of talent training based on the actual development of the industry, the demand of enterprises and talents, and on the basis of the existing talent supply structure.

**Focus on the Frontier Change of Freight Forwarder Industry**

It is necessary to follow up the latest global skills development trend, real-time control of the world skills competition standard documents and regulations changes, while continuing to do a good job in skills guidance, athletes training, the freight forwarding industry trends and frontier changes in daily teaching to disseminate and promote, and deepen students’ understanding and control of the freight forwarding industry [10]. With the rapid development of social economy, the demand for freight forwarders is also complex. Freight Forwarders involve many fields, such as manufacturing, trade, production and circulation, transportation, etc. The complexity of freight forwarders is far greater than that of a single discipline. This requires freight forwarders to make full use of all kinds of theoretical knowledge to coordinate, operate or innovate freight business, and have the ability to work independently.

**Inheritance of the Essence of the World Championship-Craftsman Spirit**

Whether training contestants or in the daily teaching process, we should train students not only to have superb skills, but also to cultivate rigorous, meticulous, dedicated and responsible working attitude, as well as professional identity, sense of responsibility, mission and honor, and constantly improve the comprehensive quality of skilled personnel.

**Keeping the Training Environment Consistent with the Design Concept of the Competition Venue.**

The design of the World Skills Competition venue is based on the high restoration of the real working environment of the enterprise [11]. Under the guidance of this design concept, referring to the standard layout of the World Games venue, combining with the brand image and campus culture of the school, the elements of the World Games will be integrated into the overall design of the training base, the layout of workstations, cultural construction and so on. While restoring the atmosphere of the World Championship and strengthening the teachers’ and students’ identification with the World Championship, we should enrich teachers’ and students’ professional experience and deepen their practical perception of corporate culture and professional accomplishment.

**Docking Major of World Skills Competition**

According to the technical standards of the World Championship, the core skill requirements of freight forwarding project assessment are: to complete the international door-to-door transport of goods through multi-modal transport, such as highway, railway, aviation and ship, and to collect customer fees, examine the actual business of cargo handling, operation, quality control, customer service, insurance and legal affairs, information processing, etc. involved in various modes of transport, such as sea, land, air and multimodal transport, with emphasis on comprehensive accomplishment and professional quality assessment.

At present, the professional establishment management of higher vocational colleges is based on the professional catalogue of Higher Vocational Colleges issued by the Ministry of Education (2015
edition), and the catalogue is updated dynamically year by year [12]. According to the professional
catalogue of higher vocational education (specialty) in colleges and universities (2015 edition) and
the additional professional catalogue in 2016, 2017 and 2018, the major which freight forwarding
competitions can be docked are: port and shipping management (professional code 600308) under
the category of waterborne transportation (professional category 6003), port logistics management
(professional code 600). 309), waterway transport and maritime management (professional code
600312), container transport management (600313); international trade practice (630501),
international economy and trade (630502), customs declaration and international freight transport
(630506) under economic and trade (6305); logistics management under logistic class (professional
class 6309) (professional code 630903).
There are still differences between the above professional training objectives and the assessment
objectives of freight forwarding events, but the professional training objectives can be restructured,
rebuilt and improved by incorporating or strengthening such skills as customer development, cost
accounting, transportation management, cost quotation, complaint handling and insurance claims.

World Skills Competition Technical Standards Docking Course Standards

In the past 40 years, the research of curriculum objectives in China has gone through three stages
of development [13]: double-base, three-dimensional goal and core literacy, as shown in Fig.1.

![Figure 1. Three Stages of Development of Curriculum Objectives.](image-url)

As the curriculum goal of basic education in our country, "double-base" has occupied an
extremely important position since it was put forward. However, it does not mean that it is enough
for students to have mastered the "basic knowledge" and "basic skills" which are equivalent to
achieving educational goals. "Double-base" is set up to achieve the higher educational goal of
"all-round development of human beings". The curriculum content compiled according to the
"double-base" goal removes the detailed branches in the working scene, so that teachers can transfer
the huge and profound knowledge system to students in a more direct and fast way; by teaching
basic concepts, basic propositions and basic formulas, students can grasp the essence of things
directly. Students do not need to go through the whole process of discovering knowledge by
scientists, and do not need to blindly explore in difficult to control and complex phenomena, so that
they can get the essence of the complex knowledge system in the shortest time. Thus, students get
the greatest benefits, and their cognitive development efficiency has been greatly improved.

On the basis of "double-base", the "three-dimensional goal" supplements the two factors of
"process and method" and "emotional attitude and value concept", and tries to "reverse the bias that
the curriculum attaches too much importance to knowledge teaching, help students develop active
learning attitude, and make the process of acquiring basic knowledge and basic skills become learning at the same time, and also the process of self-study and the accurate values forming.

If the "process and method" and "emotional attitude and value" in the "three-dimensional goal" are regarded as supplements to the "double-base" goal, then the "core literacy" goal has not been discussed at the same level as the former two. It can be said that "core literacy" has increased one dimension compared with the curriculum objectives of the first two stages.

As curriculum objectives, "double-base" and "three-dimensional goals" are closely related to teaching objectives. Compared with "core literacy", they are more specific forms of objectives. And "core literacy" is closer to the upper goal of curriculum goal, that is, "quality education" or "all-round development of human beings".

In April 2018, the China Institute of Educational Innovation of Beijing Normal University held a conference to publish the “5C Model Research Report on 21st Century Core Literacy” for the first time, covering five aspects: cultural understanding and inheritance, deliberation, thinking, innovation, communication and cooperation, each of which contains 3-4 elements. According to the needs of China’s social, economic, scientific and educational development, this report further explores "what qualified talents are those who lay the foundation for China and have an international perspective".

Throughout the 40 years of reform and opening-up in China, people have emphasized the humanistic value of curriculum objectives. The idea of "core literacy" is to overcome the thinking mode of "subject-based" and avoid urging students to acquire symbolic knowledge outside of them while ignoring their internal development. It emphasizes the attention of the learning subject “human”, emphasizes that educators should strengthen the consideration of the factors of students' needs and social needs, and advocates that the talents trained by school education should be better connected with the rapidly developing economy and society.

International organizations such as the Organization for Economic Cooperation and Development (OECD) and the International Association for the Evaluation of Educational Achievements (IEA) regularly conduct a series of assessments of students' and teachers' literacy around the world. Our country seldom participates in such international assessments because of the language (Shanghai has participated, but cannot represent the overall level of China). Therefore, the global positioning of Chinese teachers and students has not yet been clearly known.

![Figure 2. Major Capabilities of Freight Forwarders.](image-url)
The World Skills Competition provides an opportunity for China's vocational education to integrate into the global education family. According to the technical standards of the World Championship freight forwarding project, freight forwarders should have six capabilities: working organization and management, customer relationship management, business processing, cost and price accounting, information and communication application and emergency management, represented in Fig.2. The capability of each module is required to continue to be subdivided according to the work scenario until it can be demonstrated by specific actions and evaluated subjectively or objectively.

At present, there is no clear criterion for expressing curriculum objectives, which affects the measurability of curriculum objectives. For example, the teaching objectives of our country often use similar terms such as "understanding, knowing, mastering", but there is no further definition and interpretation, which lead to some result that teachers cannot use scientific criteria for evaluating the students, and affect the scientific nature of the evaluation.

The formulation of British national curriculum standards has certain reference significance. The Ministry of Education of the United Kingdom has set up a special network platform to solicit opinions from all sectors of the society. The Secretariat of the Ministry of Education publishes the issues on the revision of the national curriculum standards on this platform. It openly addresses teachers, parents, students, business organizations, local institutions, social organizations, charities, independent schools, learning associations, academic institutions, etc. Special schools, national qualifications granting organizations, government agencies, teaching associations, senior consultants, etc. consulted for three months. Well-known curriculum research experts from the United States, Finland and other countries are invited to participate in the curriculum revision and provide international reference. The Ministry of Education has also set up a National Committee of Curriculum Experts to engage core experts from Cambridge University and the Institute of Education of London University to conduct in-depth research on doubts and objections in the implementation of current curriculum standards and to submit expert advisory reports on how to adjust and revise them. It also emphasizes that the curriculum standards should embody the idea of dealing with international competition and facing the future, and be forward-looking. The curriculum standards should specify legal and non-legal learning content and achievement goals for teachers to choose and adjust according to students' situation in teaching.

The World Competition is a high-standard test of the content of skill education. In daily teaching, the World Competition topics can be broken down and refined, students' characteristics can be fully considered, from the perspective of cultivating students' interests, from shallow to deep, reasonably reducing the difficulty, combining with business cases, to restore the scene, forming typical and unusual work tasks, and integrating the theory and practice in teaching.

Docking of World Skills Competition with Teaching Projects

For the purpose of enabling more students to have the chance to participate in the competition, and because the World Competition itself is for the practical use of personnel training, it is a wise choice to dock the school's teaching projects with the World Skills Competition, which also points out a clear direction for the reform of teaching.

Adjust the Curriculum System According to the Training Items of the WSC

The competition topic of freight forwarding in the 44th World Championship is divided into seven modules: customer acquisition, quotation calculation, port gathering transportation, freight calculation, shipping operation, complaint handling and claim handling, which correspond to each link of freight forwarding business respectively, forming a complete workflow, and examining the players' degree of all-round skills in this field. In June 2018, the 45th World Championships held in Shanghai, the percentage of air transport operations is increased by a large margin, and similar with the percentage of sea transport content.

On the construction of the curriculum system, a complete professional knowledge system is formed based on the courses of international trade practice, economic geography, certification of
foreign trade documents, container business operation, customs declaration practice, air freight forwarding practice, ocean transportation practice and freight forwarding professional English [14]. In the practical teaching, students should deal with the abnormal situation of freight forwarding business. For example, when goods are not loaded at the scheduled time, containers that have entered the port area and declared need to be lifted out of the port area, when containers enter the port, unexpected incidents such as gross weight or wrong number of containers are found, students need to have the emergency ability to treat them reasonably in the first time.

The matching degree between professional training scheme design and freight forwarding events can be enhanced appropriately. On the one hand, the original non-core curriculum can be supplemented and replaced. On the other hand, the core curriculum content can be reformed to form a curriculum and training system based on the World Skills Competition Standard.

Transforming the Training Program of the WSC into an Integrated Teaching Program

Each module of the World Championship is arranged in the order of module name, module introduction, project and task description, description to competitors, scoring rules, description of sub-task work scenarios and assessment requirements. Each module covers many knowledge points. For example, "quotation calculation" assessment project, focusing on the assessment of freight forwarding business to provide customers with appropriate quotation skills. On the basis of proficient mastery of transportation mode, container type and size, shipping date, route, port, etc., the competitors should compile appropriate quotation plan according to the characteristics and needs of customers and through analysis and estimation [15].

Assessment knowledge points cover those four aspects: (1) selecting suitable routes and modes of transportation according to given cargo transport needs and air-sea transport costs; (2) calculating container stowage considering to cargo characteristics and transport requirements to determine the type, size and quantity of containers; (3) choosing the best good transport company according to schedule and customer requirements; and (4) making quotation forms according to the selected mode of transport and related costs.

Project-based teaching alleviates the phenomenon that theory and practice are separated to a certain extent. Integrated teaching projects attach great importance to the leading role of teachers. Teachers define teaching objectives and design teaching tasks before class. Teachers and students cooperate to achieve the goal of teaching, learning and doing while in class, and build a framework of quality and skills training throughout the course, so as to improve the quality of teaching [16]. In the whole process of teaching, theory and practice alternate, intuitive and abstract interweave, theory and practice are not rigidly divided into order, but permeate and blend with each other.

Transforming the Training Means of WSC into Daily Teaching Means

The title of the World Championship is expressed in English. Students are required to use English in both written and oral answers. English is a tool for freight forwarders to communicate by letter, telephone and dialogue. Teachers should not neglect English teaching in their daily work. They should attach equal importance to the cultivation of students' English reading, writing and presentation abilities [17]. Meanwhile, they should also attach importance to the professional terms of freight forwarding, such as 11 price terms and their connotations, and the special significance of common words in professional English.

Assessment of abnormal business handling is an indispensable part of the World Cup. Daily teaching usually teaches general business and basic process, that is, common practice without accidents, while ignoring the response and treatment of abnormal business. Therefore, it is urgent for teachers to accumulate abnormal accident materials and enhance students' ability to analyze and solve abnormal business urgently.

Transforming the Evaluation Method of WSC into Teaching Assessment

It is available to transform the evaluation method of WSC into teaching evaluation method of vocational colleges. The scoring criteria of the World Championships are scientific, fair and reasonable, which are fully affirmed by enterprise experts and judges. Through objective scoring
and subjective evaluation, the marking of contestants in each knowledge point and the situation compared with their opponents can be fully reflected.

In the process of teaching evaluation, it is capable to integrate the advanced ideas of the World Championship scoring system, from the preparation of tasks to the filing of documents after tasks, from general business disposal to the response to abnormal emergencies, from following the rules and regulations to innovate the use of knowledge and skills. Both objective scoring points and subjective evaluation rules are used to comprehensively assess students’ quality and accomplishment.

Conclusion

The implementation of curriculum reform in docking with the World Skills Competition Standards is essentially to guide and lead the educational revolution of vocational colleges with the World Competition Standards, make full and reasonable use of the World Competition platform, enhance strengths and complement weaknesses, and tap their own potential, so as to promote the systematic and professional training of students in freight forwarding skills, further promote major building of freight forwarding, push curriculum construction reform, and optimize professional teaching. At the same time, it is vital to strengthen the construction of teaching staff, create conditions for improving students’ competitiveness, strive to promote teaching by competition, feed the competition with teaching, and realize the dynamic virtuous circle of "competition-teaching".

An effective way to realize the curriculum reform of freight forwarding specialty is to collect, translate, analyze and transform the materials of freight forwarding events in the World Championships, and finally form the teaching resources for training international freight forwarders, so as to realize the docking of talent cultivation with the advanced level of the world and to cultivate more and more excellent talents of use type for the society.

References


