



World TVET Database India

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Abbreviations

AICTE	All India Council for Technical Education
AVTS	Advanced Vocational Training Scheme
CBSE	Central Board of Secondary Education
CII	Confederation of Indian Industry
CISCE	Council for the Indian School Certificate Examinations
CTEs	Colleges of Teacher Education
CTIs	Central Training Institutes
DGET	Directorate General of Employment and Training
DIETs	District Institutes of Education and Training
EFA	Education for All
FICCI	Federation of Indian Chambers of Commerce and Industry
IASEs	Institutes of Advanced Study in Education
IT	Information Technology
ITC	Industrial Training Centres
ITI	Industrial Training Institutes
JSS	Jan Shikshan Sansthan
KVIC	Khadi and Village Industries Commission
MES	Modular Employable Skills
MHRD	Ministry of Human Resource Development
MOLE	Ministry of Labour and Employment
NCTE	National Council for Teacher Education
NCVT	National Council for Vocational Training
NIOS	National Institute of Open Schooling
NIT	National Institutes of Technology
NSDC	National Skills Development Corporation
NVEQF	National Vocational Education Qualifications Framework
PSSCIVE	Pandit Sunderlal Sharma Central Institute for Vocational Education
RIE	Regional Institutes of Education
RMSA	National Mission for Secondary Education (<i>Rashtriya Madhyamik Shiksha Abhiyan</i>)
RTE	Right of Children to Free and Compulsory Education
SCERT	State Councils of Educational Research and Training
SSC	Sector Skills Councils
UGC	University Grants Commission

TVETipedia Glossary

Below are listed TVET terms mentioned in this report. Click on a term to read its definitions on the UNESCO-UNEVOC TVETipedia glossary.

Competence/y	Quality Assurance
Education-industry relationship	Skill needs
Informal Learning	Skills development
Job	Teacher
Labour market	Teacher In VET
National Qualifications Framework	Tertiary Education
Non-formal education	Trainer
Qualification	TVET
Quality	

India

Population:	1,311,051,000 (2015)
Youth population ¹ :	241,540,000 (2015)
Median population age:	26.6 (2015)
Annual population growth (2010-2015) ² :	1.26%



Data © OpenStreetMap Design © Mapbox

1. TVET mission, strategy and legislation

TVET mission

The mission of TVET in India is to help the country's economic and social development, and specifically transform its increasing manpower to a skilled and competent workforce.

TVET strategy

TVET policies are supported by the **Twelfth Five Year Plan (2012-2017)** which aims to help the government of India achieve its development objectives. Specifically Volume three deals with education and highlights the importance of education for social, economic and political transformation. The Plan sets a number of TVET related objectives including to:

¹ Population aged 14-25

² All statistics compiled from the United Nation's Population Division's *World Population Prospects, the 2015 Revision* (<http://esa.un.org/unpd/wpp/DVD/>)

- Link secondary, and specifically vocational and technical programmes, to the needs of the labour market in collaboration with the Ministry of Labour and industry;
- Improve residual access and equity gaps to TVET programmes by for example targeting out-of-school children;
- Expand the number of TVET programmes;
- Encourage and facilitate students to take pre-vocational programmes in the secondary education level;
- Develop a mechanism for convergence of vocational programmes offered by various ministries, private institutions, and vocational educational institutions;
- Improve TVET teacher and training programmes to ensure a high quality of education; and
- Integrate and closely align vocational programmes with the academic curriculum. TVET programmes should contain modules on various generic and specific vocational skills with the involvement of industry.

In addition, the **National Youth Policy (2012)** sets a number of policy interventions, and specifically highlights the need to enhance the employability of youth by developing more vocational secondary programmes.

The **National Policy on Skill Development** aims to empower individuals through improved skills, competences, knowledge and nationally and internationally recognised qualifications. The objectives of the policy are to:

- Develop opportunities for lifelong learning, and especially for youth, women and disadvantaged groups;
- Encourage stakeholders to develop skill development initiatives;
- Develop a high-quality skilled workforce relevant to current and emerging labour market needs;
- Establish flexible delivery mechanisms that respond to the needs of stakeholders; and
- Coordinate between different ministries, and the States and public and private providers.

TVET legislation

The National Constitution guides Federal and State policy in all sectors including education. The **Right of Children to Free and Compulsory Education (RTE) Act No. 35 (2009)** guarantees the right of children to free and compulsory education until the completion of primary education. TVET is addressed in the following Acts:

- The **National Institute of Technology Act (2007)** allocates additional funding and government support to National Institutes of Technology (NIT) established in the Institutes of Technology Act (1961).
- The **All India Council for Technical Education Act (1987)** has instituted the All India Council for Technical Education and provides for the structure of the Council. The Act delineates the functions of the Council and calls on the Council to coordinate and integrate development of technical and management education and maintenance of standards.

- The **Institutes of Technology Act (1961)** has established certain institutes of technology to be institutions of national importance. The Act calls on institutes to provide programmes and research in engineering and technology, sciences and art.
- The **Apprentices Act (1961)** regulates the provision of apprenticeship training programmes. The Act also calls on the Central Apprenticeship Council to ensure that programmes are taught according to the prescribed syllabi and period of training.

Sources:

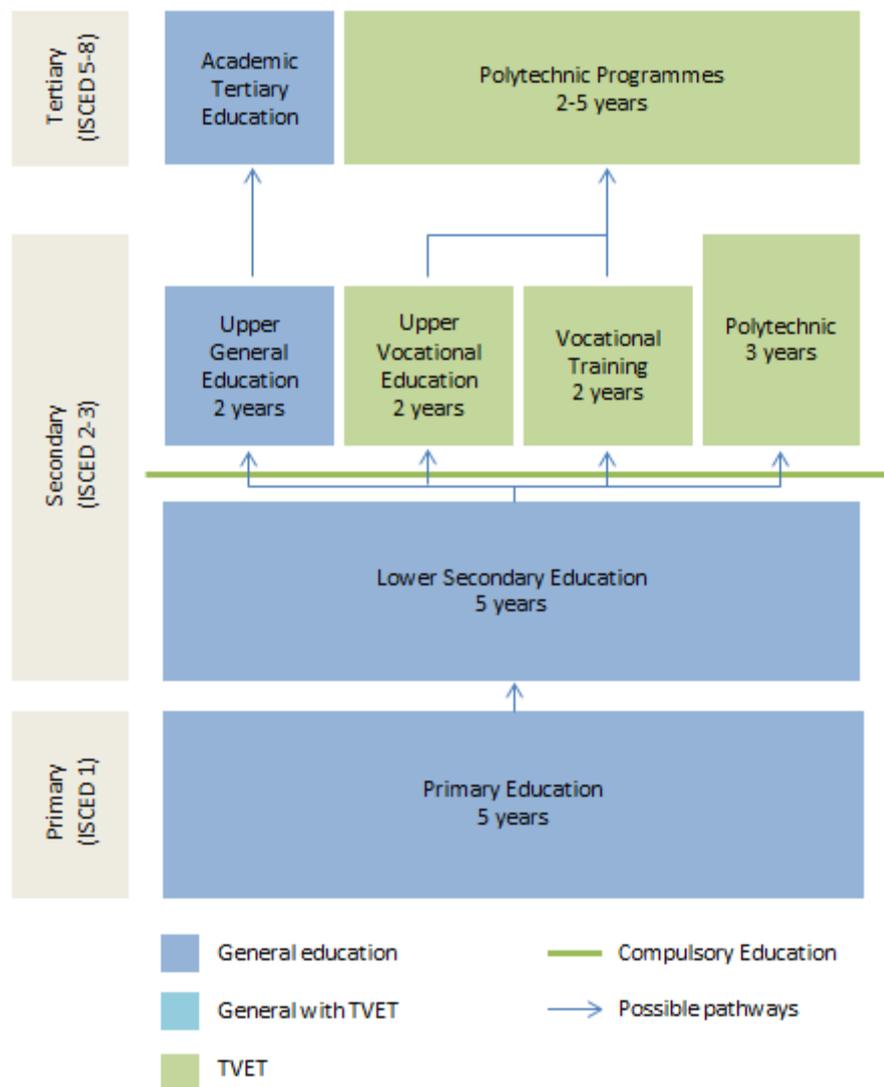
Government of India (2012). Draft National Youth Policy 2012. Accessed: 12 September 2014.

Government of India (2013). Twelfth Five Year Plan 2012-2017. Accessed: 12 September 2014.

Ministry of Labour and Employment (2009). National Policy on Skill Development. Accessed: 12 September 2014.

UNESCO-IBE (2011). World Data on Education VII Ed. 2010/11. India. Geneva: UNESCO-IBE.

2. TVET formal, non-formal and informal systems



Scheme compiled by UNESCO-UNEVOC from Nuffic (2014). Country Module India. The Hague: Netherlands Organisation for International Cooperation in Higher Education.

Upon completing five years of primary education, students proceed to a lower secondary education which completes 10 years of basic education. Students are able to continue to an upper secondary education that completes 12 to 13 years of schooling.

Formal TVET system

TVET programmes are offered at the lower and upper secondary education levels. Specifically students are able to choose between:

- Senior secondary and vocational education lasting 2 years. Vocational programmes normally prepare students for the world of work or further education in tertiary level polytechnics programmes, while academic programmes prepare students for tertiary level education;
- Vocational training courses offered by state-owned Industrial Training Institutes (ITI) and private-owned Industrial Training Centres (ITC) last one to two years. In accordance with the Craftsmen Training Scheme, training courses are also offered at the lower secondary level from grade 8 onwards. Courses include: Typewriting, Secretarial Practices, Computer Operator & Programme Assistant, Architectural Draughtsmanship, Electrical Technician, Electronics, Refrigeration & Air Conditioning, Plumbing, Library Assistant, Cutting/Tailoring & Dress Making; and
- Technical and engineering programmes offered by Polytechnics lasting three years. Programmes are offered at the lower and upper secondary education levels.

The Pandit Sunderlal Sharma Central Institute for Vocational Education (PSSCIVE) sets the vocational education curricula in accordance with the National Vocational Education Qualifications Framework (NVEQF) and established a number of fields covered at the secondary education level including: Automobile; Information Technology (IT); Retail; Security; and Healthcare.

Apprenticeship Programmes

Apprenticeship programmes follow the National Scheme for Apprenticeship Training and are offered to graduate engineers, technicians and upper secondary vocational students in industries and organisations. Apprenticeship training is conducted in 122 subject fields in engineering and technology, and 122 subject fields in vocational sectors. Apprenticeship programmes vary in duration and apprentices obtain a stipend to cover their expenses throughout the programme.

TVET at the Tertiary Level

TVET programmes at the tertiary level are provided by polytechnics and universities. Specifically professional undergraduate programmes in engineering, medicine, agriculture, dentistry and architecture last between four to five years.

TVET programmes offered by polytechnics normally last between two to three years. In order to enrol in courses offered by polytechnics and universities, students need to have obtained an upper secondary education qualification.

Non-formal and informal TVET systems

Non-formal TVET programmes are offered by a number of national and private institutions and schemes. For example the National Council for Vocational Training (NCVT) – under the Ministry of Labour and Employment – provides a Modular Employable Skills (MES) programme targeted at school leavers and existing workers in informal sectors. The NCVT prioritises those above the age of 14 years who have been engaged as child labour to enable them to learn employable

skills in order to get gainful employment. The Advanced Vocational Training Scheme (AVTS) also aims to enhance the skills of workers by providing short-term modular courses of one to six weeks' duration.

Other national bodies offering non-formal programmes include the Ministry of Rural Development, the Ministry of Women and Child Development, and the Khadi and Village Industries Commission (KVIC); Entrepreneurship Development Centres.

Private non-formal TVET institutions play an important role and some providers are accredited as Industrial Training Centres or are operating under Industrial Training Institute guidelines. Non-accredited private institutions mainly offer non-standard courses focusing on certain types of skills and occupations. The duration of courses is generally shorter than one year.

Other organisations providing non-formal TVET include:

- **Community Polytechnics** which provide training within communities. Courses generally last three to nine months and there are no entry requirements. Students are not awarded any qualification and do not receive any credit towards further vocational training;
- **Jan Shikshan Sansthan (JSS)** is an adult education programme aimed at improving vocational skills and the quality of life of workers. The programme focuses on adults and young people living in urban and industrial areas, and people who have migrated from rural areas.
- **National Institute of Open Schooling (NIOS)** offers programmes targeting students who have missed out on education for various reasons. The institute helps students achieve primary and lower secondary levels up until grade 8.

Sources:

Nuffic (2014). Country Module India. The Hague: Netherlands Organisation for International Cooperation in Higher Education.

PSSCIVE (2013). NVEQF Curriculum. Accessed : 11 September 2014.

UNESCO-IBE (2011). World Data on Education VII Ed. 2010/11. India. Geneva: UNESCO-IBE.

3. Governance and financing

Governance

Education in India is governed on the Federal and State level. At the Federal level, the **Ministry of Human Resource Development (MHRD)** is responsible for national education policy and governance, including developing Education for All (EFA) initiatives. Specifically the **Department of Higher Education** – under the MHRD – is in charge of secondary and post-secondary education. The department is divided into a number of bureaux, of which the bureau for Technical Education is responsible for formal and non-formal TVET institutions in each respective state. Specifically the bureau is responsible for revising the curriculum, the quality of TVET teachers, and student admission.

Other Ministries involved in TVET governance at the Federal level include:

- The Ministry of Labour and Employment (MOLE) and specifically the Directorate General of Employment and Training (DGET) collaborate with the MHRD in providing apprenticeship programmes;
- The Ministry of Agriculture;
- The Ministry of Mines; and
- The Ministry of Health.

At the State level, **State Departments of Education** are responsible for administering secondary education level programmes. Specifically Boards of Secondary and Senior Secondary Education regulate and supervise the secondary education system in their respective regions.

Other actors involved in TVET governance include:

- The **Central Board of Secondary Education (CBSE)** – under the MHRD – is responsible for academic matters and examinations. The CBSE also develops innovations and reforms at the secondary and upper secondary education levels.
- The **Council for the Indian School Certificate Examinations (CISCE)**, established in 1958, conducts the Certificate of Vocational Education examinations along with the Indian Certificate of Secondary Education and the Indian School Certificate.
- The **National Council of Educational Research and Training (NCERT)** provides advice on qualitative improvements in school and teacher education. The NCERT works in collaboration with different institutions, including: the National Institute of Education, the Central Institute of Educational Technology; Regional Institutes of Education; and the Central Institute of Vocational Education.
- The **National Skills Development Agency** has been mandated by the Government of India to: (1) develop a strategy for skill development at the national level; (2) identify new areas for employability; and (3) promote greater use of information technology in the area of skill development.
- The **All India Council for Technical Education (AICTE)** is responsible for the administration of TVET programmes. Specifically the AICTE establishes new technical teaching institutions and accredits new technical programmes through the National Board of Accreditation.
- The **National Council for Vocational Training (NCVT)** awards certificates of proficiency to craftsmen in various engineering and construction trades. The NCVT is a tripartite body headed by the Minister of Labour, with members representing Federal and State Government departments, employers' and workers' organisations, professional and learned bodies, the All India Council for Technical Education (AICTE), and other organisations. State Council for Vocational Training assist the NCVT in providing advice on: TVET policy and programmes, the approval of new trades, and quality standards.
- The **National Council for Teacher Education (NCTE)** provides norms and procedures that ensure the quality of teacher education. The NCTE functions through four regional committees.

- The **Pandit Sunderlal Sharma Central Institute for Vocational Education (PSSCIVE)** develops the vocational education curricula in accordance with the National Vocational Education Qualifications Framework (NVEQF).

Industry Councils also play an important role in the Indian TVET system. The Confederation of Indian Industry (CII), a non-governmental and non-profit industry organisation, collaborates closely with the Federal government on policy issues including TVET to enhance efficiency and competitiveness. The Federation of Indian Chambers of Commerce and Industry (FICCI) also work closely with the Indian Government on national economic policy, including education and TVET.

Financing

Formal TVET programmes are financed by the government through the Ministry of Human Resource Development. State Departments of Education are responsible for allocating funding in their respective regions. Non-formal TVET programmes are funded by a number of actors, including the Ministry of Labour and Employment, private institutions, and industry.

Organisations also provide funding for students enrolled in TVET programmes. For example, students enrolled in apprenticeships under the National Scheme for Apprenticeship Training are paid a stipend to cover costs, and the National Skills Development Corporation (NSDC), provides skill development funding through loans equity or grants, and supports financial incentives to select private sector initiatives to improve financial viability through for example tax breaks.

Sources:

Ministry of Human Resource Development (2014). Organisation Chart – Department of Higher Education. Accessed: 11 September 2014.

UNESCO-IBE (2011). World Data on Education VII Ed. 2010/11. India. Geneva: UNESCO-IBE.

4. TVET teachers and trainers

The National Council for Teacher Education (NCTE) is the statutory body of the government responsible for the development of teacher education programmes in India. TVET teacher training programmes are conducted in teacher training institutes including: District Institutes of Education and Training (DIETs), Colleges of Teacher Education (CTEs), and Institutes of Advanced Study in Education (IASEs), and Regional Institutes of Education (RIE).

Specifically RIE – under the National Council of Educational Research and Training (NCERT) – provide four year programmes for secondary teachers. The minimum qualification required for admission is an upper secondary education qualification.

Teacher salaries are established separately by each State and depend on academic qualifications, training and experience. Some States also offer a number of benefits, including: a fixed medical allowance or a reimbursement for medical expenses, free education for the children of teachers, as well as retirement benefits.

In-service TVET teacher training is offered at the Federal and State levels and is conducted by the NCERT and the National University of Educational Planning and Administration (NUEPA) – under the Ministry of Human Resource Development – at the Federal level, and by State

Councils of Educational Research and Training (SCERT) and State Institutes of Education at the State level.

TVET trainers are employed at the State level and admission is based on trade. Specifically the Central Training Institutes (CTIs) – under the Directorate General of Employment and Training (DGET) – are responsible for upgrading skills of instructors.

Sources:

Webpage of the National Council for Teacher Education. Accessed: 12 September 2014.
 UNESCO-IBE (2011). World Data on Education VII Ed. 2010/11. India. Geneva: UNESCO-IBE.

5. Qualifications and Qualifications Frameworks

Secondary vocational education

Programme	Duration	Qualification
Vocational education	2 years	Standard XII Diploma (vocational stream)
Vocational training courses	1-2 years	Vocational Diplomas and Certificates
Technical (polytechnics)	3 years	Basic Diploma

Post-secondary vocational education

Programme	Duration	Qualification
Polytechnics	2-3 years	Post Diploma, Advance Diploma
Undergraduate	4-5 years	Bachelor of Engineering, Agriculture, Dentistry, or Medicine

National Qualifications Framework (NQF)

The National Vocational Education Qualifications Framework (NVEQF) aims to provide a unified national approach to linking qualifications and workplace standards. The NVEQF sets common principles and guidelines for a nationally recognised qualification system covering secondary schools, vocational education and training institutions, technical education institutions, and tertiary level institutions. The NVEQF use as reference point learning outcomes and national occupation standards established in collaboration with Sector Skills Councils (SSC), and is composed of 10 levels as follows:

Level	Degree	National Competence Certificate (NCC)
Level 10	Doctorate	NCC 8
Level 9	Master's Degree	NCC 7
Level 8	Bachelor Degree (Honours)	NCC 6
Level 7	Bachelor's Degree	NCC 5

Level 6	Advanced Diploma	NCC 4
Level 5	Diploma	NCC 3
Level 4	Standard XII Diploma	NCC 2
Level 3	Class XI (vocational)	NCC 1
Level 2	Class X (pre-vocational)	NCWP 2
Level 1	Class IX (pre-vocational)	NCWP 1

Scheme compiled by UNESCO-UNEVOC and extracted from Government of India (2012). A proposed National Qualifications Framework for Vocational Education for India.

Quality assurance

Several agencies have specific responsibilities for monitoring the quality of skills development and vocational education and training. These include the National Skills Development Agency (NSDA); the National Skills Development Corporation (NSDC); the Ministry of Labour and Employment's Directorate-General of Employment and Training (DGE&T), the National Council for Vocational Training (NCVT); the National Accreditation Board for Education and Training (NABET); the All India Council for Technical Education (AICTE), and their All India Board for Vocational Education; and the National Institute of Technical Teachers Training and Research (NITTTR) and its Council (under the Ministry of Human Resource Development). The industry-led Sector Skills Councils play a key role national occupational standard setting, among other quality assurance responsibilities. In addition to those agencies with a formal quality assurance mandate, a number of Ministries operate significant skills schemes and have a vested interest in assuring their quality such as the Ministry of Rural Development and the Ministry of Tourism. At the moment there is no national body with responsibility for quality assurance and accreditation of certifying bodies (ILO, 2014).

The University Grants Commission (UGC) is a statutory body established by the Government of India to manage the quality of tertiary education. The UGC also includes a number of accrediting bodies concerned with regulated professions and qualifications, and these include:

- The **All India Council for Technical Education (AICTE)** is responsible for accrediting and the quality of technical and engineering programmes. Quality assurance includes the regulation of the quality of materials, programmes, and inspection processes;
- The **Distance Education Council** is responsible for the quality of distance education;
- The **Indian Council of Agricultural Research** – under the Ministry of Agriculture – is responsible for the quality of education in agriculture, including horticulture, fisheries and animal sciences;

The bureau for technical education – under the Ministry of Human Resource Development (MHRD) – in collaboration with State departments of education, are also responsible for evaluating and monitoring the quality of education in their respective states.

Sources:

Government of India (2012). A proposed National Qualifications Framework for Vocational Education for India. Accessed: 12 September 2014.

Nuffic (2014). Country module India. The Hague: Netherlands Organisation for International Cooperation in Higher Education.

UNESCO-IBE (2011). World Data on Education VII Ed. 2010/11. India. Geneva: UNESCO-IBE.

6. Current reforms, major projects and challenges

Current reforms and major projects

The **National Mission for Secondary Education (*Rashtriya Madhyamik Shiksha Abhiyan*) (RMSA)** was launched in 2009 with the objective to enhance access to secondary education and improve its quality. Under the **Twelfth Five Year Plan (2012–2017)**, the RMSA sets out a number of TVET related objectives (scheme of vocational education) as follows:

- Strengthening existing and establishing new TVET institutions;
- Provide in-service teacher training lasting seven days to existing teachers;
- Develop 30-day inductions courses for new teachers;
- Support private TVET institutions and nongovernment organisations in the provision of non-formal TVET initiatives by establishing Public-Private Partnerships (PPP);
- Enhance TVET programmes by developing competency-based modules; and
- Ensure that education institutions revise their curricula every three years in accordance with the needs of the labour market.

Challenges

According to the **National Policy on Skills Development** TVET in India faces a number of challenges, including to:

- Increase the capacity and capacity building capabilities of institutions to ensure equitable access to TVET for all;
- Promote lifelong learning, and maintain and improve TVET programmes according to the needs of the labour market;
- Develop effective convergence on matters regarding skills development between schools, ministries, and private sector stakeholders;
- Enhance quality assurance mechanisms in TVET institutions;
- Develop institutional mechanisms for research development, examinations and certifications, and accreditation procedures; and
- Encourage the participation of stakeholders in providing and funding TVET initiatives.

Sources:

Government of India (2013). Twelfth Five Year Plan 2012–2017. Accessed: 12 September 2014.
Ministry of Labour and Employment (2009). National Policy on Skill Development. Accessed: 12 September 2014.

7. Links to UNEVOC centres and TVET institutions

UNEVOC Centres

- [National Institute of Technical Teachers' Training and Research Kolkata \(NITTTR\)](#)
- [Pandit Sunderlal Sharma Central Institute of Vocational Education \(PSSCIVE\)](#)

TVET Institutions

- [All India Council for Technical Education](#)
- [Ministry of Human Resource Development](#)
- [Ministry of Labour and Employment](#)
- [National Council for Vocational Training](#)
- [National Council of Educational Research and Training](#)
- [National Skills Development Agency](#)
- [Pandit Sunderlal Sharma Central Institute of Vocational Education](#)

8. References and further reading

References

Government of India (2012). [A proposed National Qualifications Framework for Vocational Education for India](#). Accessed: 12 September 2014.

Government of India (2012). [Draft National Youth Policy 2012](#). Accessed: 12 September 2014.

Government of India (2013). [Twelfth Five Year Plan 2012-2017](#). Accessed: 12 September 2014.

Ministry of Human Resource Development (2014). [Organisation Chart – Department of Higher Education](#). Accessed: 11 September 2014.

Ministry of Labour and Employment (2009). [National Policy on Skill Development](#). Accessed: 12 September 2014.

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PSSCIVE (2013). [NVEQF Curriculum](#). Accessed : 11 September 2014.

UNESCO-IBE (2011). [World Data on Education VII Ed. 2010/11. India](#). Geneva: UNESCO-IBE.

Webpage of the [National Council for Teacher Education](#). Accessed: 12 September 2014.

Further reading

Webpage of the [National Skills Development Agency](#)

Webpage of the [Ministry of Labour and Employment](#)

Webpage of the [Ministry of Human Resource Development](#)

Webpage of the [All Council for Technical Education](#)