

CHINA

By CHENG SI
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Winning gold in the computer numerical control (CNC) milling event at the 47th WorldSkills competition, held in Lyon, France, in September, is etched into the memory of 23-year-old Long Weijie, whose victory gave China its fifth consecutive gold in the event over the past decade.

Widely applied in daily life, CNC milling is used to shape metal and other solid materials to create products such as watches or even ship propellers.

"The competition imposes extremely strict requirements on precision and accuracy, with a permissible error range of just 0.02 of a millimeter — about a quarter of the diameter of a human hair," Long said. Working as a teacher at Guangdong Machinery Technician College Guangzhou, Long passes on his skills to domestic companies, helping them to improve and update their milling techniques.

Young Chinese handy men and women — usually aged under 25 — have shown the world their impressive skills and talent at WorldSkills, an initiative that rose out of the ruins of World War II in Europe when a huge skills shortage threatened economic depression.

At the 47th WorldSkills competition in Lyon last year, China won 36 golds, nine silvers and four bronzes, topping the medal table.

The WorldSkills competition is held every two years. The Chinese mainland joined the organization in 2010 and has since sent seven delegations to compete.

Long and his peers are examples of young people in China who have dedicated themselves to honing their skills not just to take victory in competitions, but to pursue better career development and to pass down their craftsmanship to future generations.

Youthful enthusiasm

Zeng Xiaolan, 21, bronze winner of the health and social care event at the recent WorldSkills competition, said that taking nursing at university was thought of as a "worrying choice" by her parents because of the laborious work and perceived lower social status of being a nurse. She hopes her peers and her contributions can help change the public's stereotypical view of nursing.

Graduating from the School of Nursing and Health Management of Shanghai University of Medicine and Health Sciences in 2024, Zeng said she had heard some preconceptions about nursing work when she was at school.

"People have always said that nurses are assistants to doctors who just do the simplest things like giving injections or pills to the patients. But we are actually 'partners' of the doctor. The doctor diagnoses and we help perform treatment and care for the patient," she said, adding that the WorldSkills competition has turned her into a more considerate person with clearer career targets.

"The event for health and social care is much like nursing, while requiring other professional knowledge on recuperation, rehabilitation and promoting physical and psycho-social well-being. Language ability and communication skills are also of importance in the event," she said. "After the event, the people around me said that I'm totally different now, I'm much more soft, caring and thoughtful. I was a bit introverted before taking part."

Zeng said that there is a great shortage of healthcare professionals in China and she intends to further her studies in social care and elderly nursing to gain more career possibilities.

For 23-year-old Wu Yanting, from Chongqing in Southwest China, becoming China's first female gold medalist in the 3D digital game art



Left: Wang Wentao (left) and Zheng Piao xue (center) learn how to measure the voltage of a new energy vehicle battery at a training center in Hefei, Anhui province, in December. The pair won a national competition on NEV maintenance in November. DU YU / XINHUA **Right:** Students learn about food processing technologies at a vocational school in Hohhot, Inner Mongolia autonomous region, in April. DING GENHOU / FOR CHINA DAILY



China's skilled workers impress on world stage

Attitude shift still needed to get more young people into vocational education



Students learn how to operate a drone at Tianjin Modern Technological Vocational College in Tianjin in November. ZHAO ZISHUO / XINHUA



A highly skilled operator uses an excavator to stack individual champagne glasses during a skills competition in Qingdao, Shandong province, in September. ZHANG JINGANG / FOR CHINA DAILY

competition in Lyon was a dream come true. The event requires competitors to use their creativity, aesthetic ability and geometry skills to design and construct a 3D model of a video game in 21 hours over four days.

"I was learning animation at Chongqing Technology and Business Institute in my first year of college, and then switched to game art design as my major. I'm very interested in

video games and programming technology," she said. "I integrated elements of cute giant pandas into my game design to impress the judges.

"When I stepped on the podium with the national flag covering my shoulders, I let the world see not only myself but proactive young Chinese in high spirits," Wu said. She is now a teacher at the institute and plans to open a workshop designing



Long Weijie



Zeng Xiaolan



Jiang Jiajun

Growing need

China has sent 283 contestants to compete at WorldSkills since 2010, winning the nation 93 golds, 41 silvers and 28 bronzes in total. Learning

and producing video games.

Jiang Jiajun, 22, from Guangdong province in South China, wishes to use his experience to show young Chinese people ways of leading a decent and fulfilling life. He and his partner Fang Canhao won the autonomous mobile robotics competition in Lyon.

"The competition was a way to learn more knowledge and skills and to prove myself. My hard work paid off," he said, adding that the public and many parents have negative impressions of vocational college, thinking that the students are just muddling along.

"I learned skills and can now make myself a good living using those skills. I hope to inspire more young people, who may feel confused about their future careers," he said. Jiang is now a teacher at a vocational school in Yiwu, in East China's Zhejiang province.

skills has not only shaped individuals' lives and careers, but has grown to become a strong support for the nation's development in manufacturing, technology and innovation.

In 2021, China had over 200 million skilled workers, taking up 26 percent of the total workforce. Among them, 60 million were highly skilled, according to the All-China Federation of Trade Unions.

The nation has channeled more effort into training skilled workers in recent years. Figures from the Ministry of Human Resources and Social Security show that from 2019, over 100 million people have attended job training or work skills improvement campaigns organized by the ministry. From 2021, nearly 2 million skilled apprentices have been trained by companies with the aid of financial support from the government.

However, skilled workers, especially the highly skilled, remain in short supply.

"The technological and industrial advancement of AI, big data and cloud computing, creates higher requirements for skilled workers. The WorldSkills competition has updated its events in line with market needs," said Ye Junfeng, Party secretary of Guangdong Machinery Technician College. The college has produced 16 world champions and won China 12 gold medals at WorldSkills competitions.

According to Ye, the students who graduate from his college have good career prospects and many receive job offers from companies two or three months before they graduate.

"We have about 3,000 graduates each year and those majoring in electromechanical and smart manufacturing, numerical control machines can get three to five job offers at campus job fairs. Their salary can be as much as 7,000 yuan (\$960) a month during their internship, rising to 28,000 yuan."

He said that some companies often complain that they can't find suitable skilled people to operate cutting-edge machines or to maintain them. "The structural imbalance of the job market is a problem. From my observation, skilled workers in electromechanical, smart manufacturing and domestic services are in great demand. Companies are willing to hire and pay more for these skilled workers."

The college is cooperating with other vocational schools to help maximize students' career prospects. "What we wish to do is to change people's stereotypes around skilled workers, whose abilities are usually undervalued. Many of our students have served in the nation's key companies and been involved in technique improvements and tackling technological problems with researchers."

Ye Zhihao, executive director of Guangzhou High Genius Dynamics Co, said China's participation in WorldSkills has brought benefits to the nation's cultivation and evaluation of skilled people.

"The updating of WorldSkills competition events has pushed forward the emergence and development of new professionals. For us employers, WorldSkills champions or contestants are welcomed at our companies," he said, adding that his company has recruited more than 10 Chinese WorldSkills competitors since 2017.

However, experts are still calling for better and fairer treatment for skilled workers in terms of payment, career promotion and social status.

Zhang Rui, deputy director of the WorldSkills Competition China Research Center in Tianjin, said that though vocational schools have open attitudes to cooperating with companies to help their students better adapt to market needs, the cooperation should be further deepened in curriculum design and with more investment.

"The public still prefers academic achievement rather than vocational education, thus it still requires efforts from governments, schools and companies to raise the social status of skilled students and skilled workers," she said, adding that the widening regional gap in vocational education needs to be tackled.

"The gap lies in economic development imbalance. The provinces or areas with stronger economies and manufacturing power, such as Guangdong province, are usually more open-minded and channel more effort into cultivating skilled workers," Zhang said.

Ye Zhihao, the executive director, added: "The manufacturing industry is the foundation for the nation's development, and requires diversified talent ranging from knowledge-based researchers to the skilled people who can deftly operate and maintain precision and high-tech machines."

Competition winner hopes to inspire others to follow in his footsteps

By CHENG SI

Draping the national flag over his shoulders, 26-year-old Chen Jun'an celebrated winning gold in the optoelectronic technology event at the WorldSkills competition in Lyon, France, in September.

Graduating from the Harbin Institute of Technology, Shenzhen in Guangdong province in 2020, majoring in communications engineering, Chen gave up several lucrative job offers from industry titans like Huawei and Xiaomi to become a teacher at the Shenzhen Institute of Information Technology in South China's Guangdong province.



Chen Jun'an

ing up I received a lot of help from my teachers. I enjoy sharing knowledge with other people, so I made the choice of becoming a teacher when I graduated," he said.

Chen said his first thought when preparing for the WorldSkills com-

petition was to gain more confidence, facing students not much younger than him at the time.

"I was not that confident in myself as I had theoretical knowledge but not much practical experience of the knowledge or skills. I never thought that my attempt at self-improvement would see me standing on the WorldSkills award podium," he said.

However, it was not all plain sailing. He missed out on the opportunity to compete in the special edition of the WorldSkills competition in 2022 because of some mistakes at domestic selection trials. The special edition of the WorldSkills competition was organized in

several countries and regions such as Switzerland and Japan from mid-September to late November that year due to the COVID-19 pandemic.

"I was lucky that I got the chance to compete in the competition in Lyon before reaching 25 years old — the maximum age for the optoelectronic technology event," Chen said.

"I took no holidays and weekends during my training period. I remember I only spent a few days celebrating Spring Festival and returned to the school for training. I was the oldest of all the Chinese competitors for the competition in Lyon and I cherished the opportunity a lot."

Recalling the competition, Chen

remembered the intensity and stress. "The competition sets four modules such as designing and producing an optoelectronic application terminal and installing and debugging a smart lighting control system. Each of the modules was highly competitive and there were very strong rivals from South Korea and Brazil. Nobody could predict the winner until the last second of the competition."

His efforts eventually paid off. "Standing on the podium, holding the gold medal with the national flag draped over my shoulders was a very touching moment. I remember the time was about two weeks

before China's National Day, and I thought the medal I gained would be the best gift I could give to my mother country.

"The gold medal is not the end but a new start for my life. The competition has shaped me into a better teacher, enabling me to master not only theoretical knowledge but hands-on ability and the spirit of craftsmanship," he said.

"I've seen many talented students who will embrace more diversified career possibilities in the future. The nation has also channeled greater efforts to producing skilled workers, and optimizing vocational education. I will face challenges, but I will not give in and I hope I can inspire more young people by guiding them to use skills to win themselves a better future," Chen said.