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# TVET Country Profile China

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## TVETipedia Glossary

In case of further clarification and definitions of terms contained herein, please refer to UNESCO-UNEVOC's online TVETipedia Glossary, which provides definitions and background information from various trustworthy sources on terms commonly used in the area of technical and vocational education and training. Find out more at [www.unevoc.unesco.org/l/68](http://www.unevoc.unesco.org/l/68).

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## UNESCO-UNEVOC TVET Country Profiles

To find similar information on other countries, please visit the UNESCO-UNEVOC World TVET Database at [www.unevoc.unesco.org/l/589](http://www.unevoc.unesco.org/l/589)

## Statistics\*

### General information

	Indicator	Statistics (Year)
Demographic	Total population (millions)	1,415.3 (2018)**
	Population growth	0.5% (2018)**
	Median age of population	37.3**
	Population aged 15-24 years (in thousands)	185,069**

Socio-economic	GDP growth (annual %)	6.6% (2018)***
	GDP per capita (current US\$)	8016***
	Unemployment rate (%)	4.1%****
	Youth literacy rate, population 15-24 years, both sexes (%)	99.5% (2017)

### Participation in education by level and by programme orientation, 2015

Category		Gross enrolment ratio (%)		Percentage of students who are female (%)	
Primary education (ISCED 1)		104.1%		46.3%	
Secondary education, all programmes	Lower secondary (ISCED 2)	94.3%	91.1%	47.3%	46.7%
	Upper secondary (ISCED 3)		89.7%		48.1%
Tertiary education, all programmes (ISCED 5-8)		43.4%		51.0%	

Category		Percentage of students enrolled in vocational programmes, both sexes (%)		Percentage of students in vocational education who are female (%)	
Secondary education, all programmes	Lower secondary (ISCED 2)	20.4%	0.1% (2012)	45.4%	46.6% (2012)
	Upper secondary (ISCED 3)		42.1%		45.4%

Indicator	Both sexes (%)	Percentage of students who are female (%)
Percentage of students in tertiary education enrolled in short cycle education (ISCED 5)	42.6%	51.0%

### Education finance

	Indicator	Statistics
Expenditure	Government expenditure on education as % of GDP	14.7%
	Expenditure on secondary and post-secondary non-tertiary vocational education as % of total government expenditure	9.7%

### SDG thematic indicators related to TVET and skills<sup>#</sup>

	Indicator	Statistics (2015)
Selected SDG thematic indicators	Participation rate in technical-vocational programmes (15- to 24-year-olds) (%)	44.3%
	Percentage of youth/adults who have achieved at least a minimum level of proficiency in digital literacy skills (%)	-

### Type of TVET institutions<sup>##</sup>

Type of institution	Education level	Ministry responsible	Number of institutions
Secondary Vocational Education Schools	Upper secondary education	Ministry of Education	11200
Higher Vocational Education Colleges	Post-secondary non-tertiary education	Ministry of Education	1359

### Other useful statistics related to TVET and skills development

Indicator	Statistics	Source
Non-governmental secondary vocational schools	2225	Yang Jin. Report on China Vocational Education Development of Year 2015, Higher Education Press, 2016.
Non-governmental higher vocational education institutions	307	Yang Jin. Report on China Vocational Education Development of Year 2015, Higher Education Press, 2016.
Government subsidized training programmes	19.35 million	Yang Jin. Report on China Vocational Education Development of Year 2015, Higher Education Press, 2016.

\* Unless otherwise indicated, all statistics retrieved from UNESCO Institute for Statistics (UIS). <http://uis.unesco.org/>

\*\* UN DESA. World Population Prospects. <https://esa.un.org/unpd/wpp/Download/Standard/Population/>

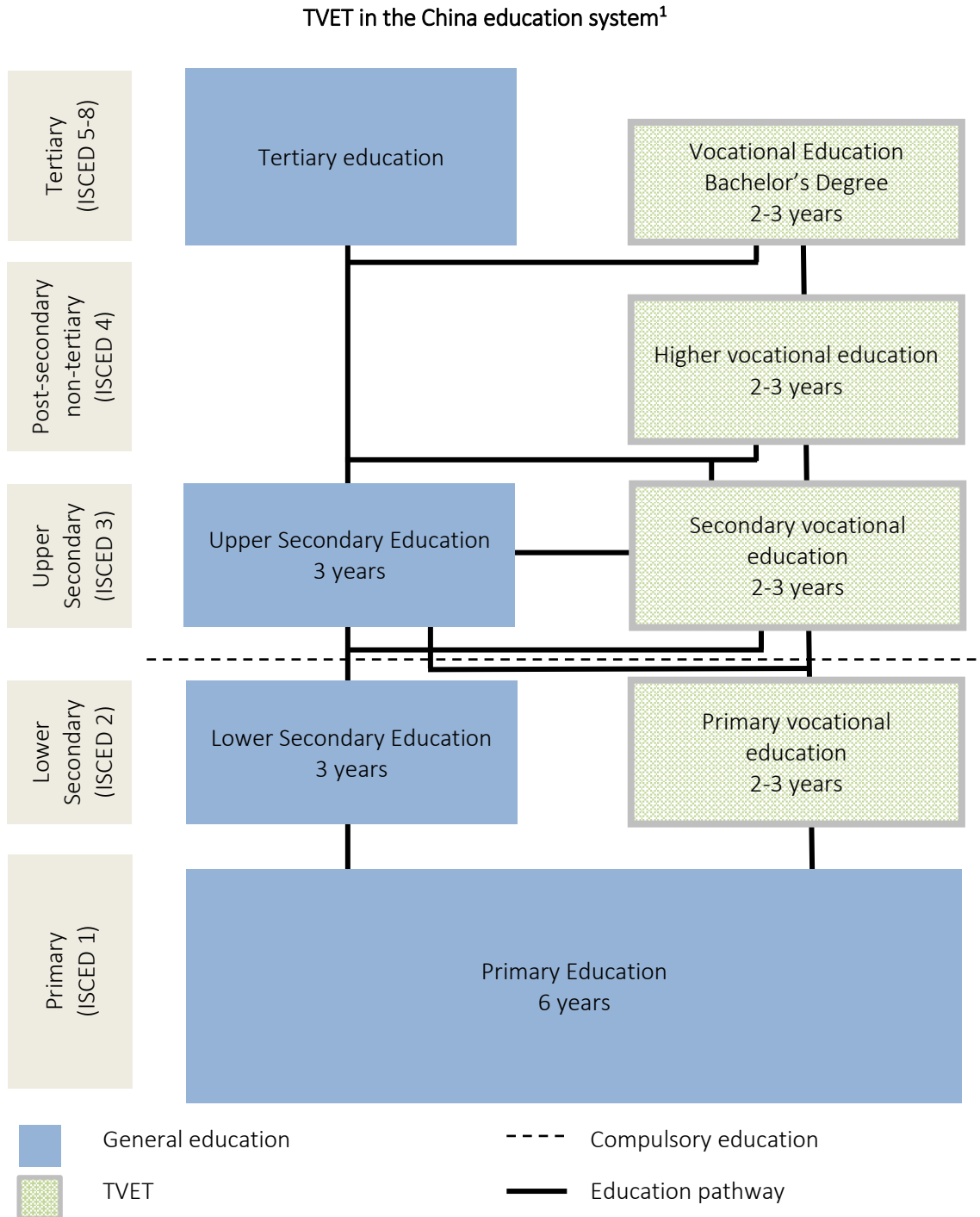
\*\*\* International Monetary Fund World Economic Outlook 2018

\*\*\*\* International Labour Organization. ILOSTAT - ILO database of labour statistics

<sup>#</sup> Other Sustainable Development Goal 4 thematic indicators at <http://sdg4monitoring.uis.unesco.org/>

<sup>##</sup> Compiled by the Central Institute for Vocational and Technical Education, Ministry of Education (CIVTE)

## 1. TVET Systems



<sup>1</sup>Compiled by UNESCO-UNEVOC International Centre

## Formal TVET system

<b>Primary vocational education</b> is offered at the lower secondary level (ISCED 2).	
Duration:	2-3 years
Admission requirements:	Primary school education (any age)
Taught in:	Vocational middle schools under the Ministry of Education
<p>Graduates from primary vocational education often find employment after completing their studies. Graduates are also able to proceed to secondary vocational education or general upper secondary education (ISCED 3). Students sit the same entry examinations as general education students. However, not many students take primary vocational education. In 2016, only 3734 students attended the programme.</p>	

<b>Secondary vocational education</b> is offered at the upper secondary level (ISCED 3).	
Duration:	2-3 years
Admission requirements:	General or vocational lower secondary education (ISCED 2)
Taught in:	Secondary vocational schools, vocational high schools, technical schools, and adult education schools under the Ministry of Education
<p>Graduates from secondary vocational education either seek work, advance to further education in TVET colleges at the postsecondary non-tertiary level (ISCED 4), or proceed to general postsecondary non-tertiary education. Students sit the same entry examinations as general education students.</p>	

<b>Higher vocational education</b> is offered at the postsecondary non-tertiary level (ISCED 4).	
Duration:	2-3 years
Admission requirements:	General or vocational upper secondary education (ISCED 3), after passing an entrance exam
Taught in:	Polytechnics, vocational colleges, and vocational and technical colleges under universities
<p>Graduates from secondary vocational education either seek work or advance to further education in universities of applied sciences at the tertiary level (ISCED 6).</p>	

The <b>Vocational education degree</b> is offered at the tertiary level (ISCED 6).	
Duration:	2-3 years
Admission requirements:	General or vocational upper secondary graduates or higher vocational education at the postsecondary non-tertiary education, after passing an entrance exam
Taught in:	Universities of Applied Sciences

## Non-formal and informal TVET systems

The **Ministry of Education** and the **Ministry of Human Resources and Social Security** offer non-formal TVET programmes. For example:

<b>Programme:</b>	<b>Subsidized training programmes</b>
Ministry responsible:	Ministry of Education
Target audience:	Migrant workers and the unemployed
Admission requirements:	No requirements
Qualifications received:	The programme focuses on equipping participants with skills to enhance their employability, and qualifications and certificates are awarded based on training outcomes.
<b>Programme:</b>	<b>Further training programmes</b>
Ministry responsible:	Ministry of Human Resources and Social Security
Target audience:	Active workers
Admission requirements:	No requirements
Qualifications received:	Graduates receive certificates that prove their participation in the programme.

There are mechanisms to recognize non-formal and informal prior learning.

## 2. TVET strategy and key policy documents

Technical and vocational education and training (TVET) in China aims to enhance the employability of its labour force and to contribute to China's social and economic development.

The following key documents help guide the development of TVET in China.

Name of document	National Plan For Medium- and Long-Term Education Reform and Development (2010–2020)
Date entered into force	July 2010
Website link	<a href="http://t1p.de/7f2d">http://t1p.de/7f2d</a>
Key points and objectives	The National Medium and Long Term Plan for Education Reform and Development (2010-2020) aims to establish mechanisms to encourage the participation of other actors, including industry, in the coordination of TVET programmes. Under this regulation, schools and enterprises of the Ministry of Education, pilot programmes including Modern Apprenticeship and TVET Groups have introduced mechanisms of mutual cooperation. This enables different stakeholders to share the costs and benefits of TVET programmes.

Name of document	Modern Vocational Education System Construction Plan (2014-2020), and the Decision on Accelerating the Development of Modern Vocational Education System
Date entered into force	16 June 2014
Website link	<a href="https://goo.gl/T889hJ">https://goo.gl/T889hJ</a>
Key points and objectives	
<p>The policy documents aim to support the development of a world-class modern vocational education system that meets China's needs by 2020. According to the policy documents, the TVET system should contribute to the development of a highly qualified workforce, promote career development, and develop skills and talents that are competitive in the international market.</p> <p>Moreover, the policy documents support the involvement of other stakeholders in providing and developing TVET. It states that the proportion of medium and large enterprises participating in running vocational education schools should be above 80% by 2020. By the end of September 2014, 26 major companies were involved in providing and developing vocational education.</p>	

Name of document	Vocational Education Law
Date entered into force	1 September 1996
Website link	<a href="https://goo.gl/CBCDKC">https://goo.gl/CBCDKC</a>
Key points and objectives	
<p>The Vocational Education Law consists of five chapters and 40 articles. It aims to implement the <i>Strategy of Rejuvenating China through Science and Education</i>, a national development strategy adopted in 1995 to develop vocational education, enhance the labour force, and further China's modernization. The law acknowledges vocational education as an important element of the national education system that boosts economic and social development as well as employment. To this end, the law encourages the reform of vocational education to improve the quality and efficiency of the system.</p> <p>The law sets out the main task of the TVET system to educate people with political and ideological education and professional ethics, train people with vocational skills and give career guidance to improve the quality of students. It lays out general principles, provides details on the processes and functions of the vocational education system, the implementation and provision of vocational education, and supplementary provisions. The law also covers supporting conditions including financial resources, teachers' development, and textbook development.</p>	

### 3. Governance and financing

#### Governance

The Ministry of Education is mainly responsible for the formal TVET system, while the Ministry of Human Resources and Social Security is responsible for non-formal TVET. However, the Ministry of Education also conducts the non-formal TVET programmes.



The TVET governance system was established following the State Council's Decision on Boosting Vocational Education, adopted in 2005. It gives the State Council of the People's Republic of China the role of coordinating the TVET sector and coordinating efforts at the various levels. The Decision also establishes mechanisms for cooperation between the relevant administrative vocational education departments.

The National Medium and Long Term Plan for Education Reform and Development (2010-2020) aims to establish mechanisms to encourage the participation of other actors, including industry, in the coordination of TVET programmes. For example, under the Regulation on Cooperation between Schools and Enterprises of the Ministry of Education, pilot programmes, such as Modern Apprenticeship and TVET Groups, have introduced mechanisms through which different stakeholders share the costs and benefits of TVET programmes.

## Financing

The Ministry of Education is responsible for financing the formal and non-formal TVET systems. It funds TVET in collaboration and discussion with the Development and Reform Commission, the Ministry of Human Resources and Social Security, and local governments. Amongst all financing sources, local budgets play an important role.

TVET in China is legally free. Other than the government funds, there are no other mechanisms to finance the TVET system. However, new regulations have been introduced that encourage the sharing of financial costs and benefits with the private sector.

## 4. TVET teachers and trainers

Vocational teachers at the secondary educational level are classified according to: (i) teachers in specialized schools; (ii) teachers for cultural and technical theory at crafts schools; and (iii) practice-guiding teachers in skilled workers' schools and vocational secondary schools.

TVET Teachers and trainers at the secondary education level are required to meet the Secondary Vocational Teachers Standards. These standards require teachers to be equipped with both general education teachers' qualities and corresponding vocational qualities, including knowledge of industry trends, updated techniques, and practical experiences. At the post-secondary non-tertiary education level, teachers need to have tertiary level degrees and working experience, and the same goes to those who teach TVET at the tertiary education level.

Universities and TVET teacher training programmes in higher education institutions offer pre- and in-service TVET teacher and trainer training.

## 5. Qualification system and Quality Assurance

### National Qualifications Framework (NQF)

The Chinese government is currently exploring options to establish a NQF.

The National Vocational Qualification (NVQ) framework, administered by the Ministry of Human Resources and Social Security, was introduced in China in 1993. The NVQ framework has five levels:

NVQ Level	TVET Qualification
1	Primary worker certificate
2	Intermediate worker certificate
3	Advanced worker certificate
4	Technician certificate
5	Senior technician certificate

NVQ certificates are based on skill units required by specific occupations. Examinations are conducted by assessment agencies approved by the Government and consists of two parts, knowledge examination and operational skills assessment. Certificates are issued in accordance with the vocational skill standards or qualification requirements established by the Government.

### Quality assurance

Standards in the NVQ framework are monitored and evaluated by the Ministry of Education and Ministry of Human Resources and Social Security. The standards ensure the quality and relevance, and recognize learning outcomes related to TVET.

At the end of 2011, the Ministry of Education issued the Supervising and Evaluating Specification of Secondary Vocational Education. According to the Specification, each district is required to set up a standardized supervision and evaluation systems that consider regional needs. The evaluation system includes 8 category indexes, namely: (i) policy construction; (ii) system innovation; (iii) total investment; (iv) special investment; (v) infrastructure; (vi) teacher teams; (vii) developing scale; and (viii) education quality.

### Curriculum

The Ministry of Education develops and updates the TVET curriculum in collaboration with the National Industrial Committee for Vocational Education and Teaching. The committee is founded and managed by relevant departments and industries.

In order to teach TVET, institutions need to be accredited by local education authorities based on policies and regulations made by Ministry of Education.

## 6. Current reforms and policy discussion

Current reforms and policy discussions aim to ensure that TVET remains attractive to youth and adults, including to:

- Deepen reform to develop mechanisms for more innovation in vocational education, establish school-enterprise cooperation, and promote more work-based learning;
- Coordinate stakeholder initiatives, especially enterprises, to support vocational education;
- Increase the offer of vocational education in rural areas, regions inhabited by ethnic minorities and poverty-stricken areas, in order to ensure equal access for all.

## Challenges

According to the Central Institute for Vocational and Technical Education, China is facing the following challenges to the TVET system:

<b>Lack of attractiveness</b>	Making technical and vocational education and training attractive to young people and adults is a major area of reform and policy discussions.
<b>Enhancing mechanisms to involve industry and enterprises in TVET</b>	Discussions focus on developing mechanisms to establish school-enterprise cooperation and promote more work-based learning.
<b>Unbalanced development of TVET in East, Middle and West China</b>	There is a need to ensure that the TVET system develops at an equal rate in all areas of China and provides the same opportunities and access to quality technical and vocational education and training for all.
<b>Enhancing the quality of TVET</b>	The quality of TVET needs to be further enhanced and modernized in order to develop an excellent modern vocational education system that meets China's social and economic development needs. The TVET system should contribute to the development of a highly qualified workforce, promote lifelong learning, and ensure that China's labour force is competitive in the international market.
<b>The preparation and training of TVET teachers need to be improved</b>	The current number of TVET teachers is not enough to support the TVET system. In addition, many teachers lack industrial experience, and the quality of teacher's professional development needs to be improved.

## 7. References and further reading

CETTIC (China Employment Training Technical Instruction Centre). 2017 (*in Chinese*).  
<http://www.cettic.gov.cn/zyjnjd/index.html> (Accessed October 2018)

Ministry of Education of People's Republic of China. 2016. *Opinions of the Ministry of Education on Further Improving the Training System of Vocational Education Teachers (in Chinese)*.  
[http://old.moe.gov.cn//publicfiles/business/htmlfiles/moe/moe\\_960/201201/xxgk\\_129037.html](http://old.moe.gov.cn//publicfiles/business/htmlfiles/moe/moe_960/201201/xxgk_129037.html)

Ministry of Education of People's Republic of China. 2016. *Statistics on the implementation of the National Education Funds (in Chinese)*.  
[http://www.moe.gov.cn/srcsite/A05/s3040/201611/t20161110\\_288422.html](http://www.moe.gov.cn/srcsite/A05/s3040/201611/t20161110_288422.html)

Ministry of Education of People's Republic of China. 2017. (*in Chinese*).  
<http://www.moe.gov.cn/s78/A07/>

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