

Human Resource and Skill Requirements in the Education and Skill Development Sector Executive Summary



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National
Skill Development
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Industry Overview

Indian education and skill development industry grew at an average rate of 13% in the last four years from over Rs. 1.21 trillion in 2008 to over Rs. 2.35 trillion in 2012

Key Growth Drivers

School education sub-segment -

- Increasing government impetus in successive five year plans
- Rising disposable income of Indian population
- Increase in population in the target age groups
- Increasing private sector participation

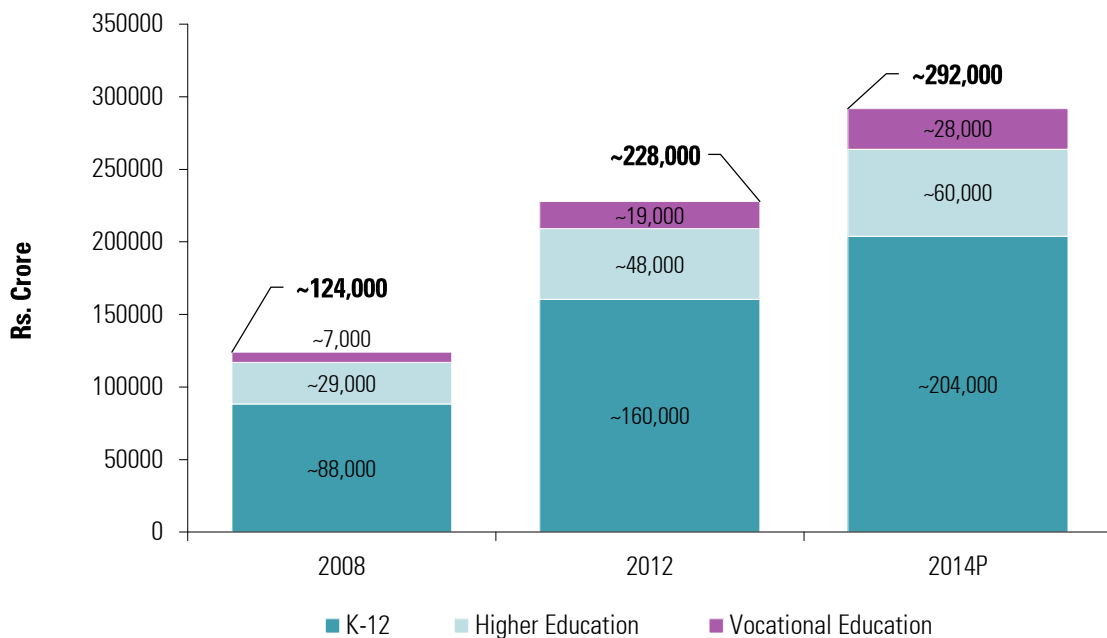
High education sub-segment –

- Increasing private sector participation
- Increasing Population in the age group of 15-24 years
- Policy drive to improve gross enrolment ratio in higher education institutes

Vocational education sub-segment –

- Increasing absorption of dropouts from mainstream education who are seeking a career or skill upgrade
- Increasing awareness amongst Indian employers and population
- Increasing private sector participation

Market size of Education and Skill Development sub-segments (in Rs. crore)



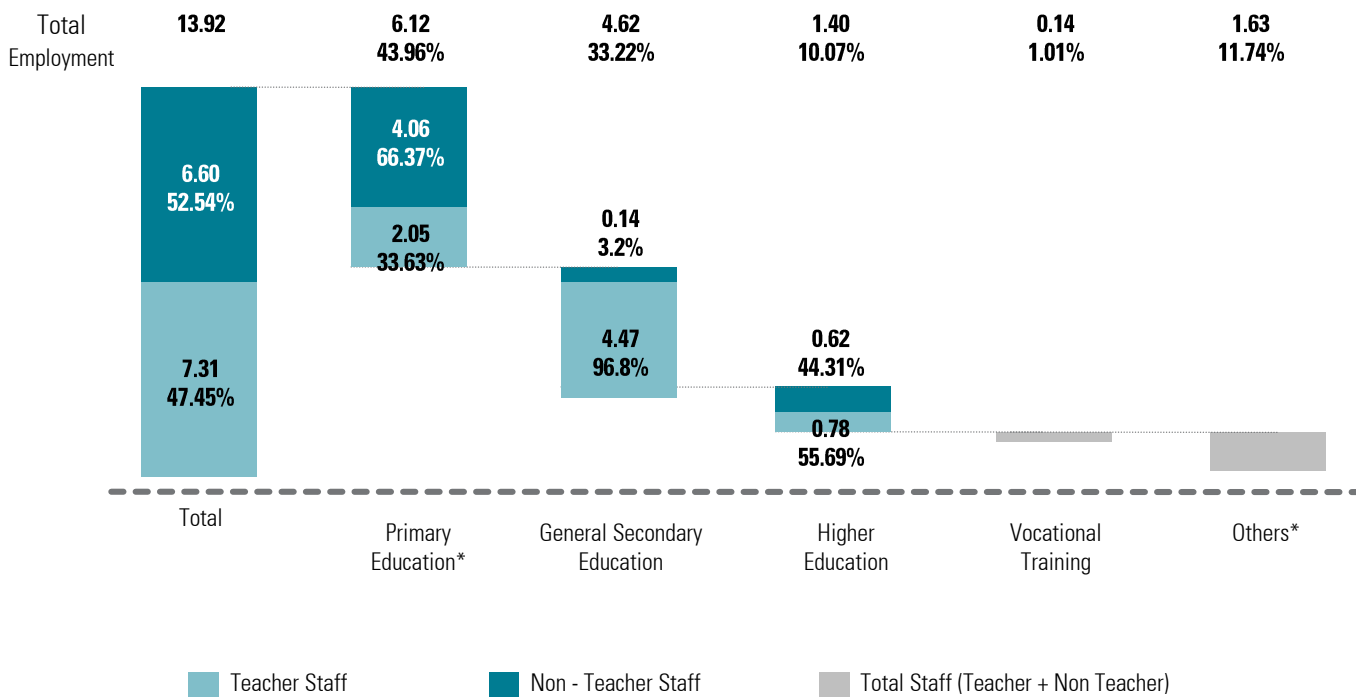
CAGR (2008-14)	
K-12	13%
Higher Education	11%
Vocational Education	22%
Overall	13%

Sources: KPMG in India analysis

Demographic and workforce characteristics

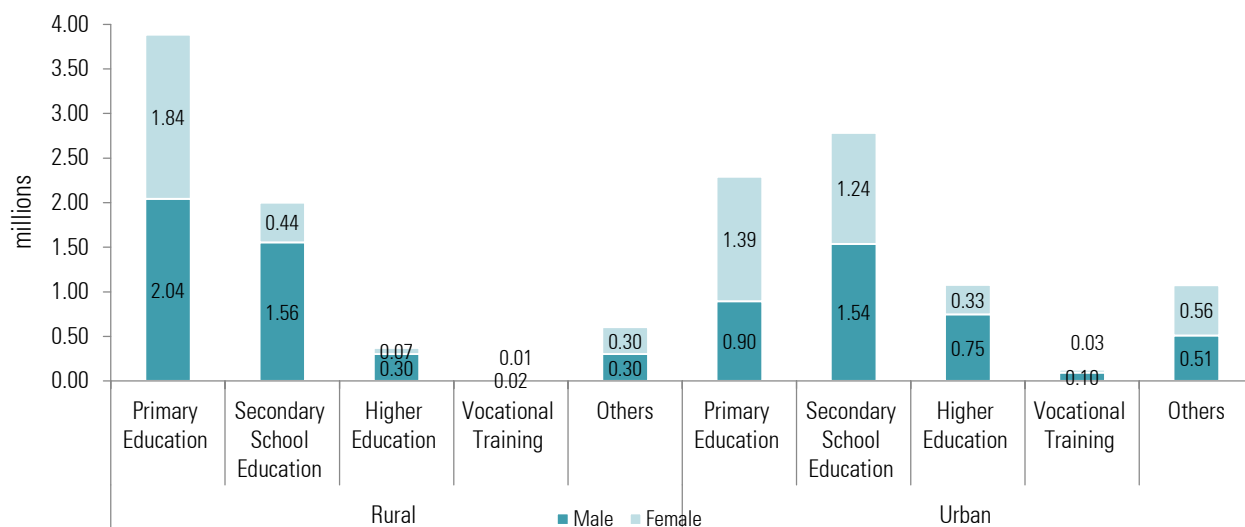
Employment by sub-sectors and gender

Distribution of employment across sub sectors (as of 2011-12) in millions



Source: NSSO 66th Round, 2011 – 12 and KPMG in India analysis

Gender distribution of workforce (as of 2011-12)



Source: NSSO 66th Round, 2011 – 12 and KPMG in India analysis

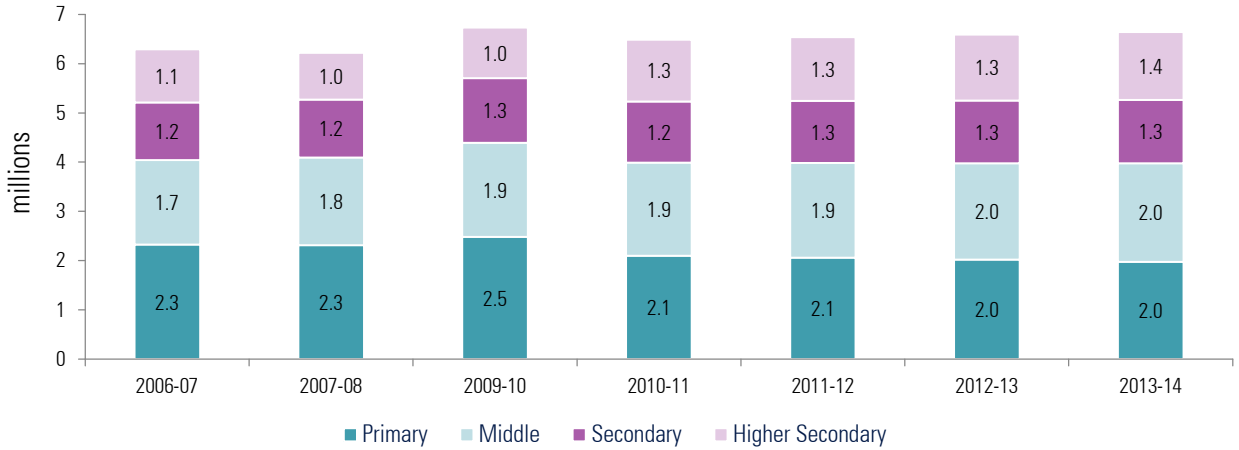
Demographic and workforce characteristics

Employment by sub-sectors and gender

School education

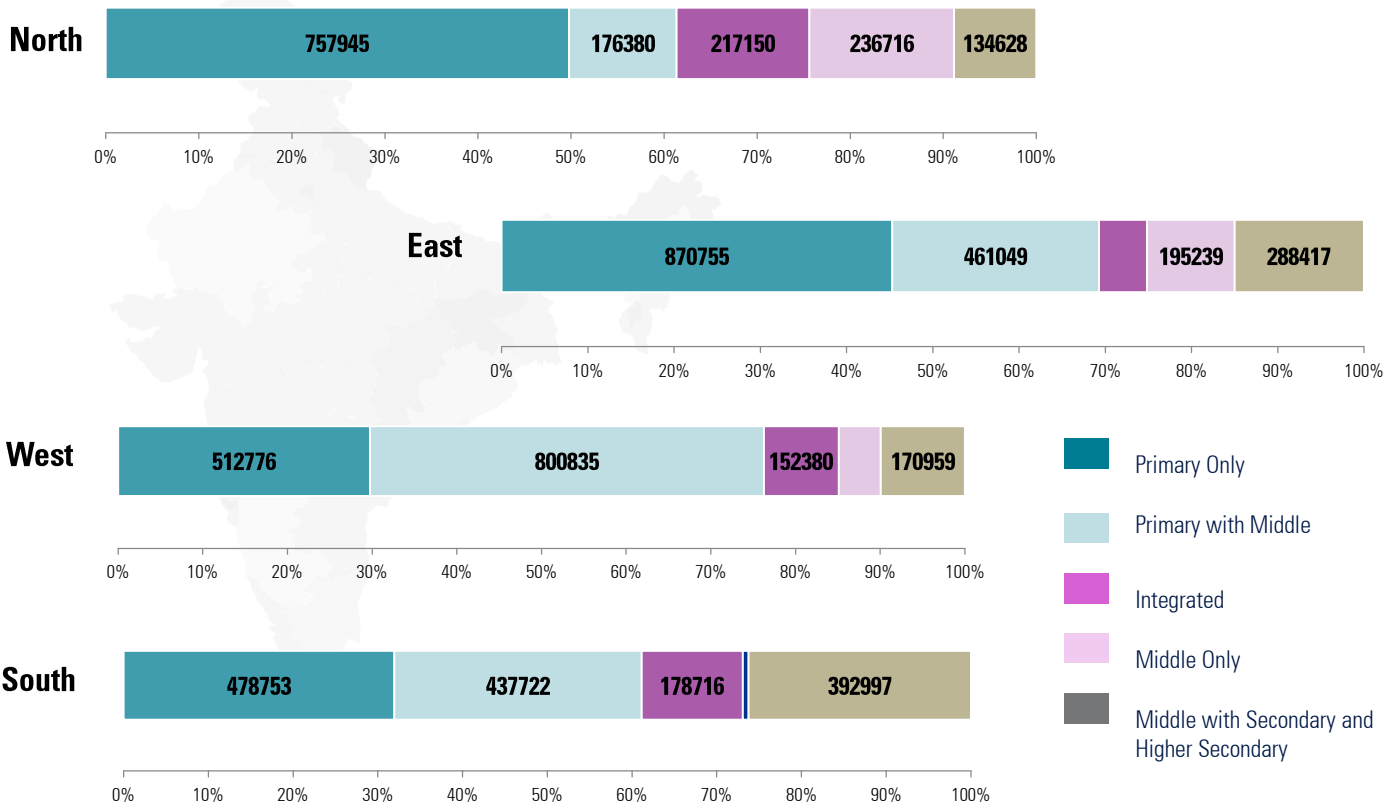
Of the total 1.07 crore persons employed in the school education sector, about 67 lakh are employed as teachers.

Trends in teacher employment in school education



Source: Historical Statistics in School Education, MHRD & KPMG in India analysis

Number of teachers (as of 2011-12) as per school category

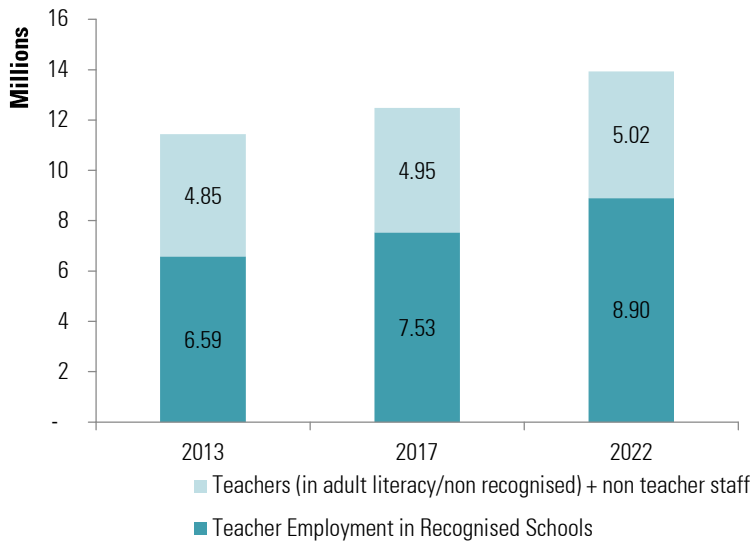


Source: DISE Data, Analytical Tables 2011-12

Incremental human resource requirements (2013-17, 2017-22) and skill gaps

Employment Growth Projections

Distribution of Workforce in School Education



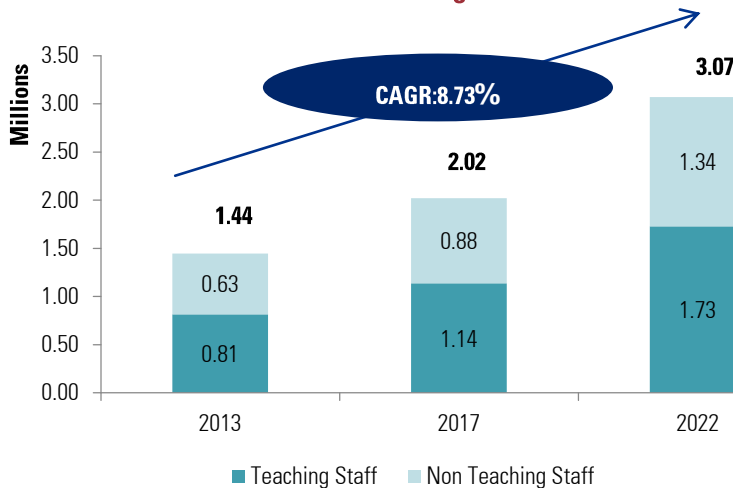
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Is the Student – Teacher Ratio Norm in Primary Education (I-V) as per RTE

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Is the Student – Teacher Ratio Norm in Middle School Education (VI-VIII) as per RTE

Distribution of Workforce in Higher Education



56.3%

Is the teaching staff of the total workforce in Higher Education

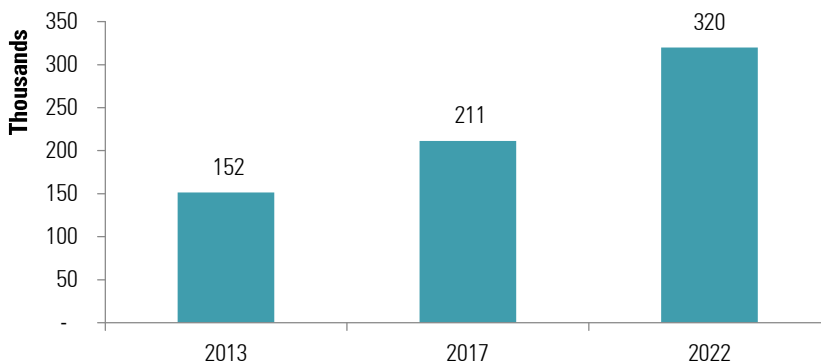
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Is the current Student – Teacher Ratio in Overall Higher Education as of 2011-12

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Is the Norm for Student Teacher Ratio by AICTE

Workforce Requirement in Vocational Training (Teacher and Non Teacher)

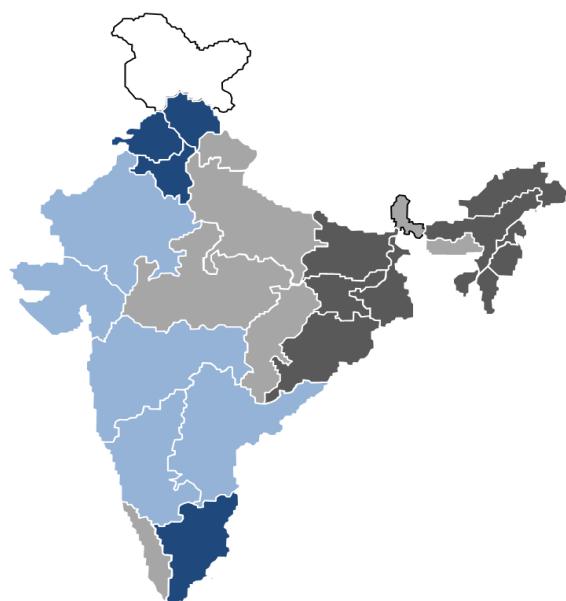


Training Infrastructure

- Addressing the imbalances and the increased demand for quality teachers in the country, the government established the National Council of Teacher Education (NCTE) with the twin strategy to (a) prepare teachers for the school system (pre-service training) and (b) improve the capacity of existing school teachers (in-service training).
- There is a large network of government – owned teacher training institutes (TTIs) which provide in – service training. The NCERT along with its six regional institutes of education prepares a host of modules for various teacher training courses and also undertakes specific programs for teacher educators. Similarly, there are State Councils of Educational Research and Training (SCERT) to serve the purpose. Following table gives a list of institutes that offer various programs in teachers’ education.

Institute	Programme
Cluster Resource Center	In – service education
Block Resource Center	In – service education
District Institute of Education	D.Ed. (Elementary School)
State Council of Education Research and Training	D.Ed + Pre- School Teacher Education
Private Institutes affiliated to SCERT	D.Ed + Pre- School Teacher Education
Institutes of Advanced Studies in Education	B.Ed, M.Ed, M.Phil and PhD in Education

Seat Intake Capacity (per 10,000 persons) in Teacher Training Institutes



Number of Seats per 10,000 persons for Teacher Education (D.Ed + B.Ed + M.Ed)

- The intake capacity of these institutes offering teacher education and training is 12.95 lakh provided by more than 16000 institutes (including both government and private offering range of programs from certificate courses to PhD in Education).
- The exhibit below gives an overview of the seat capacity across various states that offer teacher’s education programs (including Diploma, Bachelors and Masters in Education). Tamil Nadu and Haryana have the largest capacity offering 28.93 and 30.18 seats for teacher education per 10,000 persons. States like Orissa, West Bengal, Meghalaya and Other North East States have a capacity of less than 5 seats in teacher education per 10,000 persons.

Select recommendations & implications

Recommendation	Implications
<p>Provide long term benefits and recognition to teachers and improve overall work benefits</p>	<ul style="list-style-type: none"> ▪ Launch a national level marketing campaign to restore the pride of the teaching profession by highlighting the job satisfaction, the work benefits including paid vacation, work timings and career path ▪ Revamp the teacher training (pre service and in service) to include latest pedagogical methodologies and quality assurance techniques ▪ Highly structured incentive schemes which take technical competency, teaching assessment, student perspectives, soft skill competencies into consideration and based on the rating monetary perks are provided ▪ Division of institutions in tiers based on prestige and opportunity for teachers and developing bands within the tiers to provide career progression incentives ▪ Based on assessments teachers are provided with a three-year improvement plan where they can work on their areas of development and leverage their strengths
<p>Curriculum development, training and assessment of teachers in needed to ensure quality</p>	<ul style="list-style-type: none"> ▪ Stringent screening of candidates who take the TET will ensure that only the best candidates get through ▪ A more comprehensive and coherent curriculum that encompass the latest development and interdisciplinarity is needed ▪ M.Ed programme should be a two-year programme with sufficient provisions to branch out into curriculum studies, pedagogic studies, policy, finance and foundational studies ▪ Quality of teacher assessment needs to improve. A pre-service teacher education programme to test the aptitude of the candidates on qualitative parameters as well such as attitude towards children, values, disposition, habits and communication skills is important ▪ Need to have a national level academic body for periodic assessment of teacher education programmes both pre and in service, continuous update of curriculum with changing needs and development of faculty for teacher educators
<p>Consider policy level changes in providing for faculty positions drawn from non PhD backgrounds</p>	<ul style="list-style-type: none"> ▪ UGC could look into allowing a small percentage of non PhD faculty who could rise to Professor and administrative positions in universities and colleges. Such faculty should be selected from a pool of exceptional industry experienced professionals with 15 to 20 years of work experience and whose teaching and research capabilities can be tested and certified ▪ A national level certification program could be developed for assessing pre-service and re-training of faculty from both PhD and non PhD backgrounds
<p>Improve the overall perception of vocational education and offer incentives for trainers</p>	<ul style="list-style-type: none"> ▪ Developing training institutes with industry infrastructure that will ease the investment needed from educational institutions particularly for technical education and VE ▪ Structured programs for teacher training particularly in the VE sector that requires industry exposure ▪ Norms that take softer skills into consideration for certifying teachers. Soft skill training is essential for teachers and would vastly improve the productivity of the sector ▪ Technical training requires practical industry exposure. REEMAP has tied up with industrial organizations to provide teacher training through practical exposure. Increasingly, governments must realize that going for the typical L1 tender in this space will not get quality. In this context, schemes which allow cost structure based contracts are a good strategy to delivery quality training



cutting through complexity

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- Access to our wealth of knowledge – Thought leaderships, Industry monitors and database through our Education - Centre of Excellence in India
- A strong cross functional team with expertise of Consulting, Corporate Finance, Tax teams – focused on education sector
- Working closely with Central Govt., MoHRD, State Govts, Apex bodies and funding agencies
- Use of robust proprietary tools and methodologies assuring quality delivery to our clients

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