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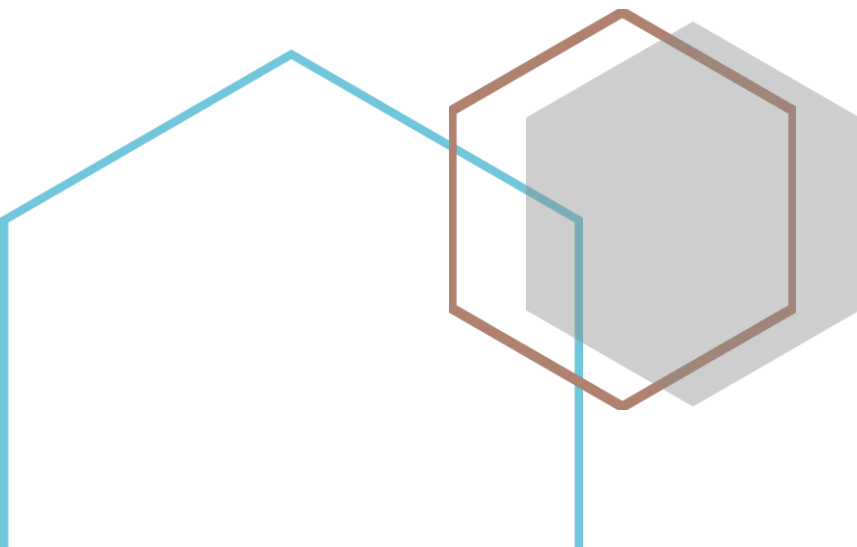
# MAPPING REPORT ON THE CONDITIONS AND DETERMINANTS OF GRADUATES' EMPLOYABILITY

## INDIA



**Integrating Talent Development into Innovation Ecosystems in Higher Education**

**586227-EPP-1-2017-1-BG-EPP**





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The report analyses the social and economic conditions that are likely to provide opportunities or impact negatively on Indian universities' efforts to develop a comprehensive and effective approach to the promotion of graduates' employability. It looks at the context and conditions both inside the higher education system and in the broader social and economic environment.

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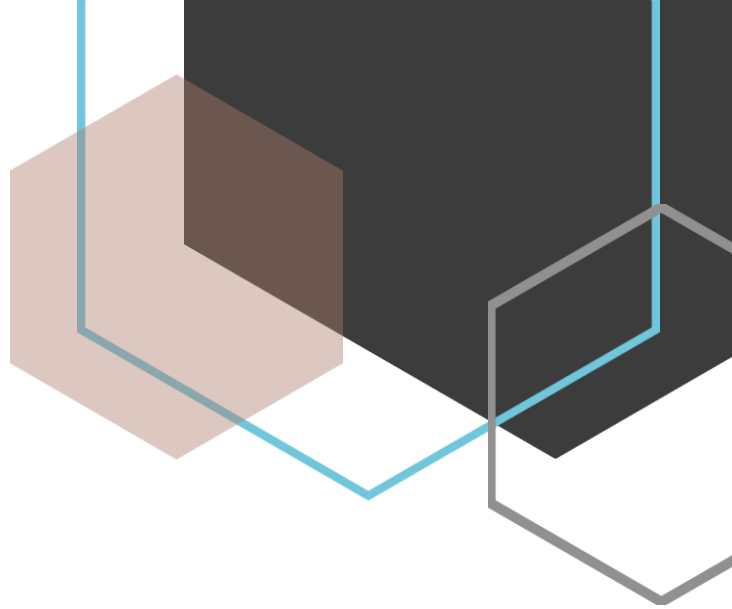
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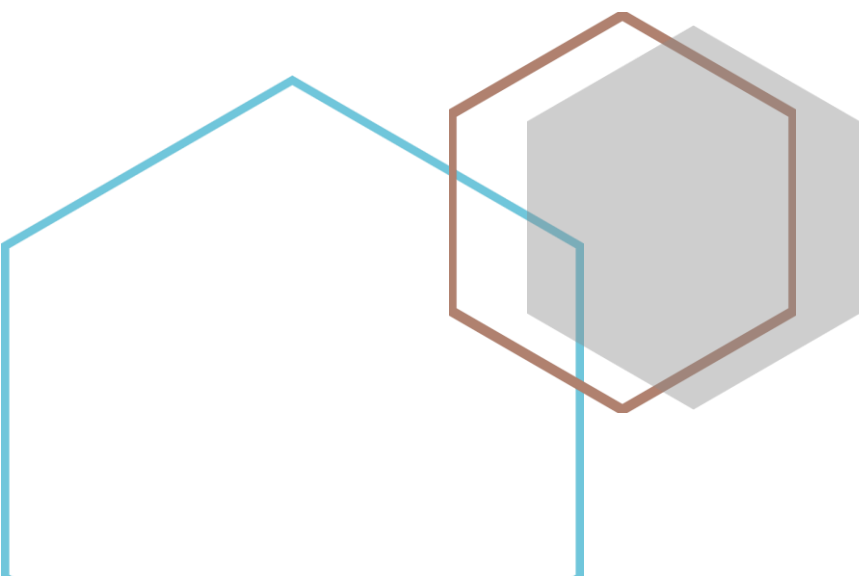


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# Assessment of the current state of graduates' employability in India



The government of India does invite inputs from stakeholders from time to time on formulating a policy for higher education. However, these have been very rare. The last attempt was made between 1986 and 1992. The latest attempt is by the present government that put out a draft policy in 2016, which also recognises the major socio-political and economic changes that have taken place in the last decade or so. The Ministry of Human Resource Development (MHRD), in charge of education in the country, is yet to finalise the report.

Research at Indian universities remains weak. There are not enough initiatives for upgrading the skills and knowledge of faculty, as well as for developing the knowledge triangle and building synergies between teaching and research. The current policy is to encourage as much as possible the internationalisation of higher education and to enable higher education institutions and their faculty to engage with peers around the globe. Another main element of the current policy is to enhance knowledge flows between universities and industry ([http://mhrd.gov.in/sites/upload\\_files/mhrd/files/nep/Inputs\\_Draft\\_NEP\\_2016.pdf](http://mhrd.gov.in/sites/upload_files/mhrd/files/nep/Inputs_Draft_NEP_2016.pdf)).

The government has thus actively promoted internationalization in higher education. The GIAN (Global Initiative of Academic Networks) initiative has aimed at facilitating the interactions of Indian students and faculty with the best academics and industry experts from all over the world. This initiative has been focused mainly on inviting foreign faculty to teach at Indian Universities. More recently, a follow-up on the GIAN initiative was announced – the GRIN (Global Research Interactive Network). It is less focused on faculty and more focused on promoting interaction between Indian students and foreign institutions through the provision of scholarships and government-funded study visits abroad.

Rankings and accreditation are the main government instruments for quality assurance in higher education. They provide information to students, employers, policy-makers, educational experts, and other concerned individuals, in order to ensure that information asymmetry does not hinder in assessing quality. National accreditation agencies such as the National Assessment and Accreditation Council (NAAC), the National Board of Accreditation (NBA), and the National Institutional Ranking Framework (NIRF) play an important role in monitoring quality in the Indian higher education sector, but this system presently suffers from various problems. Such issues were addressed in the National Accreditation Regulatory Authority for Higher Educational Institutions Bill, 2010. University ranking is also gaining importance. Universities are ranked on the basis of comparable performance indicators and the league tables point to each university's relative position vis-à-vis others. The first NIRF was launched in 2015. A second NIRF was announced in 2017. The ranking criteria broadly focus on teaching, resources, research and professional practices, graduation outcomes, outreach, inclusivity, etc. Criticisms of this policy have centered on the fact that participation in the ranking is not compulsory and hence many institutions remain without a rank, as well as on the fact

that ranking is based on self-evaluation by each higher education institutions and the data in the self-evaluation reports is not verified.

A different set of policies has aimed at encouraging the emergence of centres of academic and research excellence. A recent government initiative has led to the establishment of a specific category of higher education institutions termed “Institutions of Eminence”. The scheme, announced by the Ministry of Human Resource Development (HRD), will facilitate 20 selected Indian higher education institutions (10 public and 10 private) and help them enter into top 500 global rankings within 10 years. It is expected that these institutions will eventually in the long-run enter into top 100. The selected institutions will receive greater autonomy compared to other higher education institutions, and the public institutions included in the category will also receive substantial additional government funding. They will be allowed to freely determine the fees payable by Indian and foreign students, and to introduce flexible course duration and structure. They will also not need the approval of the government or the UGC when entering into academic collaborations with foreign institutions.

In 2018, the Indian government drafted a new Act that will replace UGC with new commission called “Higher Education Commission”. The new commission will not be a grant-making body and would focus solely on academic quality, including learning outcomes and teaching, assessment and research standards. Grants will be managed by the Ministry of Human Resource Development.

#### RATE OF PARTICIPATION IN HIGHER EDUCATION IN INDIA

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The gross enrolment in Indian universities, as per official figures is only about 16 (<https://data.gov.in/catalog/gross-enrolment-ratio-ger-higher-education>) as against the global average of 23.

#### GRADUATES' EMPLOYABILITY IN INDIA

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Over 50% of the total population of the country is below 25 years of age. The frequent complaint by industry leaders and bodies is that only 11% of the graduates are employable. The draft policy recognises as a priority the need to equip graduates with the necessary skills that will make them employable.

#### THE POLICY CONTEXT

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The government has recently set up the National Skill Development and Entrepreneurship Cell following feedback from the industry. The focus of the Cell is to improve employability of students.

It is estimated that only 4.69% of the total workforce in India has undergone formal skill training as compared to 68% in UK, 75% in Germany, 52% in USA, 80% in Japan and 96% in South Korea. While the debate on the exact quantum of the challenge continues, there is no disputing the fact that it is indeed a huge challenge.

According to the National Skill Development and Entrepreneurship Policy 2015 skill development programmes will be integrated in 25% of



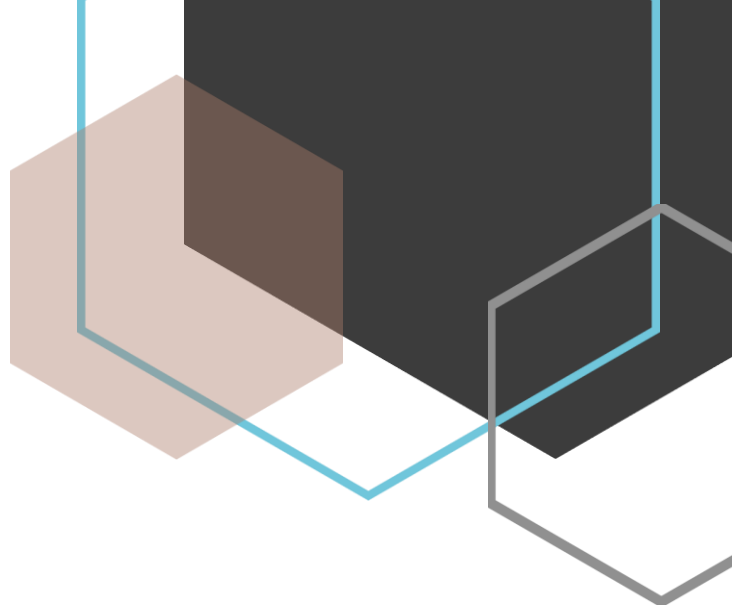
RATE OF  
ENTREPRENEURSHIP  
START-UP ACTIVITY  
AMONG GRADUATES  
IN THE COUNTRY

the schools and higher education institutions (<https://www.msde.gov.in/assets/images/Skill%20India/policy%20booklet-%20Final.pdf>). The draft policy recognises that "Formally linking the development of skills in vocational fields, and bringing an academic equivalence to vocational accomplishments with avenues for horizontal and vertical mobility of students has been attempted only recently. To enhance employability, a blend of education and skills is essential for individual growth and economic development. Fostering dignity and social acceptability to high quality vocational training needs increased attention."

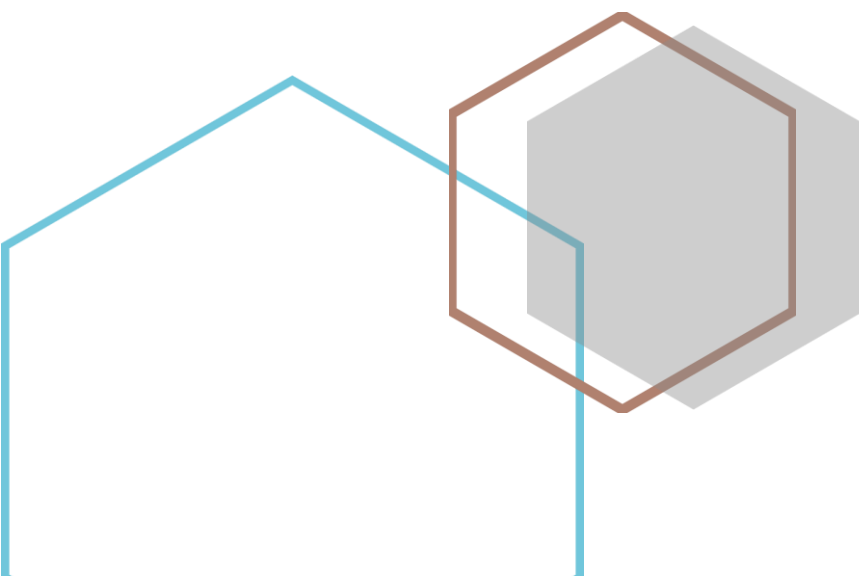
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The Global Entrepreneurship and Development Institute (GEDI) that monitors the rate of entrepreneurship across the world, places India at the 68th position, on a par with Peru. According to this composite index of the health of entrepreneurship ecosystems (<https://thegedi.org/global-entrepreneurship-and-development-index/>), India has received an index of 28% only (far from the US, with 83.6% or some EU countries that boast an index of around 70%). Very few individuals (0.75% of its population) are motivated to become entrepreneurs (<https://www.gemconsortium.org/country-profile/69>), according to the website.





## Structural factors impacting graduates' employment and employability



**STRUCTURAL FACTORS  
RESPONSIBLE FOR  
GRADUATE  
UNEMPLOYMENT**

Lack of job opportunities in India is demonstrated in the data sets for the government's flagship skilling scheme - the Pradhan Mantri Kaushal Vikas Yojana (PMKVY). Data for the PMKVY scheme until the first week of July 2017 has revealed that of the total 3,067,000 candidates who had been trained or were undergoing training across the country, less than a tenth – 290,000 had received placement offers.

Some of the factors responsible for graduate unemployment in India include gender gaps, regional disparities, low relevance and quality of education, etc.

*Gender Gaps:*

The Economic survey 2018 presented by the Finance Minister of India suggests that women workers are the most disadvantaged in the labour market, mostly because a very high proportion among the low skilled informal workers are women. In India, the gender gap in the labour force participation rate exceeds 50%. The government has been taking measures to increase the participation of women at all levels in society. As a result of those measures, women's representation rose by 1% to reach 11.8% in the Lok Sabha - House of the People, the lower house of India's bicameral Parliament. The government is in the process of reforming labor laws, too. (Source: DNA JAN 30, 2018)

*Regional disparities in India:*

India is facing the problem of acute regional disparities and it is reflected in indicators such capita income, the proportion of population living below the poverty line, the percentage of urban population living below poverty line, the percentage of urban population of total population, the percentage of working population engaged in agriculture, the percentage of workers engaged in industries, infrastructural development, etc.

*Low relevance and quality of education:*

According to a 2016 report by the job skills credentialing company Aspire Minds, nearly 80% of the Engineering graduates in India are not employable. Most of them are compelled to accept jobs in non-specialised fields or remain unemployed. Major explanatory factors identified are:

- ease of securing approval from the All India Council for Technical Education (AICTE) to set up an institute
- courses are not in tune with the industry's requirements
- lack of sufficient skilled faculty to train students, etc. (Source: Business Line April 24, 2017).

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Key factors that impact employment rates in the economy, and thus also graduates' employability, include the macroeconomic context, demonetisation and micro-entrepreneurship.

*Macroeconomic context:*

**CURRENT CHANGES  
IN THE NATIONAL OR  
REGIONAL ECONOMY  
EFFECTING ON  
GRADUATE  
EMPLOYMENT**





The economy of India grew at an average of about 6.6% per year between 2011 and 2017. It appeared to slow down from 2011 to 2013 due to rising fiscal deficit, high consumer inflation, collapse of the mining sector, and a deadlock in infrastructure projects. Since 2013, however, India has enjoyed economic recovery after the government ruled in the fiscal deficit and the inflation, rapidly increased public investment in the infrastructure sector, and implemented large-scale programmes to provide basics services (such as bank accounts, sanitation, and clean energy) to previously unserved millions of citizens. India's projected growth rate for the period 2019-2020 is 7.3%, making it one of the fastest growing major economies in the world.

*Demonetisation:*

A decision of “demonetise” was announced in November 2016. It has affected the cash dependent sectors such as the informal sector, the real estate sector, and the consumption-oriented businesses. It has also led to a surge of digital payment, too. Demonetisation has resulted in job losses, especially in the informal sector. The Centre for Monitoring Indian Economy has estimated that 1.5 million jobs were lost during just four months following demonetization. Alongside this loss of jobs, there has been a decline in the labour force participation rate (Source: Live mint: Nov 16, 2017)

*Micro-entrepreneurship:*

India is currently the third largest start-up hub in the world. It hosts over 4,200 technology start-ups, generating over 80,000 jobs. Indian start-ups enjoy increased funding, a growing investors' base and the support of over 100 incubators and accelerators across the country (<https://www.nasscom.in/>). Despite this rapid grow, most of Indian start-up fail within the first 5 years, mostly due to lack of innovation or the lack of employees with the right skills (the percentage is an estimate provided in a report by the IBM Institute for Business Value and Oxford Economics: IBM Corporation, 2016: 3).

The start-up ecosystem is largely government-supported. The Indian government runs a small-entrepreneur financing programme under the “Micro Units Development and Refinance Agency” (MUDRA). Almost 35 million new loans were sanctioned under the MUDRA scheme in 2016. This programme is aimed at creating not only self-employment for small entrepreneurs receiving the loans but also indirect employment. The government data suggest that of the 35 million new loans, some 36 percent (or 12.6 million loans) were disbursed to first-time entrepreneurs, resulting in work opportunities for 15 million to 19 million people. According to data from the National Bank for Agriculture and Rural Development, loans to self-help groups (largely women-oriented collectives with ten to 12 members each) increased with 35 percent in the period 2015–16, and loans were made to two million beneficiaries, with approximately 20 million to 24 million individual members. Studies show that programme participants gave high ratings on women empowerment, self-esteem enhancement, personality

**DEVELOPMENT OF  
THE LABOUR MARKET**

development, reduced social tensions, increase in livestock production, and the reduction of high-cost debt. (Source: MCKINSEY Discussion paper June 2017).

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India's labour markets are experiencing structural change. It affects the quantity and type of work done by people already in employment, growth in labour productivity, higher earnings, and aspects of work quality such as safety, cleanliness, flexibility, income security, and intellectual challenge. To bridge India's infrastructure gaps, the government has raised public investment in roads, railways, rural development, power, telecom, housing, healthcare and education. It has created work opportunities for an estimated seven million workers, at wages that are 70 percent higher than average farm worker wages. From 2014 to 2017, data from the industry association NASSCOM suggest, the IT and business process outsourcing sectors created between 550,000 and 600,000 incremental direct jobs. Rapid development in automation technologies is affecting India's information technology and business process outsourcing sectors. The industry estimates that companies could hire up to 2.5 to 3 million more workers by 2025.

India's labour bureau is releasing quarterly surveys measuring net employment growth. The survey suggested that India's labour market has grown in the range from 150,000 to 400,000 jobs each year from 2013 to 2016. Based on the annual surveys, the total number of jobs in India from 2011 to 2015 grew (net) by about seven million (from 455 million to 462 million). The agricultural employment fell by 26 million and non-farm employment rose by 33 million. With more and better jobs available in construction, trade and hospitality, labour moved out of agriculture. The growth in non-farm jobs in India is also evidenced by the growth number of Employees Provident Fund members. Membership grew at a 7 percent rate, from 32.6 million in 2013–14 to 37.6 million in 2015–16. Mining saw jobs lost, and manufacturing jobs seem to have grown between 2013 and 2015. Job growth in transport and trade was significantly faster than average India employment growth. Three-fourths of the new work opportunities are in logistics and transport, where the wages of a worker with a middle-school education can be as much as 80 percent higher than in agriculture.

A massive 55% increase by central government spending on infrastructure helped increase jobs in the roads, railways, housing, telecom and power sectors. State governments also spent much on infrastructure, which led to more jobs in the sector. A further boost to work opportunities has come since 2015 with the government's renewed commitment to the National Rural Employment Guarantee Act 2005.

*New digital ecosystems and independent work:*

There is growth in internet penetration and data usage in India. It leads to improvement in digitally enabled ecosystems and increase in work opportunities across various sectors like retail, transportation, financial services and health care. This means adequate growth in work



opportunities, which are projected to rise to one million by 2018. The number of workers directly employed in e-commerce is estimated to have grown at 40 to 50% per year between 2012 and 2016, rising from some 20,000 jobs to over 100,000.

*The public sector:*

The public sector is a major creator of jobs and employment opportunities. In India it includes various ministerial departments, state-owned corporations and the sectors and industries, dominated by government like banking and insurance. The Government has been conducting recruitment drives on a regular basis and looking for new human resources who are skilled and semi-skilled. Till now, the public sector used to recruit through departmental promotions, newspaper advertisements, and gazettes and through employment exchanges.

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Several studies over the past decade have documented that the Indian state does a poor job at effectively delivering basic services to its citizens. Nevertheless, public services are available to help those that are looking for employment.

- Employment Exchanges: The Employment Exchanges are managed by the State Governments while the Central Government lays down policies and guidelines.

- The Ministry is implementing the National Career Service (NCS) Project (under the 12th Five Year Plan for transformation of the National Employment Service) to provide a variety of employment related services like job matching, career counselling, vocational guidance, information on skill development courses, etc. These services are available online on the National Career Service Portal ([www.ncs.gov.in](http://www.ncs.gov.in)) and are supported by Call Centre/Helpdesk. The NCS services are accessible from multiple delivery channels like NCS Portal, the Employment Exchanges (Career Centres), the Common Service Centre, etc. This project also includes establishment of 100 Model Career Centres in employment exchanges and reputed institutions. The Model Career Centres provide a variety of employment related services utilizing appropriate technology. The NCS Project has also been enhanced to interlink all employment exchanges with the NCS Portal so that services can be delivered online. The scheme provides some public funding to support IT upgrading and minor refurbishing of Employment Exchanges, as well as for organising job fairs.

The portal provides job matching services in a highly transparent and user friendly manner. These facilities along with career counselling content will be delivered by the portal through multiple channels like career centres, mobile devices, Common Service Centres (provide Internet infrastructure to rural areas), etc.

- At regional and state level there exist additional initiatives: For example, the Kerala government has launched a single window service portal for job seekers and employers. The service has been developed by



ACTIVE AND PASSIVE  
EMPLOYMENT  
POLICIES

the Kerala Academy for Skills Excellence. Initiatives have been taken to set up skill centers in the state and expand industrial internship programme. The Kerala Academy for Skills Excellence will create a labour bank with the labour commissionerate. It will be linked with the job portal.

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Labor market policies represent public interventions within the labor market. They may be passive (namely, income replacement such as unemployment benefits and assistance) and active (training and re-training, job creation, hiring subsidies). Specific labor market measures include interventions that secure temporary support for disadvantaged groups within the labor market, such as unemployed, vulnerable or at risk employees and inactive persons. They may include training, job switch or job rotation, direct job creation and unemployment benefits (Card et al., 2009; Arpaia, Mourre, 2005).

In India, the following active labor market policies are being implemented:

- Employment Exchange: A database of unemployed qualified candidates and a link to match requirements and skills
- National Career Service (India): Online Job Portal by Government for job seekers
- National Rural Employment Guarantee Act: Provides guarantee of minimum 100 days employment to unemployed
- Deen Dayal Upadhyaya Grameen Kaushalya Yojana: provides training to rural youth between the ages of 15 and 35 years from poor families, with the objective to make them employable
- Integrated Rural Development Program: To make rural people employed through development programs
- Pradhan Mantri Kaushal Vikas Yojna: a flagship scheme of the Ministry of Skill Development & Entrepreneurship aimed at providing Indian youth with industry-relevant skill training
- Stand-up India: Provides a loan facility to Scheduled Cast and Scheduled Tribe candidates for green-field projects.
- New Swarnim Yojana: provides loans for women for self-employment and targets Backward Class Women and poor women
- In addition, the following passive labor market policies are implemented:
- National Social Assistance Scheme: Public assistance to citizens in case of unemployment, old age, sickness and disablement and in other cases of undeserved want
- Atal Pension Yojana: A pension program that allows people to make voluntary contributions within a certain range in order to



receive matching government contributions

- National Pension Scheme: A contribution-based pension scheme

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The Government of India has undertaken several initiatives and instituted policy measures to foster a culture of innovation and entrepreneurship in the country. In recent years, a wide spectrum of new programmes and opportunities to nurture innovation has been launched across a number of sectors. These programs target various stakeholders, including academia, industry, investors, small and big entrepreneurs, non-governmental organizations and the under-served sections of society.

The Government of India also ensures that all policy initiatives are geared towards enabling equal opportunity for women. The government seeks to bring women to the forefront of India's entrepreneurial ecosystem by providing access to loans, networks, markets and trainings.

Some of India's efforts at promoting entrepreneurship and innovation are listed below:

- Start-up India

The launch of Start-up India gave a significant boost of the Indian entrepreneurial ecosystem. The initiative has recognized the revolution in Indian entrepreneurial sector and has provided the following type of entrepreneurial support:

*No Capital Gains tax for start-ups*

Start-up India allows registered start-up to apply for tax exemption on Capital Gains and on investments above Fair Market Value. These exemptions are game changers for start-ups.

*Start-up profits not taxable for first three years*

Start-ups are always worried about tax. Under the Start-up India, profit generated by start-ups is not taxable for the first three years. Now entrepreneurs can focus more on their business without worrying about the tax part. The exemption applies only to registered entrepreneurs

*Single point access*

The Start-up India hub will now provide for entrepreneurs a single point of access to communicate or go ahead. This can also be done via a mobile app. This single point access seeks to ease the work of start-ups.

*Patent fees for start-ups to be slashed by 80%*

Patent fee for start-ups will be reduced by 80% in order to encourage innovation and creativity. Start-ups will also be helped through facilitation centres where lawyers will file patents without any charges.

*Start-up funding*

A dedicated fund has been set up to provide both equity and debt support. Registered entrepreneurs can apply for funding support during

each year during the first four years after registration.

- **Make in India:** This Government of India campaign targets 25 priority economic sectors and seeks to encourage local companies to manufacture their products in India and to increase foreign investment. The programme is operational since 2014
- **Atal Innovation Mission:** This Government of India programme is aimed at the promotion of Innovation Hubs, start-up businesses and other self-employment activities, particularly in technology driven areas. It includes entrepreneurship support and mentoring, incubation centres and scale-up support to established incubators. It also establishes Atal Tinkering Laboratories in Indian schools with the objective to promote creativity and innovation at a very early age.
- **Support to Training and Employment Programme for Women (STEP):** A Programme providing employability and entrepreneurship training to women
- **Jan Dhan- Aadhaar- Mobile (JAM):** Launched in 2015): A Government of India initiative for Financial Inclusion which seeks to allow the direct transfer of subsidies in order to eliminate subsidy intermediaries and leakages
- **Pradhan Mantri Kaushal Vikas Yojana** (described above)
- **National Skill Development Mission:** This Government of India initiative seeks to foster convergence of skill training activities across sectors and States in terms
- **Science for Equity Empowerment and Development (SEED):** This Government initiative provides opportunities to scientists and field-level workers to take up action oriented and location specific projects promoting the socio-economic development of poor and disadvantaged sections of the society. It promotes the uptake of appropriate science and technology interventions, especially in rural areas
- Many states have formulated their start-up policies

There are also programs which help entrepreneurs with getting loans and funding, such as:

- **Stand-Up India:** Launched in 2015, Stand-Up India seeks to leverage institutional credit for the benefit of India's underprivileged. It aims at enabling the economic participation of women entrepreneurs and the Scheduled Cast and Scheduled Tribe communities, and to thus increase their ability to share in the benefits of India's growth, among. Towards this end, at least one woman and one individual from the Scheduled Cast or Scheduled Tribe communities are granted loans between Rs.1 million to Rs.10 million to set

up green-field enterprises in manufacturing, services or the trading sector. The Stand-Up India portal also acts as a digital platform for small entrepreneurs and provides information on financing and credit guarantee.

- Trade Related Entrepreneurship Assistance and Development (TREAD) Scheme: The scheme seeks to address the critical issues of access to credit among India's underprivileged women and to provide pathways for women to take up non-farm activities. It enables credit availability to interested women through non-governmental organizations. Women can receive support from registered non-governmental organizations both in accessing loan facilities, and in receiving counselling and training opportunities to kick-start the proposed enterprises.

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After 70 years of economic planning, India has 4% of skilled workforce in comparison to China (47%), Japan (80%) and South Korea (94%). It has been imperative to bridge the skills-gap prevailing in Indian labour market, as well as to take measures to support the emergence of a skilled work force. In 2014 the newly elected government of India created a new ministry tasked with resolving this issue – the Ministry for Skill Development and Entrepreneurship. This Ministry forecasts the skill requirements for industries, finds out skills gaps and works to remove the skills gaps.

More than 12 million youth between 15 and 29 years of age are expected to enter India's labor force every year for the next two decades. The government's recent skill gap analysis concludes that by 2022, other 109 million or so skilled workers will be needed in the 24 keys sectors of the economy. According to estimates by the Ministry of Skill Development and Entrepreneurship in its Annual Report 2016-2017, the number of people who will need skills training by 2022 is 126.87 million, working in 34 sectors. There are 10 priority sectors that account for 80% of those needing training. Top sectors requiring skilled training for a future period from 2017-2022 include construction (32 million people), retail (10.7 million people), beauty and wellness (8.2 million people) and transportation and highways (6.22 million people).

The Ministry of Skill Development and Entrepreneurship relies on the following organizations and yojanas (schemes) to achieve its mission:

#### **Organizations**

- Director General of Training (formerly the Directorate General of Training & Employment, Ministry of Labour and Employment)
- National Skill Development Corporation
- National Skill Development Agency
- National Skill Development Fund

## Schemes

- Pradhan Mantri Kaushal Vikas Yojana
- UDAAN, a Special Industry Initiative for Jammu & Kashmir

The National Skill Development Agency is an autonomous body created with the mandate to coordinate and to harmonize the skill development activities in the country. It is part of the Ministry of Skill Development and Entrepreneurship. One of its objectives is the creation of an integrated Labour Market Information System. A national database on all major aspects of skill development should be created in partnership with all other Ministries of the Government of India and the State Governments. This will be a one-shop stop where all the relevant information will be freely available to citizens. The LMIS should create operational efficiencies and should help reduce considerably situations in which one individual benefits under different schemes.

The ministry at national level tries to forecast and judge the skills requirements of the labor market and tries to bridge the gap through providing training and support. The ministry has introduced a Skill Requirement Report to find the requirements of various sectors and industries of India. Sectors have been defined for which a Skill Requirement Report is prepared. Relevant research is conducted for sectors such as Agriculture and related sectors, Auto and auto parts, Banking and insurance, Beauty and wellness, Building construction and real estate, Construction and material building, Domestic help, Education and skill development, Electronics and IT hardware, Textile, Tourism and transport, etc. Each particular sector is then classified into various sub-skill categories. After finding the sector-wise gaps, a state-wise report is also prepared to find the skill requirement and gaps in a particular state.

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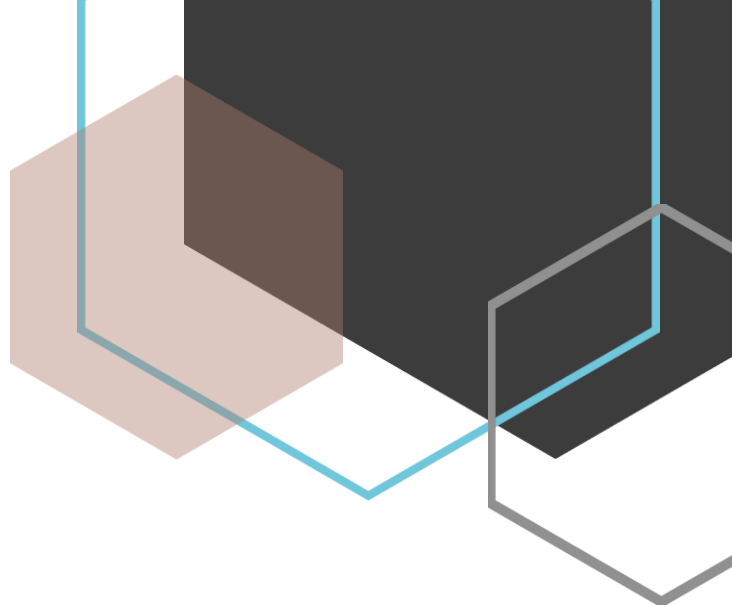
Trade and businesses in India have been established since ancient times and they have been surviving without any professional training or education of business through the transfer of skills, knowledge and experience from the senior generation in the business family to the junior family members. In current times there is a sizable population depending on small and medium sized businesses which are run by generations in the same family. The Government, through its different initiatives, has established systems and structures to help unskilled people acquire skills, which can help them pursue some gainful employment. Those who already possess skills acquired through work experience or informal ways can enrol in the Recognition of Prior Learning (RPL) programme. RPL is a platform intended to ensure that informal learning or learning through work get acceptance equal to that of the formal levels of education. RPL is a process of assessment of an individual's prior learning with the rationale that learning is an outcome rather than a process.

Under Pradhan Mantri Kaushal Vikas Yojana, special focus is given to

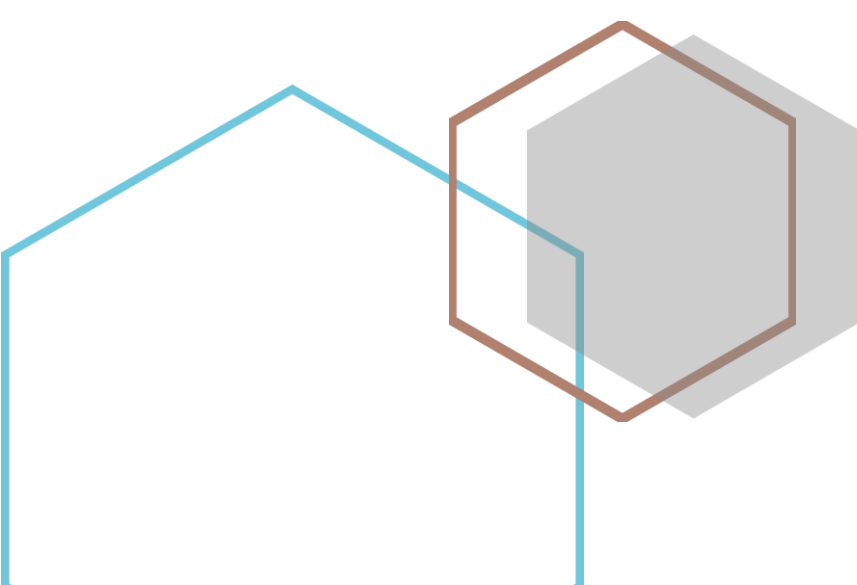


RPL by recognizing prior competencies of the assessed candidates, while the candidates also receive a certificate and monetary reward upon successful completion of assessments. (source: <http://www.sscnasscom.com/efficacy/pmky-20/recognition-prior-learning-copy/>).





**Factors in the higher education system impacting graduates' employment and employability**

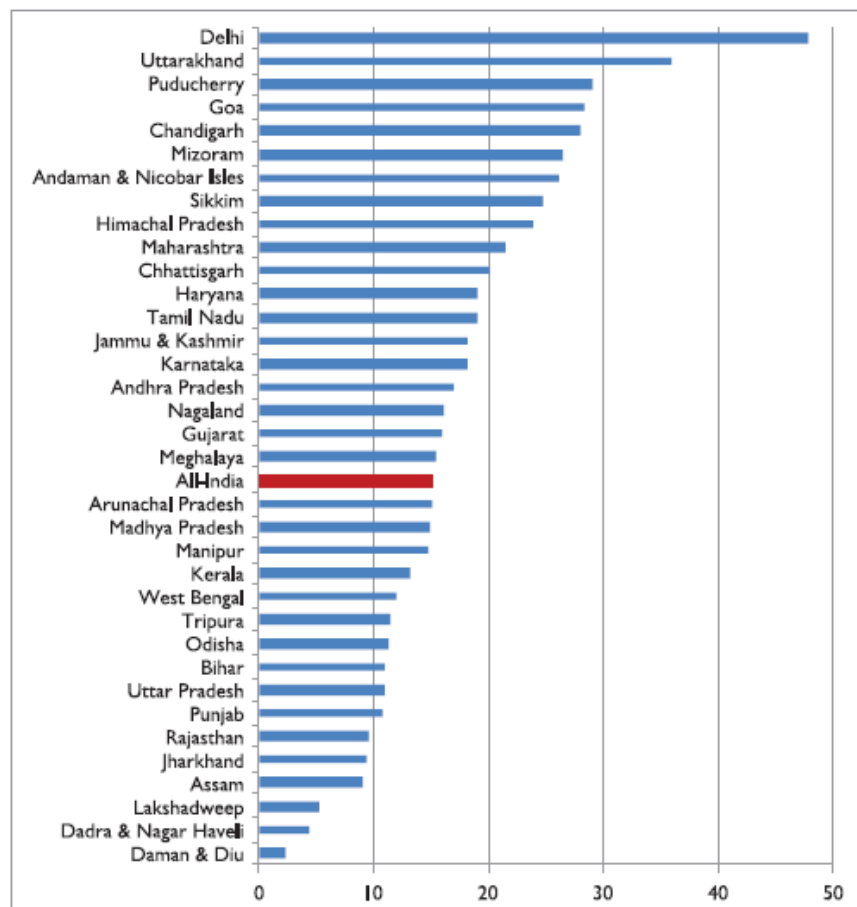


**REGIONAL  
DISPARITIES IN  
ACCESS TO HIGHER  
EDUCATION**

Higher education in India has expanded at a very fast rate during the last decades. Gross enrolment ratio has grown from less than 2% in the 1950s to 25.8% in 2017/2018 (<http://www.pib.nic.in/Pressreleaseshare.aspx?PRID=1541358>). As of end 2018, there are over 889 recognized higher education institutions, including 394 state universities, 125 deemed to be universities, 48 central universities and 322 private universities (<https://www.ugc.ac.in/oldpdf/Consolidated%20list%20of%20All%20Universities.pdf>). However, expansion has not led to more inclusiveness and has not managed to eliminate disparities in access to higher education based on gender, caste, religion, economic status and region.

There are substantial regional disparities in access to higher education in India. They concern not just enrolment but also number of colleges and universities, available institutional infrastructure and public expenditure. Regional disparities in access to higher education are primarily due to the underlying disparities in social and economic development among the states, as well as disparities in access to and quality of primary and secondary education. What is notable is that inequalities appear to be increasing rather than decreasing during the last decades.

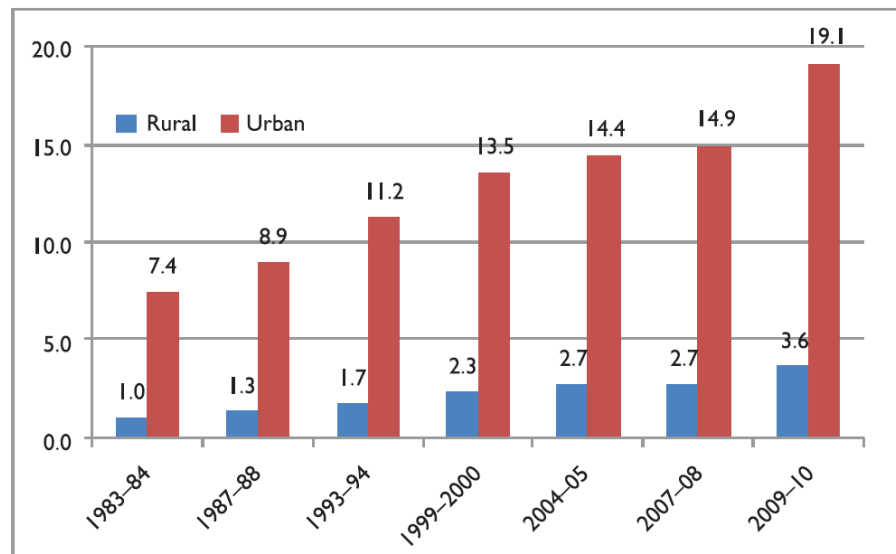
*Gross Enrolment ratio in higher education 2009-2010 per region (in percentage)*



*Source: Tilak, Jandhyala. 2015: "How Inclusive Is Higher Education in India?" Social Change 45(2): 203*

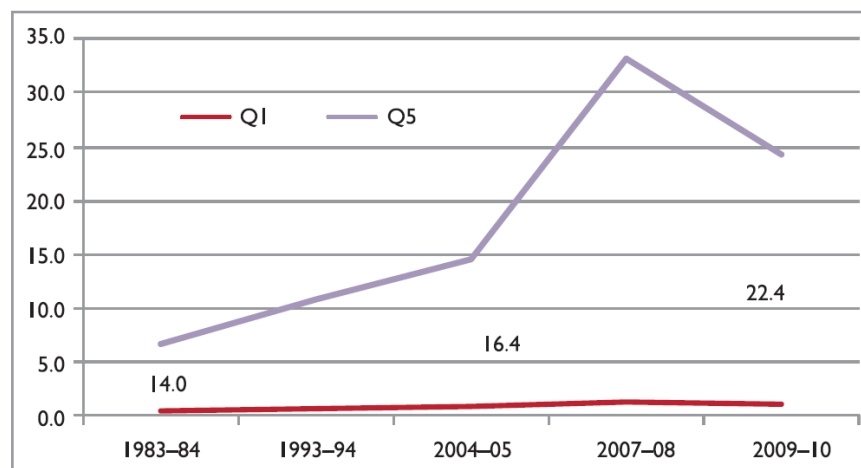


Apart from inequality in enrolment, there is an even more pronounced inequality reflected in the rates of higher education attainment:



Source: Tilak, Jandhyala. 2015: “How Inclusive Is Higher Education in India?” *Social Change* 45(2): 206

The different sources of inequality in access to higher education and higher education attainment overlap and mutually reinforce each other. For example, there are strong disparities in higher education enrolment and attainment between the poorest and the richest sections in society. While the gross enrolment ratio among the poorest quintile is around 5%, it is over 61% for the richest quintile. There is a similar disparity in higher education attainment (Q1 being the poorest quintile, while Q5 the richest one):



Source: Tilak, Jandhyala. 2015: “How Inclusive Is Higher Education in India?” *Social Change* 45(2): 207

In response to this situation, many universities have initiated new programs aimed at minimizing disparities. Various Schemes/Programmes launched by both Government of India and state governments aim at minimizing disparities in enrolment in higher

education amongst poor, rich and socially backward students. Such programs are funded through the University Grants Commission, CSIR (the Council of Scientific and Industrial Research), ICHR (the Indian Council of Historical Research), ICSSR (the Indian Council of Social Science Research), DST (the Department of Science and Technology), etc.

The following are examples of the scholarships/fellowships provided to assist talented but socially backward students:

- Dexina Fellowships
- Grant-in-aid to Backward Class Students Statement A (Freeship)
- Scholarships to Children of Political Suffers
- National Merit Scholarships
- Post Matric Scholarship Schemes Minorities CS (Alpasankhank)
- Rajarshree Shahu Maharaj Scholarship for (Unreserved Category) (EBC)
- Panjabrao Deshmukh Scholarship for Hosteller Students (Unreserved
  - Category)
- Facilities of Children of Primary and Secondary School Teachers
- Free education to the Children of Jawan & Ex-Servicemen
- Government of India Scholarship
- Scholarship to the Physical Handicapped
- Eklavya Aarthik Sahayya Government of Maharashtra Scholarship
- Indira Gandhi One Child Government of India Scholarship
- Ahindi Bhashik
- Merit Scholarship (University Fund)
- Junior Research Fellowship (JRF)
- Rajiv Gandhi National Fellowship

However, the ability of individual universities to contribute to addressing the unequal access to higher education in India is limited. The majority of students come from the financially poor strata of Indian society and need scholarships in order to pursue higher education. Unfortunately, universities suffer from a fund crunch and are unable to dole out an adequate number of scholarships.

India is a conglomerate of villages and in order to pursue higher education, many students need to migrate from the rural belt to urban dwellings. They are therefore in need of hostel facilities. Unfortunately, universities do not have adequate hostel space to offer accommodation for the all the students that need it. Every year only a few students get

## UNIVERSITY AUTONOMY

accommodated in hostels, while many have to give up on their pursuit of higher education due to inability to provide for their accommodation.

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In India there are five categories of Universities: State Universities, Central Universities, Private Universities, deemed to be universities and institutions of national importance. State and Central Government funded Universities have only academic and organizational autonomy. All financial and staffing decisions are taken by the Government. However, all private Universities are completely autonomous to make important decisions. They have financial autonomy, academic autonomy, autonomy in organizational matters, and autonomy in staffing decisions.

## PUBLIC FUNDING FOR UNIVERSITIES

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Private universities are financially self-sustaining, so the instrument of performance-based funding is irrelevant in the case of private higher education in India. Public funding of the state and central universities is performance-based. State Universities are mainly funded by the State Government. Central Universities are funded by the Central Government. Apart from salary grants, the Central Government provides funding for R&D activities through the University Grants Commission, the Department of Science and Technology, the Department of Biotechnology, the All India Council for Technical Education, Rathstriya Uchchar Shiksha Abhiyan, etc. There are many parameters for performance evaluation, such as the research performance of the university, the social contribution of the University, their employability of the students, the progression of students toward a higher level of study, etc. Most of the Universities have revamped the curricula of existing programs in order to ensure graduates' employment or progression to higher academic level. They have introduced student-centric practices through identification and incorporation of necessary skills for greater preparedness and employability in industries or research organizations. Research relevant to societal problems and enhanced employability has been one of the key considerations for many universities.

## INDUSTRY FUNDING TO UNIVERSITIES

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Universities are free to attract funding from Industries. Nowadays, many industries are coming forward to fund universities under their CSR funds. There is much potential in further encouraging industries to earmark their part of profits under Corporate Social Responsibility (CSR) towards research funding in Universities in their region. There is also potential in arranging Industry-University Summit annually in every University in order to intensify university business linkages. Another unavoidable trend is the practice of appointing Adjunct Faculty members from Industry so that the existing gap between theoretical education and its practical application can be reduced if not warded off completely.

Under Section 135(1) of Companies Act, 2013 in India it is a statutory obligation upon all the business houses/industrial undertakings having a) net worth of five hundred crores INR or above, b) turnover of 1000



crores INR or more or c) net profit of INR five crores or more during any financial year, to spend 2% of their net profit for carrying out Corporate Social Responsibility. In view of this, presently many industries are providing financial assistance for infrastructural development at Universities. For example, the Bajaj Group of Industries has funded an Incubation Centre at the University Campus of Dr. Babasaheb Ambedkar Marathwada University, while the Maharashtra Government has funded the post of Director for Incubation Centres across the entire State. Industries and businesses are also supporting Indian Universities by providing scholarships to students or by organizing expert sessions for students, trainings, summer internships, mentoring programs, technical experts' lectures, etc.

All in all, however, business is not sufficiently committed to financially supporting universities in India. On the positive side, India is much more advanced in involving industry in the design of curriculum. For example, a positive step in this regard has been initiated by the State of Maharashtra by enacting the MPU Act 2016, wherein, on many of the academic bodies it is compulsory to have experts from industries as members.

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Nowadays, the India Government has made it mandatory for each university to have their own business model so that universities can be financially sustainable. Therefore, most of the universities have their own rules and regulations for their business relations.

Policy-wise, India has the necessary rules and regulations to deal with the relations between Universities and Business Houses/Industrial Undertakings. For example, under the NITI Aayog scheme, the government of India has initiated the "Atal Innovation Mission" under which Atal Incubation Centres across Indian Universities are set up. The present Government is pro-active in this regard and has brought out guidelines for setting up the said centres. Further, the Ministry of Human Resource Development has initiated a program under which Institutions Innovation Councils (IICs) are created in Higher Education Institutions to systematically foster the culture of innovation in higher education. The primary mandate of the Ministry of Human Resource Development's Innovation Cell is to encourage, inspire and nurture young students by supporting them to work with new ideas while they are in formation years. Thus, the major focus of IIC is on the following issues ([www.mic.gov.in](http://www.mic.gov.in)):

- To create a vibrant local innovation ecosystems
- To provide start-up/entrepreneurship supporting mechanism in HEIs
- To enable the ranking of institutions according to innovation achievements
- To establish functional ecosystems for scouting ideas and pre-incubation of ideas

- To develop better cognitive ability amongst Technology students. Further details on these issues can be gathered from their portal i.e., ([www.mic.gov.in](http://www.mic.gov.in))

Inspired and influenced by the Central Government, state governments have taken further steps to promote innovation. For example, the Government of Maharashtra has adopted the Maharashtra State Innovative Start-ups Policy, 2018 with the aim to establish an incubators network for developing a congenial atmosphere for start-ups. The expectation is that when these start-ups get stabilized as entrepreneurs, they will contribute to job creation. Further, attempts are also made to encourage greater cooperation between industries and higher education hubs. For beginner Institutions of Higher Learning, five crores INR grant-in-aid is provided by the Government of Maharashtra. The Maharashtra State Innovation Society (MSInS) has been established and it has developed guidelines for establishing business incubators across the State ([www.msins.in/incubators](http://www.msins.in/incubators)). MSInS is expected to facilitate a healthy environment for the growth off start-ups into well-functioning and established entrepreneurs.

## ENTREPRENEURSHIP EDUCATION

Current Governments at state as well as central level have developed new education policy in which the main focus is on employability, entrepreneurship and skills development. The Government of India has initiated many Certificate, Diploma, Degree and Post Graduate programs so that more entrepreneurs and skilled graduates can be prepared to enter the economy. One of the popular initiatives is the Deen Dayal Upadhyay Kaushal Kendra – it focuses on imparting skills-based education and preparing entrepreneurs in various areas as per local needs. MBA Programmes, coupled with accumulating knowhow in manufacturing, can also help students thrive well as entrepreneurs. MBA Programmes are regulated by the All India Council for Technical Education (AICTE).

There is some form of entrepreneurship education provided in almost any Indian University. However, most of the existing courses are subsumed under the general study of business and commerce<sup>1</sup>. This often results in conflation of entrepreneurship education with the study of business and management. In addition, entrepreneurship education is not well integrated in other study programs, such as Technology, Engineering or the Arts.

In 2019, the Government of India has announced plans to support the establishment of 66 Entrepreneurship and Innovation Career Hubs at universities across the country. The Scheme is managed by the Ministry of Human Resource under Rashtriya Utchar Shiksha Abhiyan (RUSA) Phase – II Scheme, which includes funding for research projects. The Hubs will be tasked with skills-oriented training and support for students and faculty and will aim at developing innovative ideas into

<sup>1</sup> H.V. Mukesh, Abhishek S. Rao, Rajasekharan Pillai, 2018, “Entrepreneurial Potential and Higher Education System in India” *The Journal of Entrepreneurship*, Volume: 27 issue: 265-6.





start-ups.

All India Council for Technical Council (AICTE), Government of India has approved plans to start a new academic programme - an MBA in 'Innovation, Entrepreneurship and Venture Development', aimed at helping individuals who want to launch start-up firms. This program is expected to be unique as it involves a strong practical component and will focus on real time examples. The curriculum for the course will be prepared with the consultation of IIT-M, IIM-A, top institutes and industry experts.

Finally, a new scheme of the Ministry of Human Resource Development's Innovation Cell was launched in early 2018 to foster a culture of innovation in HEIs and specifically to encourage students' involvement in innovation projects. Supported by this program, more than 1,000 HEIs have already created Innovation Councils on their campuses. This program aims at institutionalising innovation and developing a culture of scientific curiosity in the country, and especially among students.

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Most of the Universities in India have recognized the need to promote internationalization. Many Universities have established functional Memoranda of Understanding with overseas universities for student and faculty exchange. However, the number of international students studying at Indian Universities is relatively low<sup>2</sup>. The majority of Indian universities are not well prepared to host a large number of foreign students due to a variety of factors such as lack of international focus in programs, lack of staff skilled in working with foreign students, and lack of adequate accommodation for foreign students. In general, larger and more cosmopolitan cities tend to attract a larger share of international students than universities in more remote areas.

In order to promote the internationalization of Indian Universities, the Government has prescribed procedures to be followed while entering into Memorandums of Understanding (MoUs) for initiating students and faculty exchange programmes. In National Assessment and Accreditation Council (NAAC) inspection and accreditation also some additional marks are provided if more of such functional MoUs are entered into by the Institution in India. University where a larger number of foreign nationals are admitted receive higher marks in National Assessment and Accreditation Council inspections. To facilitate the admission and study of foreign students, every university has a Foreign Students' Cell. This Cell not only facilitates the students on campus in academic matters, but also helps them in resolving visa and related issues in the Foreigner Registration Offices. The majority of the Universities in India maintain a separate Foreign Students' Hostel.

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<sup>2</sup>Qamar, F. and Bhalla, V. 2017. "Internationalisation of Higher Education in India: Annual Survey of International Students in India 2014-15". Association of Indian Universities, New Delhi

India has set up a legal framework for governing student traineeships and internships. After independence, the Indian higher education sector has witnessed a tremendous increase in the number of Universities/University level Institutions and Colleges. The Indian higher education system is the third largest in the world, next to that of the USA and China, and its total enrolment in higher education has been estimated to be 34.6 million. However, there has always been the perception that many students are not getting employment after their graduation and the number has been increasing. Therefore, India has strived to create the necessary framework and new structural mechanisms and models to address the unemployment issues. The Government of India has formulated a National Policy on Skill Development (NPSD), 2009 with a mission to “empower all individuals through improved skills, knowledge, nationally and internationally recognized qualifications to gain access to decent employment and ensure India’s competitiveness in the global market”. However, more recent policies have revisited the existing NPSD and have resulted in a comprehensive and holistic policy document under the newly established Ministry of National Skill Development and Entrepreneurship – the National Policy on Skill Development and Entrepreneurship 2015<sup>3</sup>. The new policy’s goal is to fulfil the vision of a Skilled India where human resource development is the primary focus. The policy promotes individual lifelong learning and the accumulation of competencies via instruments such as credible certifications, credit accumulation and transfer, etc.

The Ministry is developing an entrepreneurship development scheme with the following major elements:

- **Educating and equipping potential and early stage entrepreneurs across India:**

The scheme seeks to develop a high quality entrepreneurship education curriculum. This curriculum will be accessible to all aspiring entrepreneurs at no cost. Through online learning via Massively Open Online Courses (MOOCs), entrepreneurship courses can be taken as and when needed by both students and business professionals.

- **Connecting entrepreneurs to peers, mentors and incubators:**

The entire entrepreneurial ecosystem will be connected through a web- and mobile-based platform, which would serve to support young entrepreneurs.

- **Supporting entrepreneurs through Entrepreneurship Hubs (E-Hubs):**

A national network of Entrepreneurship Hubs (E-Hubs) will be

<sup>3</sup> Available from:

<https://www.msde.gov.in/assets/images/Skill%20India/National%20Policy%20on%20Skill%20Development%20and%20Entrepreneurship%20Final.pdf>

established and tasked with supporting entrepreneurs through coordinated delivery of national and state government entrepreneurship programs and provision of access to resources. One national, 30 State, 50 Nodal and 3,000 college-based Entrepreneurship Hubs (E-Hubs) will be set up. Collectively, they will cover the entire country.

- **Catalysing a cultural shift to encourage entrepreneurship:**

Entrepreneurship will be promoted through state and national level cooperation with stakeholders. Internship opportunities and exchange programs with global entrepreneurship hubs such as Silicon Valley and Israel will be used to leverage international linkages and global learning.

- **Encouraging entrepreneurship among underrepresented groups:**

Dedicated efforts will be made to include in entrepreneurship support programs the scheduled castes, the scheduled tribes, the minorities, the differently abled, the under-represented regions and areas such as those in Eastern and North Eastern India.

- **Promoting Entrepreneurship amongst women:**

Special efforts will also be made to encourage women's entrepreneurs by providing appropriate incentives for women-owned businesses in the public procurement process.

- **Fostering social entrepreneurship and grassroots innovations:**

Universities and academic institutions will be encouraged to design and deliver courses on 'Social Entrepreneurship' (in presence form or online).

The National Skills Qualifications Framework (NSQF) defines qualifications according to levels of knowledge, skills and aptitude. These levels are defined in terms of learning outcomes, which eliminates the requirement for formal education and allows for the recognition of learning outcomes through formal, non-formal or informal learning. NSQF can also serve as a quality assurance framework. It thus emerges as an integrated education- and competency-based skill framework for the national education system, and it provides multiple horizontal and vertical pathways from one level of learning to a higher level, both within vocational education and vocational training and across vocational education, vocational training, general education and technical education. This will enable a person who has acquired a certain levels of skills and competencies and entered the job market, to return to education and training at a later stage in order to obtain additional skills or upgrade his/her knowledge or competencies.

The NSQF provides:

- principles for recognising skills and competencies acquired at

different levels, leading to international equivalency

- multiple pathways, with entry and exit possibilities, between vocational education, skills training, general education, technical education and the job market
- progression pathways defined within the skills qualification framework
- opportunities to promote lifelong learning and continuous skills development
- opportunities for partnerships with industry and employers
- opportunities for recognition of prior learning

NSQF is expected to rationalize skills training and make it more efficient. It should help navigate the diversity of the Indian education and training systems by defining a set of qualifications for each level, based on learning outcomes that are accepted across the nation. By defining progression pathways, it will also assist people in different life circumstances to move easily and without barriers between different education and training sectors and between education and the job market. The NSQF also provides mechanisms for the recognition prior learning and experience gain outside the formal education sector. Finally, the NSQF is equipped to promote the national and international mobility of persons with NSQF-compliant qualifications by improving the recognition and comparability of Indian qualifications<sup>4</sup>.

The Indian Apprenticeship System is well established and supported by legislation and administrative arrangements. It regulates the training and protects the rights of apprentices in India. The rights of apprentices are protected under the Apprentices Act, 1961 ("Apprentices Act"). This Act is based on principles of 'learning while earning' and 'learning by doing'. It ensures that the facilities and knowledge available in Indian industry can be used for practical training of the future work force, thus ensuring that this workforce is better prepared for the requirements of the business environment. The Apprentices Act lays out the rules for recruitment, training, conditions of work, contractual arrangements and compliances in the frame of apprenticeships. A debated issue is the right of employment of the apprentices upon completion of their training. Although the Apprentices Act does not impose any obligation on the employer to recruit the apprentice subsequent to the completion of his or her training, several court cases have been held, where apprentices have demanded legal right to employment after completion of training. Despite such controversies, the Act clearly stipulates that "Apprentices are trainees and not workers" and this remains the norm. The Act, however, confers a number of obligations upon employers and apprentices, including those related to remuneration of the apprentice work; health, safety and welfare of apprentices; hours of work, overtime, leave and holidays; the employer's liability for compensation for injury; conduct and discipline, etc.

<sup>4</sup> <https://www.nsda.gov.in/nsqf.html>



The National Apprenticeship Training Scheme is instituted by the Board of Apprenticeship Training / Practical Training at the Ministry of Human Resource Development, Government of India. This is a one-year programme that allows technically qualified young people to acquire practical knowledge and skills in their field of work. The Apprentices receive training in the workplace by relevant Central, State and Private organizations which have excellent training facilities, and the process is supervised by Trained Managers. Apprentices receive a stipend, 50% of which is reimbursable to the employer from the Government of India. At the end of the training period the apprentices are issued a Certificate of Proficiency by the Government of India which can be registered at all employment exchanges across India and is recognized as a valid employment experience. The National Apprenticeship Training Scheme is one of the flagship programmes for skilling Indian youth implemented by the Government of India<sup>5</sup>.

The National Apprenticeship Training Scheme is implemented through four Regional Boards of Apprenticeship/Practical Training (BOATs/BOPT) situated in Mumbai, Kanpur, Chennai and Kolkata. Eligible participants in the scheme are graduate engineers, diploma holders (Technicians) and 10+2 vocational pass-outs. Receiving organizations are around 10,000 industrial establishments/organizations. The process is overseen by the Central Apprenticeship Council constituted under the Apprentices Act. The basic objective of this scheme is to fill the gaps between the requirements of industry and the actual practical/hands-on experience of fresh Graduate Engineers, Diploma holders and 10+2 vocational pass-outs.

NITI Aayog (National Institution for Transforming India), Government of India operates an Internship Scheme since 2015. It is targeted at students pursuing undergraduate, graduate or postgraduate degrees or are Research Scholars enrolled in recognized higher education institutions within India or abroad. Some of these students can be accepted as interns into various divisions or units within NITI Aayog and be tasked with contributing to the work of the institution by collecting empirical data and collating information<sup>6</sup>.

**INCENTIVES AND  
REQUIREMENTS FOR  
COMPULSORY  
STUDENT WORK  
PLACEMENTS  
(INTERSHIPS,  
TRAINEESHIPS)**

The Government of India is trying to promote a better match between demand and supply on the job market. According to the guidelines of the Ministry of Human Resources, Government of India and the University Grants Commission (UGC), all higher education institutions in India are required to set up compulsory student work placements (internships, traineeships) to enable students to receive relevant practical training and thus, indirectly, help their employment. Each university has its own system for arranging work placements (internships, traineeships). Summer internships, short-term or long term traineeships are provided to students and in most cases students receive a stipend or fellowship

<sup>5</sup> <http://mhrdnats.gov.in/about-us>

<sup>6</sup> <http://niti.gov.in/career/internship>



during the internship. Besides Universities, other higher education institutions also offer internship/ traineeship programs and skills development programs for students in specific fields and disciplines. In some courses, the curriculum for final year students includes compulsory internships in industry for one semester (with or without a stipend, depending on the company policy).

**Innovation in Science Pursuit for Inspired Research (INSPIRE):** This program is implemented by the Department of Science & Technology (DST) at the Government of India to strengthen the national Science and Technology base. One Component of INSPIRE is focused on attracting students to pursue a doctoral degree in basic and applied sciences, including engineering, medicine, agriculture, veterinary science, pharmacy, etc. after either a Masters' degree in Science, Applied Science or Engineering or after a Bachelor or Masters' degree in Medicine.

Almost all State Governments have established Science Cities under the Ministry of Higher Education and are organizing various internship programmes and Summer Training Programmes in Physics, Chemistry, Biology and Mathematics for the benefit of postgraduate students of respective disciplines across the State. The participating students receive scholarship.

Few examples are given below:

- Chandigarh University (CU) has created a niche as the 'University with Best Placements' in India. Chandigarh University has strong corporate alliances that have allowed it to be the only university in North India to hold Joint Placement Program with the participation of reputed institutions such as NIT Jalandhar, NIT Hamirpur, IIT Ropar, BITS, and others. Chandigarh University has set a new record with a Joint Placement Drive for Hewlett Packard in which more than 13,000 Students participated. Practo Technologies and Directi have held their own Joint placement drives at Chandigarh University in 2017.
- Jawaharlal Nehru University Placement Cell (JNUPC) was opened in 2008. It upholds both quality of the education and social responsibility by giving respectful job opportunities to its students at government institutions, non-government institutions and other organizations. Under JNUPC, numerous programmes are organised to improve students' skills.
- Tata Institute of Fundamental Research (TIFR), Mumbai: TIFR conducts a Visiting Students Research Programme (VSRP) annually for students interested in being a part of world class research work.
- National Center for Biological Sciences (NCBS), Bangalore: NCBS offers training opportunities to science and engineering students who are interested in working under the supervision of scientists and faculty members at the Institute.

- The Three National Science Academies (Indian National Science Academy – New Delhi, Indian National Academy of Science – Allahabad and the Indian Academy of Sciences – Bangalore): The Three National Science Academies together offer a two-month summer fellowship for students interested in pursuing world-class research with scientists associated with these academies.
- Indian Institute of Sciences (IISc), Bangalore: Many students have been placed at the IISc for summer training and internship programmes through the two-month summer fellowship offered by the three national science academies. Sometimes, many departments within IISc post summer internship opportunities in their departmental website.
- National Institute of Immunology (NII), New Delhi: NII provides opportunities for students who wish to do their project work under the supervision of the scientists at the Institute.
- Jawaharlal Nehru Centre for Advanced Scientific Research (JNCASR), Bangalore: JNCASR conducts an annual summer research fellowships program of two months duration for BTech, BSc and MSc students.
- Rajiv Gandhi Centre for Biotechnology (RGCB), Thiruvananthapuram: RGCB offers plenty of paid summer training programs, skills development workshops, and training courses.
- Centre for Cellular and Molecular Biology (CCMB), Hyderabad: CCMB conducts a summer training program (6 weeks duration from May – June) for students who are in their 1st year of MSc or 6th semester of BTech or 8th semester of an integrated B.Tech-M.Tech program.
- National Brain Research Centre (NBRC), Haryana: Students who are interested in doing their summer training at NBRC must be selected through the summer fellowship of the Three National Science Academies.
- ICAR – National Research Centre on Plant Biotechnology (NRCPB): NRCPB offers project-based training to BTech and MSc/MTech students.
- Indian Institute of Technology (IIT) and National Institute of Technology (NIT): IITs and NITs routinely conduct summer research fellowships that are of 2 to 3 months of duration. Since the IITs are recognized world over, doing internships here makes a huge difference to one's career.
- Indian Institute of Science Education and Research (IISER): IISER Pune conducts a 4-8 week summer student program for students in their 2nd, 3rd or 4th year of BSc/BTech and 1st year of MSc or MTech.

- University of Madras, Tamil Nadu: As part of its curriculum, the Department of Management Studies sends its final year MBA students for internship with any industry for a period of three months to gain practical exposure to solving real-world managerial problems. Similarly, in many Science and Commerce courses, too, the students are encouraged to take internships with an industry relevant to their field of study.
- Likewise, all Government funded Universities (21) and Private higher educational institutions (29) have a policy requiring all students pursuing their studies to get internship/traineeships opportunity. For this purpose, almost all institutions have established a Memoranda of Understanding with different organizations to enable the students to gain practical exposure.

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Employers are extensively involved in the process of external quality assurance procedures in higher education. Accreditation processes put a lot of emphasis on the active involvement of employers in the Board of Studies, Industry-Institute Partnerships and placement assistance offered by employers.

After seven decades of India's independence, Indian Higher Education has changed significantly. Due to expansion, diversification and privatization of the higher education system, there has been an increased concern with the quality of higher education. In addition, globalization has far-reaching effects on higher education and creates new imperatives for its regulation. Nowadays, qualitative and effective development of modern higher education features on the list of development priorities of almost every democratic state. However, current globalisation and economic processes create new demands and challenges for national education systems.

Employers are actively involved in the development of professional higher education in India, thus trying to the maximum extent to solve the problems of human resources availability and employment in all the branches of the economy. In general, this creates conditions for achieving the objectives of the Government Strategy "Higher Education in India: Vision 2030", namely to raise the importance of education and to ensure that it responds to the demands of the labour market in India.

In order to achieve better quality of education and upgrade knowledge/technology and skills in the respective domain, curriculum changes are inevitable. Employers place the responsibility on Universities and colleges to train graduates in written and oral communication skills, as well as decision-making skills. Education-employer engagement is a two way communication exchange involving a series of interactions between the education and training sector and the world of work. Its core feature is employer engagement. Employer engagement can take many different forms, such as employer participation in classrooms; employer involvement in the development of occupational standards; work based learning; mentoring relationships;



CAREER GUIDANCE  
OFFERED TO HIGHER  
EDUCATION  
STUDENTS AND  
RECENT ALUMNI

involvement in curriculum design or the accreditation of programmes; knowledge transfer, research and development and supporting start-ups.

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Over the years, many career guidance centers have been set up in universities, accumulating useful experiences in career guidance and counselling implementation. Each university has developed its own system to provide career guidance in different ways for both students and recently graduated students. Below we provide several examples.

The University of Madras has specifically formed a forum called 'University Students Advisory Bureau (USAB)' and 'International Centre of Madras University (ICOM)'. Both are available to provide career guidance for students at different stages of their studies. These centres are not only providing guidance for graduates' career development but also regularly organize special coaching classes/training programmes for students, which has tie-up with various companies/industries. Individual students who have graduated maintain a cordial relationship and regular contact with their teacher to get different types of support/guidance for their career development even after they graduate from the University. The University of Madras has presently felt the need for building strong alumni network in order to utilize the expertise of graduates for institutional development and to provide career development guidance for the graduates.

Anna University is an engineering and technology University established in 1978 as a unitary type of University. It has a well-established career counselling center and it has strong alumni network. The Anna University alumni are spread across the globe. The Alumni Club was created in 1993 in order to strengthen the bond among the alumni, foster ties between their families and stimulate social and intellectual interests.

IITs in India, which are exclusively offering world class engineering and technology oriented education, have a strong alumni network which spreads throughout the globe. IIT Madras Alumni Association (IITMAA), which was founded in 1964 and whose primary mission is to reconnect the alumni with their fellow alumni, institute and students on the campus, engages stakeholders in various activities and seeks to generate impact through several social and academic projects for collective growth. IITs also organize Career Awareness Workshops through their alumni working at multinational industries/companies.

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In higher educational intuitions, a person with HR management skills is appointed as career consultant. His/her major responsibilities are arranging workshops and training programs, helping students to prepare their profile for presentation to employers and preparing placement brochure. It is the job of career consultants to build good relationships with leading industries and management. Some major employers have been developing more pro-active approaches to supporting career guidance. An example is the Joint placement drives at Chandigarh

INVOLVEMENT OF  
EMPLOYERS IN  
CAREER GUIDANCE



**USE OF GRADUATE TRACKING SURVEYS OR OTHER FORMS OF MONITORING OF THE CAREER PATH OF GRADUATES**

**AWARENESS OF EMPLOYABILITY WITHIN THE HIGHER EDUCATION SYSTEM**

**ENCOURAGEMENT OF EXTRA-CURRICULAR ACTIVITIES AND VOLUNTARY WORK IN UNIVERSITIES**

University.

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In general, all Universities/colleges usually collect students' personal data after completion of their course at the University. All the data collected from students who have graduated is kept in a separate database. Each department has separate alumni network and through that the students who have graduated are regularly monitored.

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There is great awareness of employability within the Indian higher education system. Each university is following separate strategies for raising awareness and promoting employability. Generally, at end of the academic year, the departments as well as University, organize job fairs or employment fairs for the students who have graduated during the academic year. There is competition between universities regarding the number of industries with which the institution cooperates and the total numbers of graduates who found employment through the institution. Data on graduates' employability in each university is an important consideration for prospective students when they make their choice of university.

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Extracurricular activities are significant for students taking various professional courses. They help them to improve upon various skills as hobbies. It has been observed that students who have taken part in various extracurricular activities end up being smarter professionals.

In India, for the majority of college and university students, involvement in extracurricular activities plays an integral role in the collegiate experience. Students become involved in extracurricular activities not only for entertainment, social, and enjoyment purposes, but most importantly, to gain and improve skills. A wide and diversified range of extracurricular activities exists in Indian Universities/colleges, meeting a variety of student interests.

Because of the diverse interests of university/college students, the range of extracurricular activity offerings varies extensively, depending upon the size and type of college or university. Extracurricular activities range from primarily social organizations to governance organizations. Each activity offers students an opportunity to work with others and to gain essential life skills. Though numerous extracurricular activities exist, the following activities are those that are most commonly found on Indian universities/college campuses.

**Personality Building Clubs:** The work of those clubs is focused on organizing workshops by inviting experts for talks.

**Music Clubs:** Generally, such clubs are found in all universities.

**Cultural Clubs:** These clubs are usually responsible for encouraging students to become aware of the cultural heritage of their country. India is a country of various cultures. Executive members of such clubs learn



various organization skills, teamwork and how to make something happen. Some of the students will realize their potential as leaders as well.

**Photography Clubs:** These clubs serve students with interest in photography by allowing them to sharpen their skills and organize some events or competitions.

**Drama Clubs:** These clubs target talented students and help them improve or express their drama and acting skills. They also teach students about leadership, coordination, teamwork, etc.

**National Cadet Corps (NCC):** The NCC wing is a must in any institute. It prepares the students for many challenges. It teaches the team members to respect diversities in religion, language, ethnicity and lifestyle, and instil a sense of national unity. It encourages students to adopt healthy lifestyles free of any substance abuse. NCC helps students to understand the needs of poor and disadvantaged citizens. The participating students are trained to understand the values of honesty, truthfulness, self-sacrifice, perseverance and hard work. Here students also learn to respect knowledge, wisdom and the power of ideas.

**National Service Scheme (NSS):** NSS was introduced in 1969, under the Ministry of Youth Affairs & Sports of the Government of India, with the primary objective of developing the personality and character of young students through voluntary community service. Currently more than 3,650,000 volunteers are enrolled in 39,695 NSS units spread over 391 Universities/ +2 Councils, 16,278 Colleges and Technical Institutions and 12,483 Senior Secondary Schools. Since its inception, over 47,800,000 students have benefited from NSS. To encourage students to take up NSS, the UGC has issued an Advisory to all Universities to introduce NSS as an Elective subject with credits.

NSS units can take up any activity that has relevance to the community. The activities continue to evolve in response to the needs of the community. The core activities tend to be in the field of education and literacy, health, family welfare and nutrition, sanitation and cleanliness, environment conservation, social service programmes, programmes for improving the status of women, production-oriented programmes, disaster relief and rehabilitation, campaigning against social evils, creating awareness about Flagship Programmes of the Government like Digital India, Skill India, etc.

**Sports Clubs:** These clubs help develop sportsman spirit along with healthy competition. Generally, such clubs are found in almost all universities of our country.

**Literary Clubs:** These clubs have potential to develop students' writing and public speaking skill.

**Environs Clubs:** Almost all educational institutions set-up Environs Clubs in their institutions to take up activity related to campus cleanness, tree plantation and create environmental awareness among the public.

**Rotaract clubs:** The clubs help to develop leadership and professional



skills, and also support economically weaker students with funds for pursue their education.

Red Ribbon Clubs: The clubs raise awareness of HIV/AIDS in their immediate environment and organise blood donation camps.

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