



सत्यमेव जयते

**PARLIAMENT OF INDIA**  
**RAJYA SABHA**

DEPARTMENT-RELATED PARLIAMENTARY STANDING COMMITTEE  
ON HUMAN RESOURCE DEVELOPMENT

**TWO HUNDRED EIGHTY FOURTH REPORT**

**Issues and Challenges before Higher  
Educational Sector in India**

*(Presented to the Rajya Sabha on 8<sup>th</sup> February, 2016)*

*(Laid on the Table of Lok Sabha on 8<sup>th</sup> February, 2016)*



**Rajya Sabha Secretariat, New Delhi**  
**December, 2016/Agrahayana, 1938 (Saka)**

Hindi version of this publication is also available

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**COMPOSITION OF THE COMMITTEE**  
*(Constituted w.e.f. 1<sup>st</sup> September, 2016)*

1. Dr. Satyanarayan Jatiya — *Chairman*

**RAJYA SABHA**

2. Prof. Jogen Chowdhury  
3. Prof. M.V. Rajeev Gowda  
4. Shri Anubhav Mohanty  
5. Shri Pratap Singh Bajwa  
6. Shri Vishambhar Prasad Nishad  
7. Shri Basawaraj Patil  
8. Shri Sharad Pawar  
9. Shrimati Sasikala Pushpa  
10. Dr. Vinay P. Sahasrabuddhe

**LOK SABHA**

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13. Shri Nihal Chand  
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17. Prof. Chintamani Malviya  
18. Shri Bhairon Prasad Mishra  
19. Shri Chand Nath  
20. Shri Hari Om Pandey  
21. Dr. Bhagirath Prasad  
22. Shri N.K. Premachandran  
23. Shri K.N. Ramachandran  
24. Shri Mullappaly Ramachandran  
25. Shri Sumedhanand Saraswati  
26. Shri M.I. Shanavas  
27. Dr. Nepal Singh  
28. Dr. Prabhas Kumar Singh  
29. Shrimati Neelam Sonkar  
30. Shri P.R. Sundaram  
31. Shrimati P.K. Sreemathi Teacher

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Shri Mahesh Tiwari, Director  
Shri Vinay Shankar Singh, Joint Director  
Shri R.K Mecolt Singh, Assistant Director  
Shri K. Sudhir Kumar, Research Officer

## P R E F A C E

I, the Chairman of the Department-related Parliamentary Standing Committee on Human Resource Development, having been authorized by the Committee, present this Two Hundred and Eighty-fourth Report of the Committee on the subject 'Issues and Challenges before Higher Educational Sector In India'.

2. The Committee visited various Universities and educational institutes in Kolkata, Mumbai, Bengaluru, Hyderabad, Chandigarh, Patiala, Thiruvananthapuram, Udaipur, Chennai, Vishakapatnam, Bhopal, Ujjain, Indore, Goa and Pune. The Committee held wide ranging discussion with Director, IIMC, Vice Chancellors of University of Kolkata and Jadav University, Director, IIT Bombay Vice Chancellors of SNDT and Mumbai University, Directors of IIM, Bangalore, Indian Institute of Science, Vice Chancellors of Bangalore University, Central University of Hyderabad, Centre for Foreign Languages (CFL), Directors of IIT, Hyderabad and IIT Hyderabad, Vice Chancellors of Panjab University and Central University of Punjab, University of Kerala Central University of Kerala, Directors of IISER, IIM Khozicode and Indian Institute of Information Technology and Management (IITM), Vice-Chancellors of Central University of Rajasthan, Mewar University, Directors of IIT, Jodhpur and IIM, Udaipur, Vice Chancellor of Madras University, Anna University, Director, IIT Madras, Vice Chancellors of Andhra University, IMU, DS National Law University Director of IIM-Vishakhapatnam, Vice Chancellors of Noida International University (NIU), IIIT Noida, Director, IISER, Bhopal, Maulana Azad NIT (MANIT), Vice Chancellors of Rajiv Gandhi Technical University, Barkatullah University, Atal Bihari Vajpayee Hindi Vishwavidyalaya, Vikram University, Ujjain, Director, Ujjain Engineering College, Vice Chancellor of Devi Ahilya Vishwavidyalaya, Directors of Goa Institute of Management and NIT Goa, Representatives of Gokhale Institute of Politics and Economics, Vice Chancellor of Pune University, Directors of IISER, Pune and College of Engineering, Pune along with the officials of State Governments of West Bengal, Maharashtra, Karnataka, Andhra Pradesh, Telangana, Kerala, Rajasthan, Punjab, Haryana, Tamil Nadu, Madhya Pradesh and Goa on the issues and challenges facing higher educational sector in India and the steps taken to address them.

3. The Committee considered the Draft Report on the subject and adopted the same in its meeting held on the 14<sup>th</sup> December, 2016

4. For facility of the reference, observations and recommendations of the Committee have been printed in bold letters at end of Report.

NEW DELHI  
*December 14, 2016*  
*Agrahayana 23, 1938 (Saka)*

DR. SATYANARAYAN JATIYA  
*Chairman*  
*Department-related Parliamentary*  
*Standing Committee on Human Resource*  
*Development*

## **ABBREVIATIONS**

1. AICTE : All India Council for Technical Education
2. CBES: Choice Based Credit System
3. CEC: Consortium of Educational Communications
4. EOC: Equal Opportunity Cells
5. GER: Gross Enrolment Ratio
6. ICT: Information and Communication Technology
7. GIAN: Global Initiative of Academic networks
8. HEFA: Higher Education Financing Agency
9. IIIT: Indian Institute of Information Technology
10. IIM : Indian Institute of Management
11. IISER: Indian Institute of Science Education and Research
12. IIPRS: Indian Institute of Intellectual Property Rights Studies
13. IIT: Indian Institute of Technology
14. IMPRINT: Impacting Research Innovation and Technology
15. MOOCS: Massive Online Open Courses
16. NIRF: National Institutional Ranking Framework
17. NIT: National Institute of Technology
18. NMEICT: National Mission On Education Through ICT
19. NQRI: National Quality Renaissance Initiative
20. NSQF: National Skill Qualification Frameworks
21. PMMMNT: Pandit Madan Mohan Malviya National Mission on Teachers and Teaching
22. PPP: Public Private Partnership
23. RUSA: Rashtriya Uchchar Shiksha Abhiyan
24. SWAYAM: Study Webs Of Active-Learning For Young Aspiring Minds
25. UAY: Uchchar Avishkar Yojana
26. UBA: Unnat Bharat Abhiyan
27. UGC: University Grants Commission

## **REPORT**

### **AN OVERVIEW**

1. Education, as we are aware, is vital to the human resource development and empowerment in the stages of growth of a nation. In any education system, higher education encompassing Management, Engineering, Medicine etc., plays a major role in imparting knowledge, values, and developing skills and, in the process, increase the growth and productivity of the nation. The higher education segment in India has tremendous potential for growth, and could prove to be viable investment avenues for private sector and foreign institutions. The government has pledged its efforts to reform the sector over the next one year by overhauling the regulatory framework and enabling access to education for all though the conversion of intention into accomplishment to be seen. India has seen tremendous growth in past few years. The service sector has become the growth driver, with the economy shifting from the manufacturing sector. Information Technology, management, Hospitality and Banking industry are the major contributors. The conventional courses are now less preferred. This shift also changed the Indian education sector, as these sectors require skilled manpower thereby heightening the demand for higher education in India. In this process new challenges came to forefronts which have to be overcome.

2. In the light of this background, the Committee decided to examine 'the Issues and challenges before Education Sector in India' and felt to get first hand feedback from the stakeholders. It then decided to interact with the educational institutions of higher learning, educationists and other stakeholders across the country. During its visit to Hyderabad, Chandigarh, Patiala, Thiruvananthapuram, Udaipur, Chennai, Vishakhapatnam, Bhopal and Indore it held a number of meetings with authorities Higher Educational Institutions, Universities, educationists, different stakeholder in the field of education, etc. and also interacted with authority of Public Sector Banks (PSBs) concerning the education loan facilities being provided to students in higher education.

3. At Kolkata, the Committee and held discussion on 1<sup>st</sup> July, 2015 with the authorities of IIM, Calcutta. The Director of the institute submitted that IIM, had a vision to be an international Centre of Excellence in all aspects of management education. He informed that the mission of the institute is to develop innovative and ethical future leaders capable of managing change and transformation in globally competitive environment and to advance the theory and practice of management.

5. The Director further added that the some facilities were needed for the Institute. The Institute needed new Academic Block, New Hostel Complex which include 345 Rooms, 500 seats hostel space and 33KV Substation. There is a need for constructing peripheral compound wall, construction of Student Hostel of 444 Rooms and construction of another hostel for married students.

6. The Committee visited Mumbai and held of discussion with the Vice-Chancellor of SNDT Women's University, Mumbai authorities of Ministry of HRD on the subject under consideration.

7. The Committee was apprised about the innovations introduced by the university as under:-

- (a) Research being an important component the student, faculty and departmental research was encouraged through fellowship, research grants and workshops on preparing research;
- (b) Innovation in curriculum design and development;
- (c) Deployment of information and Communication Technologies (ICT) for online admissions and student cycle, to connect campuses of Mumbai and Pune and SNDT WU,/integrate ICTs into teaching-learning process;
- (d) Internationalization by MoUs signed with many foreign universities, joint programmes, research, and student interne ship planned;
- (e) University-Industry Partnership, where industries offer fellowships, industry experts act as mentors, interact with students as visiting professors, guide students during internship etc.

8. He further apprised the Committee of the challenges being faced by SNDT Women's university as State University as under:-

- (i) Shortage of academic posts in post graduate departments.
- (ii) UGC sanctions posts for 5 years only and State Government takes over the posts which does not happen and therefore Universities cannot take advantage of these posts even for 5 years.
- (iii) Development grant from UGC is only 50% of the total grant whereas the infrastructure requires huge investments.
- (i) The Choice Board Credit System was introduced in 2012-13 at PG Level. The UG level the challenges are on account of availability of faculty and funds.

9. Hesuggested the following solutions to the above problems as :-

- (i) The UGC should for number of faculty position in higher education should be made mandatory for all State Government.
- (ii) UGC should provide funds for hiring faculty in plan period on tenure basis
- (iii) UGC needs to assess the development plan of each university in the light of its needs and provide development grants accordingly.
- (iv) To meet faculty shortage there was a need to create more posts on tenure basis at UG and PG level.



10. On the status of filling up of faculty positions in Central Universities, the authorities of the Department of Higher Education added that the sanctioned strength of all the Central Universities together is just 16,339 of which 6,107 positions are lying vacant. Central Universities were adopting different methods to address faculty shortages which include ad-hoc faculty, quest faculty, contract faculty and Re-employed faculty.

11. Some of the reasons for teaching posts lying vacant were stated as follows:-

- (i) Non-availability of faculty with requisite qualifications;
- (ii) Non-availability of faculty in certain specified domains of knowledge and non-availability of faculty belonging to reserved categories;
- (iii) Vocational difficulties; and
- (iv) Immobility of the senior level faculty members from one institution to another institution as a result of the Career Advancement Scheme which is in vogue.

13. The Committee visited Bangalore and held discussion with Directors of IIM, Bangalore, Indian Institute of Science and Vice Chancellor, Bangalore University on the subject under consideration.

14. The Director, IIMB submitted before the Committee that the Institute's Mission was to build leaders and Entrepreneurs through Holistic, transformative and Innovative Education. There are 3 PG programs which included Public Policy and Management Program for Government and 20 doctoral graduates have been enrolled in the institute.

15. The Director, IIMB highlighted the issues faced by Higher Educational Institutes in Management. He submitted that it was difficult to attract and retain high quality faculty and there was need to use technology to extend impact to other institutions. The Director also submitted that on social impact there was a centre for Public Policy. This centre was set up to improve governance and shape public policy in partnership with DoPT. Tele-education satellite based live interactive lessons was started and is now being extended to 2000 in 1000 schools in rural Karnataka.

16. The Vice - Chancellor of Bangalore University submitted that a lack of adequate and State-of-the art infrastructure facility was hindering high quality research in universities.

17. The Vice Chancellor of Bangalore University suggested the following steps necessary to promote research (initiation) at the UG level:

- (i) Inclusion of field study/project work/dissertation/observation studies in the curriculum;
- (ii) Scholarship support at UG level to inspire students to undertake short-term research work.

He further added that there is generally a decline in the quality of higher education in India due to lack of adequate number of quality teacher; lack of adequate infrastructure for teaching and learning processes; and lack of adequate funds.

18. He also pointed out that inadequate funding is one of the main reasons for hiring quality teachers. Non-availability of adequate number of qualified teachers (UGC-NET/SLET/JRF etc) in some disciplines was also cited as another reason for shortage in faculty position. Presently, Central Government funds few Universities only leaving behind most universities to be funded by State Governments which leads to disproportionate progression. Hence Central Government should fund all the Universities fully in the country.

19. He further submitted that initiatives are required to be taken to attract bright students towards teaching profession like:-

- (i) Salary as per UGC pay scale;
- (ii) Better promotional avenues;
- (iii) Teacher-friendly working environment;
- (iv) Implementation of UGC guidelines regarding pay scales and age of superannuation uniformly.
- (v) Efforts may be initiated to bring all the state-owned universities to bring under central funding system.

20. As regards the faculty position, he apprised the Committee as under:

<b>Posts on July, 2015</b>	<b>Sanctioned</b>	<b>Filled</b>	<b>Vacant</b>
Professor	84	18	66
Associate Professor	163	83	80
Assistant Professor	351	245	106

He also gave a picture of the number of students opting for doctoral studies in various disciplines in the country in the past three years can be portrayed as follows:-

Position in Bangalore University

<b>Opting PhD</b>	<b>Number of PhD registered on July, 2015</b>	<b>Number of PhD registered (Not awarded) on July, 2015</b>
Science	314	496
Humanities	278	414
Commerce & Management	42	93

Engineering & Technology	81	202
Education	35	67
Law	17	39
<b>Total</b>	767	1311

20. The representatives from the university further added that the initiative likes 'Make in India' and 'Skilled India' are commendable. However, the effectiveness of these initiatives in Higher Education needs to be debated and endeavours in Higher Educational institutions should not shy away from foreign collaborations to advance research and innovations. He further pointed out that the industry-University and technical institutions interactive initiatives require effective functioning of Faculty and to make the courses relevant to industrial needs as well. This would create a better job opportunity situation for the graduates.

21. He pointed out that the course contents should have a periodical review with interaction and feedback from industry and suggested that it is necessary to adopt the review of the course content periodically; Employers' feedback on course content, knowledge and skill level of graduates has to be viewed seriously by the institutions; and involvement of industry representatives in designing and development of course content is essential.

He further added that effective governance in higher education institutions and role of unions and politics in imparting education without interruptions in academics. He also mentioned some challenges being faced by the institutions as :-

- (i) Political interference in the field of education, especially in Higher Education, is a deterrence;
- (ii) Appointment of the Head of the Higher Educational Institution should not be by a political institution.

22. He further added that there was need to enhance Teaching Methodology, motivational level of teachers, level of teachers, level of research by faculty and role of data requirements reliable and credible data collection and maintenance of information system at different levels like, pre-school, primary, upper primary, secondary, higher secondary, technical, professional and at research levels for policy intervention and also the adopt following steps:-

- (i) Adopting innovative (technology-embedded) teaching methods;
- (ii) Incentivizing teachers for better teaching and research practices;
- (iii) Evaluation of research contribution of the Faculty;
- (iv) Development of institutional data bases and Management information System (MIS).

23. He also highlighted the economic difficulties being faced by students and the role of financial institutions in augmenting resources both at student and at institutional level Educational Loan Scheme suggested that scholarship facilities need to be enhanced this can be done by Bank Loan facilities for needy students.

24. The Director, Indian Institute of Science submitted that IISc was established in 1909. There are 37 Departments with 489 faculty members in all branches of science and engineering. The

Director, IISc submitted that the vision of the institute was to be among the world's foremost academic institutions through the pursuit of research excellence and the promotion of innovation. The institute was rapidly modernising its infrastructure by up scaling its research equipment and engaging substantial international faculty and students.

25. The Committee visited Hyderabad and held discussion with Vice Chancellors of University of Hyderabad and Centre for English and Foreign Languages along with the authorities of State Government of Telangana.

26. The Vice Chancellor of Hyderabad University highlighted the need for quality education in India and stated that the Internal Quality Assurance Cell is closely monitoring the academic performance of various departments in the university in terms of teaching, research and placements. The establishment of state-of-art research laboratories has also been established for the PG and PhD students' and continuous assessment through semester system for evaluation of students.

27. He further added the state of art infrastructure is necessary for carrying out path-breaking research. If proper allocation of funds is made of research in sciences and social sciences then the universities in the country will be able to contribute. He further added that to promote research at undergraduate level in science and technology, the university was encouraging the students through the Junior Science Club and innovation club to promote research. Some of the students have visited foreign institutions and have been associated with well-known academician on summer projects.

28. The University further imparts summer research training to UG/PG students through science academies-supported summer research fellowship. On the vacant posts in the university the Vice-Chancellor submitted that there were 156 faculty positions vacant in University of Hyderabad.

29. The Vice-Chancellor further submitted that instead of aiming at horizontal growth, there was a need to select institutions of excellence and nurture them with aim to promote excellence, if necessary by providing incentives. He further added that there was a need to address the challenges like greater transparency and accountability, the role of colleges and universities in the new millennium and emerging scientific research. He further added we need to create a second wave of institution building and excellence in the fields of education, research and capability building and a need to nurture centers of excellence permitting vertical growth in selected areas. He further added that the educated people who are skilled were necessary to more our economy forward.

30. The Vice-Chancellor further added that the Government needed to look at allocating enough budgets for education, strengthen the infrastructure in institutions and promote active research and development so that our higher education system becomes robust. A greater allocation needs to be made for the Higher Education sector which can help in developing infrastructure in Indian institutions. The recruitment process must be made conducive in line to attract foreign/NRI academicians which can help in quality research. To hire quality faculty,

Central Universities are competing with IITs, NITs, IISERs etc., which work directly under Ministry of HRD and pay scales. He suggested that it may be better if the Government considers elevating some of the best performing Central Universities to a higher level similar to IITs, NITs and IISERs, so that these Universities can do even better than the current level. The honorarium for hiring experienced and high profile faculty should also be enhanced so that the best talent can be attached.

31. The Vice-Chancellor further added that non-availability of quality and experienced academicians is one major factor. Proper grants also need to be provided to institutions to ensure that day today activities don't suffer. He further added that to attract talented candidates to academics, we need to provide basic infrastructure and good ambience and to retain them, start up grants should be provided to attract best faculty from India and abroad.

32. The Vice-Chancellor further added that different schools are encouraging science clubs wherein every week the students meet and present a research article. This will be part of the curriculum and therefore all students are encouraging to participate.

33. The research scholars are encouraged to present their research work in the seminar organized by the Department, PG students of several disciplines have to complete project work and the dissertation should be presented to the department as course work. The university is encouraging the students to apply for summer projects in IITs and other institutions. The University faculty are also encouraging the students to prepare and quality the SET/NET, JRF, CSIR fellowships etc which will enable them to work as faculty in institutions.

34. The Vice-Chancellor further submitted that the University was arranging academia industry linkages so as to enhance the job opportunities for the students. The University has placement guidance Advisory Bureau which co-ordinates with all the schools/Departments and organizes campus placements for the students. He further added that the course context at our university is periodically reviewed by the Department councils and schools boards to suit the industry needs. In most of the schools like Management, Physics, Chemistry, Computer Science, Life Sciences etc, they have representatives of industry on school Boards.

35. The Vice-Chancellor further added that the faculties of university are involved in teaching and research. At present there are 240 plus research projects worth 230 crore rupees. At present the University has filed for 42 patents out of which 17 have been granted.

36. On the role of Regulatory bodies like UGC, AICTE etc., in higher education, he added that the University Grants Commission can help the institutions through need based funding. They should also look at giving flexibility in budget re-appropriations.

37. On the scholarships, the Vice-Chancellor submitted that students faced hardships when there is delay in release of fellowships against sanction letters. He submitted that Financial Institutions need to support a student with a liberal policy in education loans and remove hardships to all sections of students in respect of their fees, food and other important requirements.

38. He further added that re-oriented courses need to be encouraged in higher education. At periodic intervals there was a need to re-orient out courses in a way to make the students industry-ready and constant interaction with the relevant industry will help the institution to do this. In addition to the subject knowledge, students and the institution must make effort to stress on the importance of development of soft skills which is a major factor in getting a job.

39. The Vice-Chancellor of English and Foreign Languages University (EFL), Hyderabad submitted that Indian Higher Education System is inspirational in its dual task of enhancing and maintaining quality and balancing it with social justice and equity. The Vice Chancellor pointed out that Indian Universities are generally not able to find mention amongst the top in any world rankings partly because funding of the institutes and institutional resources are spread over research and teaching. A dual mechanism needs to be brought into the system whereby incentives to grow and deterrents to discourage un-professional environment. Teachers may be tenured for longer periods if not 3 or 5 years, so that the impetus to perform and growth remains as in the West.

40. The Vice-Chancellor further added that for promoting research in the university we must create new knowledge and innovate. Thus, it is imperative that all universities maintain and promote a basic and strong focus on research and research culture.

41. The Vice Chancellor further added that Infrastructure such as lab facilities and a well equipped library with ICT provisions should be a part of institutional mechanism. In promotion of research, it is important to establish international and national collaborations, linkages, exchanges and joint-research programmes. The idea of creating research universities can in this context would do well to take up the mandate of being the repository of all research done in a region. A region based research repository should be done where research should be later connected to national repository which is interconnected both nationally as well as internationally to policy makers, the corporate leaders and industry is view of global growth.

42. The Vice-Chancellor further added that there needs to be a focus and massive expansion of the polytechnic and ITI from so that a robust parallel system which offers alternatives exist. The Vice-Chancellor further added that skill development/vocational courses should not be relegated as a by-product of higher education that exists only to accommodate the drop-outs but as a system that incentivizes the new and emerging creative fields. Skills should be encouraged and infused at the grass root level so that artisan classes flourish and are trained. University linkages could be possible in terms of infusing newer techniques and technologies in the existing skill-trades and higher educational institutes may mentor in this reflect rather than involving themselves per-se in skill training and vocational enhancement.

43. The Vice-Chancellor further added that ICT applications in Indian Universities are generally neither acquired nor assimilated. Technology enabled learning has suffered due to this approach wherein static content available in electronic form is passed off as technology enabled. There has to be a complete and through integration of this technology in the academic and governance structures by the Universities especially on the multiple available platforms of smart

phones, tablets and applications it is considered that a national task force be established that provides for full-fledged ICT Cells in Universities at a senior level which can oversee, co-ordinate and implement ICT so that it is fully and compulsorily integrated into university academic and governance structure.

44. The Vice-Chancellor further added for faculty progression there should be specific value-based training modules across the academic staff colleges in Indian Universities. Faculty mobility across Central Universities that has been envisaged in the Model Ordinances and should be promoted and encouraged. Similarly, expertise from the private sector and industry to should be encouraged to be part of teaching through a system like in the West. The teachers, especially younger recruits, should be institutionally and structurally allowed to establish a record of published research, ability to attract grant funding, academic institutions, teaching excellence and administrative or community service.

45. In its interaction with the Committee, the State Government of Telangana submitted that Indian Higher Education System has been built on the pillars like accessibility, affordability, quality and relevance. However, to improve the overall quality of our education system, concerted efforts are needed to bring in reforms concerning all these parameters. They further added that with greater private participation in Higher Education, the question of balancing accessibility and affordable has arisen. To make higher and Technical Education affordable to students from marginalized sections, the facility of total fee reimbursement without any condition does not seem to be a real solution.

46. The officials further added that one of the most important reasons for the lack of competitive nature of quality in our Higher Education system is shortage of qualified faculty and the pedagogue quality adopted by the existing faculty. There is also lack of proper system to ensure regular Performance Appraisal of the teachers. The merit promotion scheme of UGC viz., the Career Advancement Scheme has to be implemented scrupulously following the UGC guidelines.

47. They further added that engineering Colleges in country are mostly stand alone and not integrated with other science, Arts, law and medicine faculties to develop a multi-disciplinary approach. The lack of interaction with other disciplines is affecting the creating and innovative capabilities of the youngsters.

48. The officials further added that teaching and research are to be considered as conjoined but research in the State Universities is on the decline. The Government spending on Research and Development (R&D) must increase from the presented .01% of the GDP. Another point of concern was that 80% of the total R&D expenditure in India is met from Government sources and only 20% from Private industry. Serious measures need to be taken to improve the Quality of Research by suitably modifying the procedures related to admission into PhD programmes *i.e.* screening the candidates based on qualitative, standardized test and regular evaluation of the program of the research work of the students by external experts before PhD is awarded.

49. The officials pointed out that there is a serious problem faced by the State Universities in shortage of resources. Bulk of the enrolment in Higher Education is handled by the State Universities and their affiliated colleges but, when it comes to distribution of Grants by the Central Government, the State Universities receive very small amounts. They submitted that nearly 65% of the UGC budget is utilized for the central universities and their colleges while remaining 35% is only distributed to hundreds of the State Universities and thousands of the colleges affiliated them. Funds mobilization in the State Universities through other means such as endowments, contributions from industry, alumni etc should also be examined.

50. The officials further added that quality of distance education programmes offered by the universities is another matter of concern which is affecting the overall quality of Higher Education. Some of the universities are offering all kinds of programmes in general, Technical, Professional etc., in the distance mode both at UG and PG levels. The quality of such programmes needed close review and monitoring. There is a lot of confusion among stakeholders regarding the genuineness of the Degrees awarded by them as it is not clear as to which agency UGC, AICTE, DEC etc., should give approval and authenticate such programmes and degrees.

51. The introduction of Choice based credit system (CBCS) is important and is a step in the right direction. In this regard there is a requirement of giving greater autonomy to the Universities to design their curriculum at the UG level while the UGC can fix uniform learning objectives and learning outcomes of various programmes and courses adopted by the Universities. Therefore, while fixing a common minimum syllabus, the universities should be allowed at least 40% deviation. A uniform number of core papers to the extent of minimum 60% may be adopted among various universities, however elective subjects should be specific in meeting the regional need.

52. The Committee during its visit to Chandigarh held discussion with Vice Chancellor of Guru Kashi University and Panjab University on the Issues and Challenges before Education Sector in India

53. Vice Chancellor of Guru Kashi University, submitted that the education standard at school level is very poor in Punjab and more so in rural areas. In fact the institutions of higher education in rural areas have to deal with altogether different quality of students as compared to the urbanites and imparting quality education is much more important to deliver the best to the future nation builders. It is a real challenge for the universities in the rural catchments and there was need for more emphasis need to be laid on English and communication skills.

54. He further added that GER of 30% by 2020 cannot be achieved unless private sector institutions significantly contribute in it. Putting restrictions on Private Universities on tuition fee and minimising to the lowest charged by any Public Sector University will not provide a level playing field and will be unfair to the Private Universities.

55. He also pointed that UGC approves only specified courses as given in its list and it is devoid of Diploma Programs and keeping in view the present scenario of unemployment, these



courses are very important for rural regions when Government of India is giving high priority to skill development programs. He further added that collaboration with foreign universities will facilitate educational linkage and faculty exchange, joint research projects, joint Ph. D supervision and twinning degree programs it must be made hassle free and without complicated approvals.

56. The Vice-Chancellor further added that Government of India must extend financial help to the really deserving universities in the rural areas based on their achievements and performance. Grants from State, Centre and UGC must be provided with NAAC accreditation. Availability of quality faculty in rural universities is a big issue and a compulsory faculty exchange from prestigious institutes would be helpful for the rural universities.

57. The Vice-Chancellor submitted that they had divided all Departments of University Campus into nine sub-units. They were conducting seminars, workshops, training programmes as per specific requirements of each sub-cluster and Organising Practical Sessions on (Soft Skills and Enhancing Employability / Career Guidance)/ Academic Industry Interface / HR Meets.

58. He further added that final year students (4500) in all Campus Courses have been advised to take the non-credit course, conducted by Central Placement Cell/ Skill Development Centre, in association with industry and Sessions on Personality Development, Business English, Quantitative Aptitude, Logical Reasoning, etc were organised and Grade awarded was included in the Semester Mark Sheet, and a separate Certificate was issued by the Panjab University.

59. He further added that a periodic address by Vice Chancellor to academic Community to focus on 'Vision 2020' was organised at least once every Semester. Monthly Meeting of HODs, Deans, Senior officials with Agenda Items invited from faculty was circulated and sent to whole faculty. The Departments were helped to move to new premises, encouraged to make newer beginnings by synergizing together. New Faculty was inducted at Assistant Professor Level (250), almost all CAS cases processed via a satisfactory algorithm and terms and conditions of service of Re-employed Faculty extended and improved so that they remain engaged and active in research, etc.

60. He further added faculty was encouraged to avail Sabbatical Leave, new Faculty helped to apply for research grants and INSPIRE Faculty invited to join Departments at PU. He further added that constituted Research Promotion Cell (RPC) headed by Director and Associate Director along with four other members. He submitted that regular monitoring by IQAC Cell headed by Director and Associate Director and Research Centers were recognizing in colleges and/or Cluster of College to run Pre-PhD Courses. He also added that proposals for strengthening Research in Colleges were submitted via DHE, UT Administration and PSHE, Punjab State to RUSA.

61. The Vice-Chancellor further added that there were additional Seats for the Single Girl Child (2 per course), AIDS, Cancer patients and Blinds Students. They were encouraged to give free ships for deserving students and student Learn by Doing. Students were involved in Management of library, computerization, Hospitality, Restructuring of Examination System, E-

governance and leveraging IT for improving delivery systems and 4 constituent colleges were set up for educational spread in rural areas.

62. The Vice-Chancellor of Panjab University submitted that as per the provisional report of AISHE 2013-14 the GER in Chandigarh is very high i.e., 54.1. In Punjab the GER of Girls is significantly higher (64.4) as compared to boys (46.6). It was submitted that Panjab University gets financial assistance from Government of India as well as from the State of Punjab.

63. He pointed out that as per the vision of the Government of India, the GER in Higher Education is to be increased to 30% by 2020. He further added that Population of Punjab (in age group of 18-23) is 33,78,090 and 1013427 were there and current enrolment is 8,10,000 and seats required are 2,03,427. So about 294 more institutes of higher education are required in the State of Punjab and this would lead to the horizontal growth of the higher education, whereas vertical growth is the need of the day so as to improve the quality of education.

64. On the issue of faculty position in university, the Vice Chancellor submitted that with the introduction of Choice based credit system; the number of faculty required had increased as this gives more flexibility to students in choosing their courses. He further pointed that faculty is not interested to serve in rural/backward and remote areas, as a result the institutes were situated in or around big cities are a preferred destination for placements. In Punjab alone more than 55% of the vacancies of faculty are lying vacant due to various reasons.

65. On the issue of accreditations, the Committee was informed that a large number of institutes are not accredited due to lack of faculty and infrastructure. Moreover the criteria of accreditation are very stringent which favours the old institutions and new institutions, which are progressing and developing fast are at a distinct disadvantage. The criteria are also more oriented towards universities rather than colleges where it is very difficult to do quality research.

66. The Committee was further informed that Top 400 universities of the world have been permitted to open their campuses across India. These universities have an impeccable reputation and most of Indian universities cannot compete with the brand of these universities. So, there is an urgent need to give liberal grants to our universities so that they can compete with these universities.

67. The Vice Chancellor further added that teachers in colleges although in small numbers were doing some good research in collaboration with the universities under UGC scheme. UGC has now discontinued this scheme, which would affect the research output of these colleges.

68. He further added that in 1980's UGC started scheme of Grant-in Aid to private colleges so that the students studying in these colleges are not asked to pay a hefty fee. Over the years and with the increase of salary structure the Grant -in Aid liability of the States has increased manifold. As a consequence of this, some states have discontinued the scheme while others are not releasing the grant in time. As a result of this the salary of the faculty gets delayed which in a way affect their performance and hence the quality of education.

69. He further added that UGC had a scheme under which teachers working in universities/colleges who are to present their research contribution in international conferences were reimbursed their travelling expenses and this used to be a good incentive to the teachers to present their findings and also get international exposure. They pointed that the scheme has been discontinued affecting a large number of motivated teachers.

70. The Committee visited Thiruvananthapuram and held discussion with representatives of Central University of Kerala and other stakeholder.

71. In his presentation before the Committee, the Associate Professor in the Central University of Kerala submitted that there were Universities with and without financial support from UGC. Such universities are included in the 12b and 2f of UGC regulations. He pointed that degree of one university is not approved by the other university even if they both belong to 12b&2f category. He pointed that all 12b and 2f institutes must approve their degrees each other as this would to a great extent standardize the degrees of universities across India. Students will be the beneficiary of this move as they need not run behind recognition certificate, equality certificate, migration certificate etc.

72. He further added that students and teachers in urban universities receive good exposure in academically vibrant campuses. But a student of a university located in a rural area is prohibited from such opportunities even if they are intellectually on par with students and teachers of urban universities. A teacher in any of the universities in Delhi, Chennai and Hyderabad etc can accumulate their API scores by just attending seminars in and around the city. But in the case of a teacher from a remote area in Kerala wants to attend a good quality seminar they may have to spend a lot of energy money and time. But unfortunately many teachers working in colleges and state universities were deprived. In this context a “Regional imbalance bridge mission in higher education” may be formed and students of rural and remote places must get some time to spend at great universities.

73. He further added that the marginalized sections of the society are getting their due share in education through constitutional provisions. But to sustain the students belonging to SC/ST has become a big concern for the Central Universities the reason is that the SC ST students from other states are not getting their scholarships from their concerned states. As the Central Universities have no provision to give SC/ST Scholarship the students of Central Universities are at the mercy of their home states. The most unfortunate event in Central University of Kerala is that SC/ST students from other states are not getting their scholarships. After processing their application and sending to their concerned states no state has responded positively. He suggested that in this context a Central University SC/ST Scholarship Fund should be formed so that students can be given with scholarship within the university.

74. He pointed out the quality evaluation criteria of teacher on API scores has spoilt the quality of teachers. The unfortunate thing is that the real teachers suffer from quantification. Quality initiatives are leading to only lead us to accumulation 'quantity 'in the form of publications certificates etc. Thus our quality initiatives resulted in just accumulation of quantity. He pointed

out that there was need a National Teacher Quality Improvement Commission for Higher Education to sensibly handle the issue of teacher quality. It can be an autonomous body under UGC. A new model of teacher quality improvement initiatives needed to be started with.

75. He pointed out that an institution which is well settled with beautiful edifice, high quality technological devices etc will be rated as a good institution by NAAC and NCTE. But the intellectual aspect become undermined and attention goes to material and tangible measures. A government college with better quality teaching staff but poor building and other infrastructure will be rated low by NAAC and NCTE as well. This is mainly because the criterions set by these agencies look for tangible inputs most of which can be purchased from market. The term regulatory it is authoritarian for public funded institutions. Regulatory agencies should be set as 'quality supporting bodies' for public funded institutions. Public funded institutions must be evaluated using a separate set of criterion.

76. He also submitted that institutionalization of pre-service teacher training for collage teachers and university teachers are other important measures to be undertaken. At present the qualification for a teacher to enter in to university education system is a PG with UGC or PhD. Unfortunately nowhere a teacher training course is a basic qualification for a teacher to enter in to a higher education institution. It is not the content, but the way content is transferred is important in teaching. So an erudite scholar may not be a good teacher but can be a bane for the institution. A teacher preparation course may not be a solution for all such issues but it can improve quality of teaching understanding the students and thereby improving the teaching learning process. So a teacher education programme must be made mandatory for the teachers to work at higher education institution.

77. He suggested that the Central University special pay in the form of IIT & IIMs should be introduced to attract good faculties. At present the pay of a central university teacher is exactly the same a college teacher draws. Since Institutes of national importance give additional benefits to their teachers Central Universities also should be entertained to do the same.

78. The Committee in its visit to Vishakhapatnam interacted with representatives of Indian Maritime University (IMU) on the subject Issues and Challenges before higher education in India.

79. The representative of Indian Maritime University (IMU) submitted that, IMU is a Teaching-cum-Affiliating University established on 14<sup>th</sup> November, 2008 to provide quality maritime education, training and research. Headquartered in Chennai, it has 5 Regional Campuses at Chenai, Kolkata, Mumbai, Visakhapatnam and Cochin. IMU has 36 Affiliated Institutes.

80. He submitted that a peculiarity of the Maritime Disciplines is that there were no P.G. or Doctoral Programmes before IMU was established. In Marine Engineering, Nautical Science, and Ship Building and Repair which cover 95% of IMU's students, there are still no P.G. or Doctoral Programmes.

81. He submitted that there has been almost 50% reduction in student admissions between 2009-10 and 2014-15. This is due to the prolonged recession/slowdown in the global shipping

industry since 2009 which is yet to bottom out. However, admissions are likely to be relatively better in 2016-17 judging from the response to IMU's Online Common Entrance Test (CET) and Online Counseling.

82. He submitted that IMU wishes to focus on starting new P.G courses and on making its various Campuses centers for doing research leading to Ph.D. IMU has introduced M. Tech (Marine Technology and Management) and M.Sc (Commercial Shipping and Logistics) as new P.G courses from the academic year 2016-17. IMU offers Ph.D in Naval Architecture and Ocean Engineering in Visakhapatnam Campus. IMU is planning to make all its 5 campuses as centers for doing research leading to PhD before 2018-19. Since seafarers are on ship for 6 to 9 months in a year, IMU is planning to come up with innovative modular courses/distance-learning programmes whereby a seafarer can study various modules partly while at sea and partly while on land, accumulate credits, and get a degree even while he is an active seafarer.

83. IMU switched over from the pen-and -paper mode of Common Entrance Test (CET), which was inefficient, time consuming and a logistic nightmare, to the Online CET in June 2014 for admissions to its various Programmes. IMU's Online CETs have been a great success and has now become the norm.

84. IMU switched over from the physical mode of Counseling, which required students from all over India to come to Chennai and stay there for a couple of days at great expense of time, effort and money to Online Counseling in July 2014 for making admissions to IMU Campuses and Affiliated Institutes. IMU has switched over to Online Recruitment Tests (CRTs) for recruitments to the entry-level posts such as Assistant Professor, Associate Professor, Assistant Registrar, Assistant Registrar (Finance), Assistant, Assistant (Finance) etc.

85. IMU has introduced a Performance-based Reward Scheme for meritorious students of IMU Campuses from Academic Year 2015-16 onwards. 'Toppers' of each batch and of each programme get Rs. 1,00,000/- each while students coming within the top ten percentile (other than toppers) get Rs. 75,000/- each. The first set of Performance-based Rewards was given to 189 meritorious students (out of whom 20 were toppers) at an expense of Rs. 1.47 crores.

86. As part of quality enhancement, the syllabi and regulations of all the U.G. and P.G. programmes will be reviewed and updated wherever necessary in consultation with our MOU partners so as to be on par with the best international maritime universities. At the first Convocation, the President of India wanted IMU to be a 'Centre of Excellence' within the next 10 years and they were in pursuit of this goal.

87. The Committee during its visit to Bhopal, Ujjain and Indore interacted with representatives of Rajiv Gandhi Proudhogiki Viswavidyalaya, Vice Chancellor of Vikram University, Ujjain and MP Institute of Social Science research, Teaching and Research (MPISSR) on the subject under consideration.

88. The representative of Rajiv Gandhi Proudyogiki Vishwavidyalaya (RGPV), Bhopal submitted that the institute was established in 1998 with a vision to nurture a holistic environment for practical and innovation based learning among technical students.

89. He further added from Drug Discovery to Cutting-edge Technology, research at RGPV spans many disciplines. University has launched several initiatives to promote excellence and quality in research. Some key initiatives were Constitution of a research fellowship of Rs. 25000/- per candidate with each qualified supervisor in the University, creation of a University research and Innovation Fund of Rs. 10 Crore to encourage researchers for interdisciplinary projects and 'Best Publication Award' to researchers and faculties and 'Best Project Award' to students in each domain of engineering and technology. A new ordinance for PhD based on MHRD guidelines for quality research has been implemented.

90. In the quest for excellence in research, several initiatives to inculcate research culture among students have been taken including signing of MoUs with leading Universities and Industries around the world for sharing mutual expertise and to discuss new potential for innovations for fostering global research and RGPV has signed an MoU with EMC Corporation, one of the global leaders in Cloud. Companies like Big Data and Trusted IT were to begin operation of RGPV Corporate School at the campus. In the quest for excellence in research, University has tied-up with Tokyo Institute of Technology, Japan for Joint Research in the area of Cross Linear Concentrated Solar Power Project (a solar thermal initiative) on its campus. MoU with National Cancer Institute (NCI), NIH, USA, Northeastern Ontario Regional Cancer Centre, Canada, AMRC, and Canada, C.N.R.S., France, IIT Chennai and others was signed. RGPV has signed a MoU with Texas Instruments (TI) to establish TI Excellence Centre at the University campus for fostering training in the domains of core electronics. Researchers from the School of Pharmaceutical Science have also marked an unprecedented discovery followed by patents filing for novel anti-cancer molecules and also for bio-degradable Medicated Chewing Gum (MSG).

91. The University envisions producing globally competent, technically tempered and socially responsible technical manpower to meet the ever-growing global challenges. The University is proud to become a leading technical University with affiliating character to implement CBCS for all its undergraduate programmes to enable them choose the courses of their choice. Further, RGPV is the only University in the state of Madhya Pradesh to conduct 'Technical Teachers Eligibility Test' on national basis for recruitment of teachers in its affiliated colleges. Introduction of Online Practical Examination' under CBCS is another feather in the cap of the University.

92. The Vice Chancellor further added that to promote entrepreneurship among students, University has setup a Venture Capital Fund of Rs. 10 crore. To be a part of Knowledge Society and National Development Program to accelerate economy, RGPV is currently shaping itself as a Knowledge Warehouse. University has organized "Manthan 2012 - Redefining Academic-Industry Relationship" in collaboration with FICCI and Government of MP to foster a new era of industry academic partnership. Rural outreach programme is introduced by the university at undergraduate level.

93. The Vice Chancellor informed that the University has also availed the benefits of Faculty Recharge Program under UGC. The University has taken up several initiatives to support meritorious and economically challenged students by constituting scholarships like Chancellors Scholarships for the meritorious students of the university on the basis of the marks secured in the theory exam each year, Research Fellowships for pursuing full time PhD at the university and SC/ST scholarship to support livelihood for economically weaker students of the university. All the enrolled students are insured and also support is provided to the student suffering permanent disability. A unique Teachers Welfare Policy is framed for the support of the teachers in which a sum of Rs. 2.00 lakh is provided to the family of the teachers in case of death and for support is also provided for the teachers suffering with some notified diseases. A unique women's policy has been developed by the university for in campus safety and security.

94. He further informed that a 'RGPV Service Portal' was started and is a significant initiative to instill e-governance in our system using modern technologies. This is an online portal created to infuse responsible, accountable and transparent governance in RGPV. In order to accomplish its mission of proliferating quality technical education to the remotest of areas, RGPV has set up two new technical Institutes in distant locales of Shahdol and Jhabua with a significant tribal presence and University has created a Corpus fund of Rs. 200 Crore.

95. To create a knowledge society, University has come up with a pristine idea of setting up the 'RGPV Innovation Center' that will foster inter-disciplinary collaboration and innovations in the identified fields of research and will further glorify the name of RGPV by creating intellectual properties.

96. The Vice-Chancellor of Vikram University submitted that the National Assessment and Accreditation Council of India has rated the University 'A' Grade in the year 2015. He further informed that Scindia Oriental Research Institute, a unit of the Vikram University is an internationally renowned centre and has a collection of more than 20,000 manuscripts including Bhurja Patra and Palm-Leaf manuscripts. A number of rare manuscripts in the collection have illustrations painted in bright colors and gold and the library of printed books consists of more than 15,000 volumes.

97. He further submitted before the Committee that an Internal IQAC monitors regular assessment on seven quality parameters. More emphasis was made on practical oriented teaching and learning in the class rooms, regular revision of syllabus according to the current market and industries needs, implementation of CBCS in UTDs, case based contents in the syllabus, compulsory students training programs and continuous evaluation and implementation of RUSA Programme in University as well as in Government College.

98. He further informed the Committee that new courses were started in last 10 years. In last 10 years, 10 new departments (including Engineering Institute) were established and student strength was being increased on a continuous basis. Due to increase in Self Financing new courses, new departments and increasing students' strength infrastructure development and maintenance are required for which funds are inadequate. Additional funds are not being provided

by the funding agencies. He added that no boy's hostels and residential quarters are constructed in last 2 decades and there was a need for additional financial support for construction and maintenance of boy's hostels, residential quarters and infrastructure and up gradation of sports facilities for the students of University.

99. He further added that additional funds are required to modernize the laboratories/research in basic and social science and by and large inadequate faculty strength was there in most of the departments and also a lack of inadequate administrative and technical staff. He added that there was limited financial support from the State Government/funding agencies for expansion programmes and other facilities and the Block Grant provided by State Government should be increased. He pointed out that 13 out of 60 new affiliated Government colleges do not have their own buildings.

100. He informed the Committee that provision of approx. Rs. 1 crore is earmarked for R&D work and allied activities in the University budget. The faculty and students are encouraged to organize and participate in conferences/symposia/seminars/workshops of national and international level and for outstanding performance in research; teachers had received awards and recognitions by the Government and other academic bodies. He further added that to train the faculty and students there are collaborating with some academic bodies. He further informed that coaching classes for NET, SLET and PSC for minority students is being imparted since last 10 years.

101. The Vice-Chancellor further added that there was limited financial support from the State Government for expansion programmes and other facilities and block Grant provided by State Government should be increased. He further added that 82 teaching positions of UTD's are lying vacant and there was Difficulty and delay in the preparation of Roster for recruitment of teaching posts due to the changing policies and court judgments. Due to some legal complications and cases pending in the court of law, recruitment process has also been delayed.

102. The Vice-Chancellor, Vikram University, Ujjain submitted that it has collaboration with IIT Bombay for Development initiative Scheme through ICT Module Courses and Spoken Tutorial Courses under the NMEICT project of MHRD, Government of India. Vikram University, Ujjain has collaboration with Microsoft for faculty and employee development under Digital Innovation Lab programme. MHRD Government of India provided a grant (75% of the project) under NMEICT Project to develop Campus wide LAN area network in the year 2012. But, BSNL could not execute this project till date.

103. He further submitted about the there was Initiative taken to attract young students towards Teaching Profession by making awareness of career opportunities in teaching profession by enhancing the image of teaching through general campaigns in the media and by promoting the benefits of teaching.

104. He further added that the University strictly adhered to UGC Regulations. The statutes and ordinances of the University are in consistence with the UGC regulations and guidelines. The



University ensures complacence of UGC regulations particularly in the matter of faculty recruitment and academic matters of affiliated colleges. The course curriculum of the University was reviewed in accordance with the guidelines of the UGC on continuous basis.

105. He further added that under Make in India and Skill India Initiatives a postgraduate diploma in yoga education and philosophy of one year duration is being run by the University. A new paper on entrepreneurship has been introduced in some programme and short term training programme on entrepreneurship are being introduced. Short term computer training programmes are also being organized in collaboration with Microsoft under digital innovation lab for the students of the University. Short term yoga training programme are being organized on regular basis. Students of engineering developed level indicator model and planned to register under 'Make in India' project. He further added 757 students opted for Ph.D. in various disciplines in last 3 academic years.

106. The Vice Chancellor further added that the University has its own Board of Studies in all the 50 subjects and at least once in a year the meetings of all the boards are organized to review and modify the course curriculum. In some professional courses inputs of industrial people are also taken while modifying the course curriculum. Recently CBCS and grading system has been implemented in UTDs.

107. He further added that there was an Established framework for implementation of RTI and Public grievance redressal functioning. There was an administrative and financial code of conduct rules and regulations were emphasized and IT involvement in almost all sectors of governance.

108. The Vice Chancellor further added that university had its own School of Law, School of Education and School of Distance Education, Integrated Courses in various disciplines like: B-Pharma-M. Pharma, B.E-M.Tech., B.E.-MBA, BA-LLB, B.Com-LLB, BCA-MCA, BBA-MBA etc. University also managed a Medical College, a modern Research Laboratories and an Integrated Research and development Centre specifically for Research Scholars, 24x7-IT Centre with 200+ Computers and fully Wi-Fi facilities, Sports Complex and Academic Programmes- B.P. Ed., M.P.Ed.

109. The Vice-Chancellor further added that Vikram University was Running RD Gardi Medical College regulated by Society, Madhya Pradesh Institute of Social Science and Research (MPISSR) imparting research on Social issues, Kaveri Sodh Sansthan, Ujjain, Vikramaditya Sodh Sansthan Sitamau and others are imparting research in the field of modern, medieval and ancient historical and cultural issues.

110. The representative of MP Institute of Social Science Research, Teaching and research in higher education are co-terminous and complimentary to each other and therefore adequate attention to promote research is essentially required. Social science research is mainly committed to address the academic research, operational problem, specific policy centric issues, and input for policy and programme.

111. The representative further added that India has had a relatively stronger academic tradition in the humanities and social sciences and India's major budget allocation in higher education focuses on science and technology and the allocation to research in social sciences are very thin.

112. He added that promoting social science research is an urgent need for understanding the rapidly changing social, economic and political environment. Social science research outcome should be considered by the Government with utmost sincerity for the midcourse correction in the policies and programmes. The MPISSR, Ujjain is one among the 25 research institutes of the Indian Council of Social Science Research (Ministry of HRD), New Delhi. The broad vision of MPISSR, Ujjain is to be an institution in dynamic equilibrium with its social, political and economic environment striving continuously for excellence in social science research to serve as a valuable resource for society and contribute to the nation's development.

113. The basic aim of MPISSR, Ujjain is to engage in cutting edge research on relevant contemporary issues and disseminate the research findings for the enhancement of the existing knowledge and for the well being of the society through policy input. MPISSR has completed over 120 major research projects sponsored by various national and international agencies related to thrust areas of the institute. MPISSR is a recognized research centre of Vikram University, Ujjain for doctoral research in Political Science, Economics, Geography and Sociology. At present 36 scholars are enrolled at MPISSR, Ujjain for doctoral and post-doctoral research work.

114. He submitted that there should be a critical minimum strength of 17 faculty members with adequate support staff in the Research Institutes funded by ICSSR. The ratio of matching grant between ICSSR and respective State Government should be 75:25 instead of present arrangement of 50:50. The funding for research and other activities should be made available to ICSSR Research Institutes by UGC as well, as ICSSR offers funding to all. There has to be more workable and research oriented relationship between UGC and ICSSR and it would percolate down upto Universities and Research Institutes.

115. The Committee during its study visits interacted with the representatives of various Public Sector Banks (PSBs) on the subject Education Loan to Students.

116. The representative of Allahabad Bank, Bhopal submitted that as on 31<sup>st</sup> March, 2016 outstanding under education loan is Rs. 1463 crore in 49142 accounts. They further added that restructuring facility was available and there was provision for increasing moratorium period as per IBA guidelines. They further added that there was a provision for increasing moratorium, taking into account of under-employment/unemployment maximum up to three times during the life cycle of the loan.

117. The Bank further added that to make education loan more affordable the following relaxation were given:-

- (a) Loan up to Rs. 4.00 lac - No security

- (b) Loan up to Rs. 7.50 lac - No security, if loan is covered under Credit Guarantee Scheme (CGS)
- (c) Loan up to Rs. 10 lac - No security for premier institutes like IITs/IIMs/ISB etc.

118. The Bank has reduced rate of interest as low as MCLR for premier institutes like IITs/IIMs/ISBs further giving a rebate of 0.5% to girl students and also 1% concession in case interest is serviced during moratorium period. Bank had integrated with Vidya Lakshmi Portal since 28<sup>th</sup> November, 2015 which makes it easily accessible to all the students. Bank provides education loans, not only for professional courses, but also for various approved courses, but also for various approved courses as under:-

- (a) Approved courses leading to graduate/post graduate degree and PG diplomas conducted by recognised colleges/universities recognized by UGC/AICTE/AIBMS/ICMR/NAAC accredited 'A' rated institutions etc.
- (b) Courses like ICWA, CA, CFA etc.
- (c) Courses conducted by IIMs, IITs, IISc, XLRI, NIFT, ND
- (d) Regular Degree/Diploma courses like Aeronautical, pilot training, shipping etc approved by Director General of Civil Aviation/Shipping
- (e) Approved courses offered in India by reputed foreign universities.
- (f) Job oriented courses for studying part-time courses and approved by the appropriate authorities.
- (g) Job oriented specialized programmes like maritime courses which are offered in collaboration with foreign institutions may not be having recognition in India.
- (h) Financial assistance for pursuing research work could also be considered by financing on merit.
- (i) Other job-oriented courses leading to technical/professional degrees, post graduate degrees/diplomas offered by recognized institutions are also under this scheme.

119. They further added that Banks also provides loan to individuals for taking skill development courses aligned to National occupations standards and Qualification Packs and leading to a Certificate/Diploma/Degree by the Training Institutes as per National Skill Qualification Framework (NSQF).

120. They further added that as on 31<sup>st</sup> March, 2015, out of total education loan portfolio of Rs. 1369 crore, the percentage of loan to girl students was 22% (Rs. 301 crores) which is 24% (Rs. 351 crores) as on 31<sup>st</sup> March, 2016 out of total portfolio of Rs. 1463 crore. The further added that under the central Sector Interest Subsidy (CSIS) on education loans, bank has been claiming

interest subsidy in eligible education loan accounts since the inception of scheme. They further added that financial year (2015-16), subsidy was claimed in 18278 accounts amounting to Rs. 41.09 crore.

121. The Committee was informed about the initiatives taken by the AndhraBank for improving the sanctions under education loans, bank has given 0.50% concession in rate of interest for education loans extended to women beneficiaries. The Bank also provides 0.50% concession in rate of interest to meritorious students with 90% and above marks in intermediate and 80% marks in degree level.

122. They further informed that it was one of the members Bank for sanction of education loans for the students applied online through Vidya Lakshmi portal developed by NSDC. The Bank is giving concession in rate of interest up to MCLR for the students got admission in premier educational institutions (ISB, IIT, IIM, IIT, BITS, XLRI, MDI and SPJIMR).

123. The Bank submitted it had disbursed education loan of Rs. 57965 crores in 2014, Rs. 56036 crore in 2015 and Rs. 53093 crore in 2016. The Bank further informed that in the State of Andhra Pradesh that Bank had given Rs. 28848 crores in 2014, Rs. 27105 crores in 2015 and Rs. 24946 crores in 2016.

124. The representative of Union Bank of India submitted that the Bank's education loan scheme is to provide need based assistance to students pursuing higher education. They further added that maximum quantum of loan is Rs. 10 lakh for studies in India and Rs. 20 lakh for studies abroad. However, with the rise in cost of education, Bank also considers educational loan proposals beyond these maximum limits on a case-to-case basis.

125. The Bank submitted that in order to help reduce the burden on the students, the Bank has increased the repayment period from 10/15 years to uniformly to 15 years in March, 2016 in a view to provide maximum assistance to a needy and deserving student who desire to pursue higher education both in India and abroad. They further added that upto 4 lakh (the rate of interest is  $MCLR+3.15=12.60\%$ ) upto 7.50 lakh ( $MCLR+2.90=12.38\%$ ).

126. The representative further added that to promote education to girl child, Bank is offering 0.50% concession in rate of interest across all the above slabs. Further, with the advent of Vidya Lakshmi Portal, it has become easier and accessible for the students to choose banks as per their choice and convenience. The second educational loan was given to students who intend to pursue further higher studies by postponing the repayment of the first educational loan availed from bank.

127. They further added that the Bank offers educational loan for courses that are taken up after completion of higher secondary school i.e. 10+2 stage or equivalent and this included all graduate and Post-Graduate courses as well as Research oriented courses in India and abroad.

128. The representative further added that Bank has adopted the revised Skill Development Scheme. They further added that the branches and offices contact educational institutes providing skill development courses and liaison with the authorities to set-up stall at these institutes to offer educational loans to such students conveniently.

129. The Bank has submitted that in FY 2015-16, out of total educational loans sanctioned (Rs. 588 crore), Rs. 210 crore (35.75%) are given to female students. Out of the total educational loan outstanding as on March, 2016 (Rs. 2739 crore), Rs. 942 crore (34.38%) is outstanding in educational loans given to female students. The also gave details submitted the details of students.

<b>COURSES</b>	<b>2014-15</b>	<b>2015-16</b>
B Ed.	63	38
Computer Application	302	385
Engineering	6727	5792
Management	2016+	1697
Medicine	689	623
Nursing	741	728
Other	2452	2691
<b>Grand Total</b>	<b>12990</b>	<b>11924</b>

They further added that all the guidelines communicated from time to time on Central Sector Interest Subsidy Scheme (CSIS) as well as other subsidy.

130. The representative of Bank of India submitted that the bank extended education loan on the basis of Model Education Loan Scheme formulated by IBA. The Quantum of education loan for studies in India is max 10 lakhs and max 20 lakh for studies in abroad. They further added that for loan upto Rs. 705 lacs (3% over base rate) over Rs. 7-5 lac (2.50% over base rate).

131. They further added that to make education loan more affordable bank offers for Girl Students concession of 0.5% in ROI for loan upto Rs. 50,000 and 1 percent concession in ROI for loan over Rs. 50,000 schemes of Centre and State Governments have been implemented by our bank. They submitted that they had created master data of majority of student accounts in which subsidy has been claimed. The detail of subsidy claimed under various schemes is given below:-

<b>SCHEME</b>	<b>NO. OF CLAIMS</b>	<b>AMOUNT (IN CRORE)</b>
Central Sector Interest Subsidy Scheme (CSIS)	212352	299.84
Padhao Pradesh Scheme	234	0.64
New Central Sector Interest Subsidy Scheme	6009	17.63
Dr. Ambedkar CBIB Scheme	5	0.01

<b>QUANTUM OF LOAN</b>	<b>SECURITY</b>
Up to Rs. 4 lakh	No Security
Above Rs. 4 lakh and upto Rs. 7.80 lakh	Suitable third party guarantee acceptable to the bank to be taken
Above Rs. 7 lakh	Tangible collateral security of minimum value equivalent to the loan amount and interest accumulate during where and moratorium period acceptable to bank.

132. They further added for Professional Technical courses 0.5% concession was given. They further added that besides Education loan is provided at simple rate of interest during study period plus moratorium period up to 12 months. They also added that interest subsidy is provided by Central Government during study period plus moratorium period, in respect of loan up to Rs. 10 lakh to students whose parental income is upto Rs. 4-50 lakhs and who pursue professional or technical course in India. The Bank further added that Bank provide loans for pursuing recognized degree or post-graduation degree course after completion of HSC.

133. The representative further added that Bank has separate scheme viz. Pradhan Mantri Kaushal Rin Yojaya for pursuing skill development courses. They further added that under skill loan scheme, upto Rs. 1-5 lakhs loan is offered to Skill Development Courses with repayment period upto 7 years. They also pointed out that accounts are covered under Credit Guarantee Scheme and Credit Guarantee fee is borne by the Bank.

134. The representative of Punjab National Bank (PNB) further added that PNB is extending education loans to students for pursuing studies. They further added PNB has student friendly education loan like PNB-Saraswati for studies in India, PNB- Pratibha for students getting

admission in IITs/IIMs/Government Medical colleges and other premier educational institutes in India, PNB-Udaan for studies abroad and PNB-Kaushal for skill development courses in India. They further pointed out that loan upto Rs. 7.50 lacs is sanctioned without any collateral under PNB Saraswati and Udaan Scheme and without any collateral under PNB Saraswati and PNB Udaan Scheme and without any collateral irrespective of any amount under PNB-Pratibha Scheme and under PNB-Kaushal are collateral free.

135. The representative of PNB submitted that NPA in education loan is 19.02% as of March, 2016. The State-wise NPA portfolio of NPA accounts was where repayment was given:-

<b>Loan amount</b>	<b>NPA portfolio</b>	<b>% of NPA portfolio</b>
< Rs. 4.00 lac	354.10	89.72%
> Rs. 4.00 lac - Rs. 7.50 lac	20.95	5.30%
> Rs. 7.50 lac	19.59	4.96%

The representative submitted that the 90% NPA was in loans up to Rs. 4.00 lac.

136. The representative further added that re-schedulement/restricting in education loan is considered by PNB on easy terms and for the same powers are vested with Branch Managers Extension in repayment within the maximum permissible repayment period up to 15 years is considered.

137. The representative further added that PNB provides education loan to student for pursuing approved courses leading to Graduate/Post Graduate degree conducted by recognized colleges /universities. They further added that Education loan Scheme in the name of PNB Kaushal provided education loan to students for pursuing skill development courses in Industrial Training Institutes (ITI), Polytechnics in a school recognized by central or State Education Boards or in a College affiliated to recognized University, training partners affiliated to National Skill Development Corporation (NSDC)/Sector Skill Councils, State Skill Mission preferably leading to a certificates/diploma/degree issued by such organization as per National Skill Qualification Framework (NSDF) and minimum loan amount is Rs. 5000/- and maximum 1.50 lacs is considered under the scheme.

138. The representative further added that Bank had extended 21.36% education loans to female students for pursuing various courses. They further added, concession of 0.80 in rate of interest is available for priority sector education loans i.e. outstanding upto Rs. 10.00 lacs and 0.25% for non-priority sector education loans i.e. outstanding above Rs. 10.00 lac. They further added that to encourage the education of girl child amongst the rural masses, the Bank has launched a scheme by the name of 'PNB Ladli' to promote and popularize education among girls of rural/semi-urban India.

139. The representative of Allahabad Bank submitted as on 31<sup>st</sup> March, 2016 outstanding under education loan is Rs. 1463 crore in 49142 accounts. He further added that restructuring facility was available and there was provision for increasing moratorium period as per IBA guidelines. They further added that there was a provision for increasing moratorium, taking into account of under-employment/unemployment up to three times during the life cycle of the loan.

140. The Bank further added that to make education loan more affordable the following relaxation were given:-

- (a) Loan up to Rs. 4.00 lac - No security
- (b) Loan up to Rs. 7.50 lac - No security, if loan is covered under Credit Guarantee Scheme (CGS)
- (c) Loan up to Rs. 10 lac - No security for premier institutes like IITs/IIMs/ISB etc.

141. The Committee in Vishakhapatnam was informed by Andhra Bank about the initiatives taken by the Bank for improving the sanctions under education loans, bank has given 0.50% concession in rate of interest for education loans extended to women beneficiaries. The Bank also provides 0.50% concession in rate of interest to meritorious students with 90% and above marks in intermediate and 80% marks in degree level.

142. They further informed that it was one of the member Bank for sanction of education loans for the students applied online through Vidya Lakshmi portal developed by NSDC. The Bank is giving concession in rate of interest up to MCLR for the students got admission in premier educational institutions (ISB, IIT, IIM, IIT, BITS, XLRI, MDI, SPJIMR)

143. The representative further added that Bank had extended 21.36% education loans to female students for pursuing various courses. They further added, concession of 0.80 in rate of interest is available for priority sector education loans i.e. outstanding upto Rs. 10.00 lacs and 0.25% for non-priority sector education loans i.e. outstanding above Rs. 10.00 lac. They further added that to encourage the education of girl child amongst the rural masses, the Bank has launched a scheme by the name of 'PNB Ladli' to promote and popularize education among girls of rural/semi-urban India.

144. The Committee had interaction with representatives of EPSI, CEPI, EdCIL, JIIT, LPU, NIU and SRM University in Delhi.

145. The EPSI representative further submitted that the NASSCOM and Ministry had conducted surveys in past about employability of engineers and MBAs which was less than 28% . The issue of employability has two dimensions which was the readiness of the graduates to take up responsibility in the industry and possessing skills and competitiveness needed by recruiting organizations and availability of jobs in the industry and Government, which is subject to rate of economic growth. They recommended the following for improving the employability:-

- (a) Taking effective measures to fill up the gap between academia and industry;



- (b) Creating internships and training opportunities in the industry and government for students;
- (c) Creating training and placements Department in colleges and universities;
- (d) Setting up of Alumni Relationship Cells in all colleges and Universities, so that the Alumni members are actively involved in grooming the current students and improving their employability.

146. The representative of EPSI submitted that the regulatory framework is crippling. They submitted that regulatory body should act as a mentor and facilitator. They suggested that UGC, AICTE and other regulatory bodies should become less regulatory and more nurturing body for massive improvement in the quality of higher education. They further added that affiliation system is to be discontinued. They submitted that India has approximately 40,000 colleges majority of which are affiliated to State Universities and only few of them has been granted autonomous status. They further added that an affiliated college necessarily follows the curriculum prescribed by the affiliating universities and practically does not have any academic autonomy including the academic calendar, examination schedule, setting up of question papers and evaluation of answer sheets. They further added that an autonomous college gets reasonable academic autonomy, whereby it is permitted to have its own curriculum, academic calendar, examination schedule, evaluation of answer sheet with the only restriction that the degree is finally awarded by the University. The only solution for such a pitiable situation is to grant academic autonomy to the colleges based upon their capabilities and credentials. One of the alternatives may be that all colleges having accreditation with NAAC with highest grade and Technical Education Colleges having more than 50% courses accreditation from NBA may be given autonomous status to begin with.

147. They submitted that establishment and operation of an educational institution requires large number of clearance, Note and approvals from large number of government agencies. The norms laid down by most of the agencies are impractical and redundant, which lead to a lot of subjectively in approvals at the discretion of the Competent Authority. This leads to corruption and exchange of money for approvals through middle man. He further added that Government can ensure that the institutions do not cheat the public, by publishing in their website the facilities and faculty available, fees and other details.

148. The representative of EPSI further added that large numbers of vacancies in teaching posts are existing in both Central and State Government Universities, mainly due to unavailability of suitable candidates. To tackle this problem the solution is to reemploy the experienced, well qualified superannuated teachers to fill the vacancies, invite at least 1000 eminent scholars from abroad scientists, corporate experts to share their knowledge with the students.

149. The representative of CEPI submitted that there should be a pan India independent Examination Commission needed for higher education He pointed out that most State Universities and their affiliated colleges that account for more than 90 per cent of the enrolment suffer from a poor examination system. Most of the states have failed in conducting fair and timely examinations, irrespective of the political party

in power. Several incidents have been reported of question papers being leaked, mass copying, and improper evaluation and announcement of results in various states. Moreover, the entire process takes unreasonable and unpredictable time. The poor system can be attributed to the exponential growth of college affiliations in the last 15-20 years, owing to which universities have not been able to cope with the requirements of preparing examination papers and conducting examinations.

150. Under the circumstances, in spite of best intentions, the state government has lost control of the sector. The unfortunate recipients of this system are the students who pass out and often do not possess even basic language and mathematical skills.

151. They suggested that the job of conducting examinations requires expertise and management skills. There was need to have an Examination Commission of India, constituted like the Election Commission of India that could be given the authority of scheduling and conducting exams, preparing question papers, announcing results, etc without the interference of state and central governments, in order to set right the poor examination system currently followed. Its jurisdiction should also include private and deemed universities. The universities can choose to define their own course contents and provide the same to this body, who can then set the paper independently based on the inputs. Similar to CBSE or UPSC for universities in particular, the examination commission would have the competence to handle the numbers as well as conduct exams across the country.

152. The CEPI representative further pointed out that NAAC accreditation system needs change in design and process. They pointed out that the method of assessment adopted by the National Assessment and Accreditation Council (NAAC) does not appear to be scientifically designed to fulfill its objective, particularly with regard to teaching-learning effectiveness. The evaluation criteria for judgment do not seem to have been defined objectively as a result of which grading is often both subjective and discretionary. They pointed out that the National Assessment and Accreditation Council (NAAC) is an organisation that assesses and accredits institutions of higher education in India, awarding 'A', 'B' and 'C' grades to the universities and colleges. According to a study carried out by the government amongst 4870 colleges, as many as 2780 are graded by the NAAC.

153. However, many colleges, which have been granted 'A' grade by NAAC, have been found to suffer from inadequate availability of teaching days due to late admissions and disturbed university calendar and lack of teachers' presence in the classrooms even on teaching days. In many cases, they also suffer from improper practices for admissions and untimely examinations. Student attendance requirements are fulfilled by false reporting of attendance data. A college cannot be graded in isolation of its university as it is the universities which decide the syllabus, the criteria for admission, and the time to hold examinations. Even the admissions procedures and the academic calendar are controlled by the universities and the colleges merely follow the same. Considering that they also prepare question papers and schedule for examinations, also appointing examiners, it is the university which controls everything that is done in colleges. Similarly, universities themselves are affected by the quality of governance and policies of the state government. For example, if the state government is unable to conduct appointment of teachers, principals and staff properly, the universities have little in their hands. Hence, it is usually difficult to have good education output of the state universities and its affiliated colleges.

154. They suggested that assessment should start from the quality, procedure and timeliness adopted in admissions. It should also take into account if a time-table was prepared and followed the number of hours allotted to a subject made available; whether teachers were available for those lectures; the quality of lectures imparted by teachers and the books they consulted and referred and also the method adopted in imparting lectures. NAAC must also be aware of the quality of examination papers prepared for internal examinations; the quality of examiners who marked internal exams copies; and the ways and means of communications of results to students. These checks and balances should be put in place so that the infrastructure, money and other extraneous considerations are not into play while granting grades. Such measures would help NAAC to earn faith and respect of all concerned.

155. The CEPI representative further added that in Appointment of Teachers for self-financed courses in colleges attached to State University there is an unhealthy environment and class barrier between teachers in government aided colleges. In the 1970s, the government decided to stop financing further expansion of higher education. Aided colleges wanting to add new courses or additional classes were required to do so in "self-finance" mode. Hence, new colleges coming up were required to be completely self-financed. This meant that new teachers required by the colleges were to be appointed by the management themselves.

156. They pointed out that the colleges are allowed to charge a fixed amount of fee for such additional courses, a matter that is decided by the university. The total fee generated is insufficient to meet out the salary expenses. As a result, the teachers appointed for these additional courses earn a salary which is much lower in comparison to the salaries of the teachers who are government appointed. This has caused conflict in the colleges. The teachers earning a low salary for teaching similar or even higher courses are considered inferior to the government teachers, who in some cases are teaching junior classes, while enjoying higher salaries as well as status. This system creates unhealthy work environment and needs to be re-looked at on an urgent basis.

Further, in both aided and unaided colleges, for appointing self-finance teachers, an expert is deputed by the university, who is normally a government appointed teacher in any institution other than the one where this self-finance teacher is being appointed. Due to the large number of self-finance courses in comparison to aided courses, the number of government teachers is already small. This exercise puts additional burden on them as they are kept busy in travelling to other institutions and holding interviews while their own students suffer from their absence. They pointed out that when the basic qualifications and criteria are laid down by the university, the selection must be left with the management of the institution. This will remove an unnecessary exercise and the government teachers can be used for their main purpose which is teaching and research.

157. They further added that the quality of government appointed teachers and principals is rather poor and inadequate. The appointment of teachers is exclusively done by the state governments. State governments have established different Boards for purposes of appointment of teachers in higher education, secondary education and primary education. The political expediency does not let the government remain impartial and true to the task of appointments of board members. As a result, inept, unqualified and, sometimes, undesirable elements find a place in the appointment Boards and, in turn, they appoint teachers not according to their qualification and merit, but on the basis of other extraneous considerations. Therefore, a lot of litigation follows in respect of appointment of the members of the Board as well as of teachers. The entire system is mostly paralyzed. They suggested that the teachers and principals of higher education should be appointed through UPSC.

158. The CEPI representative pointed out that the state university controls everything that is done in colleges. If colleges desire to add new courses or additional classes in an existing course or if they decide to drop a course from their curriculum, they need to seek fresh affiliation/permission from the universities to which they are affiliated. That is certainly a lengthy procedure involving various elements. Further, the procedure for granting permission for a new course addition for a UGC approved and NAAC accredited 40 year old college is similar to that of a new college.

159. They suggested that colleges should be granted freedom to seek and get affiliation from any other university e.g. a college can have different affiliations for different subjects from more than one university. In addition to this, a central body like CBSE for higher education may be established at the central level which can grant affiliation for different courses and the choice should be left to the college. The procedure for addition of subjects usually involves an expert committee formed by the university and consists of government teachers. Thus, the government teachers have lot of additional burden in myriad processes related to college governance like self-finance teacher appointment, subject addition, NAAC accreditation, management committee election, practical examiners etc. This keeps them busy travelling to other institutions and holding interviews while their own students suffer from their absence.

160. The CEPI representative submitted that while assessing the university, NAAC does not even look at the teaching hours left with government teachers because of the university procedures. In fact, the NAAC inspection criteria for university should look at all the procedures adopted for governance of its affiliated colleges and factor them in award of rating to the university.

161. The CEPI representative submitted that there were irregularities in fee reimbursement and scholarships fee reimbursement by social welfare department of states has created monster education mafias. The task of fee reimbursement and grant and disbursement of scholarships is entrusted to Social Welfare departments of states. This has created massive avenues for unfair and illegal practices as the department is being used for siphoning off money to unintended recipients. Cases have come to light where a single student has taken admission in several institutions at the same time and is drawing reimbursement or scholarships in respect of each college where he is admitted. The money is sometimes given to persons who do not even exist.

162. The CEPI representative further submitted that the fee is reimbursed in respect of private educational universities also. The reimbursement amount is equal to the fee decided by the private university, which, in fact is many times higher than the fee charged by the government aided colleges for similar courses. As a result, the reimbursement of fee charged by the private universities is many times more. This has created further scope for corruption and milking the state exchequer at a gigantic scale without serving any purpose. They suggested that the fee reimbursement should be at a uniform level, which is to be decided by the state government for each course. The reimbursement criteria should be fixed age-wise also and should be necessarily linked with AADHAR.

163. The CEPI representative submitted that there was excessive emphasis on research by government for all colleges and universities, irrespective of their size, location and campus.

Research has become a sort of buzzword and attracts too much emphasis by policymakers. In most cases, Ph.D. scholars are not even fully aware about their own topic leading to a general reduction in the importance of the Ph.D. degree itself. The representative submitted that research should be encouraged for central institutions and state institutions which are residential. It is neither feasible nor practical for a small non-residential, non-technical educational institution to have the research facilities. Further, the emphasis should be on quality of research scholars not on quantity. Non-residential colleges should be allowed to utilize their precious resources for imparting quality education.

164. At present minority institutions are those institutions which are run by minority communities. They get state privileges and concessions while opening their institutions and are even granted full freedom in respect of running the institutions such as appointment of teachers. The status of minority institution should only be granted to those institutions which have a minimum of 50 per cent students from the minority and not because they are owned by minorities. Moreover, the excessive concessions and privileges should be curtailed and brought at par with other institutions to bring uniformity in other aspects.

165. The representative of EdCIL submitted that the Indian Higher Education system is one of the largest of the world, just after the United States and China, and enrolls around 33.3 million students. The adult literacy rate (15+ age group) is around 72.1% in total. The male and female literacy rates in the same age group are 80.9% and 62.8%, respectively. Whereas the world average literacy rate is 86.3% (UNESCO, 2015). Total GER (Gross Enrolment Ratio) for the year 2013-14 was 23.0. GER for male and female students was 23.9 and 22.0 respectively, which shows that women enrolments ratio is less when compare to male. India has a low GER when compared with 26% in China and 36% in Brazil. The table below shows the GER for last 3 academic years (AISHE 2014-15 Education at a Glance):

	2012-13	2013-14	2014-15 (P)
All Categories	<b>21.5</b>	<b>23.0</b>	<b>23.6</b>
Male	22.7	23.9	24.5
Female	20.1	22.0	22.7
<b>SC</b>	<b>16.0</b>	<b>17.1</b>	<b>18.5</b>
Male	16.9	17.7	19.3
Female	15.0	16.4	17.6
<b>ST</b>	<b>11.1</b>	<b>11.3</b>	<b>13.3</b>
Male	12.4	12.5	14.6
Female	9.8	10.2	12.0

166. The representative of EdCIL submitted that India has 757 Universities, 38056 Colleges and 11922 Stand Alone Institutions as per the latest survey by AISHE. India has 52 ‘Institutions of National Importance’ which primarily consist of the Indian Institutes of Technology, National Institutes of Technology and prominent medical colleges, like the All India Institute of Medical Science (AIIMS). The following table shows increase in number of institutes from 2010:

Year	Colleges	Universities
2010-11	32974	621
2011-12	34852	642
2012-13	35525	667
2013-14	36634	723
2014-15 (P)	38056	757

167. The representative of EdCIL submitted that only 11.7% of total enrolment is in distance enrolment, of which female students are 46% of total distance learning enrolment. About 79.9% of total students are enrolled in under-graduate, whereas only 11.45% in post-graduate. As listed by the University Grants Commission (UGC), India has 43 central universities, 312 state universities, 183 private universities and 115 deemed universities.

168. They further added that Traditional teaching methods were outdated and rigid curricula and pedagogy lead to lack of accountability and quality assurance and separation of research and teaching also account for lack of quality in the sector. Different variety of colleges, universities, technical institutions have produced different types and quality of education. There is a mismatch of quality among various institutions. Many of the universities don’t have adequate infrastructure or facilities to teach students. Access to internet and Wi-Fi is still an issue that is persistent in various colleges. Inadequate interfacing between industries and educational institutes is creating a gap. The employability report published by Aspiring Mind states that less than 20% engineers are employable for software jobs, and 7.49% are employable for core engineering jobs. Employability also varies enormously across colleges. Colleges in tier 1 cities have 18.26% employable software engineers, whereas for those in tier 2 cities, it goes down to 14.17%. Similarly, the states at the top have employability as high as 40.42% but those at the bottom have it at 12.03%.

169. They further added that Regulated Institutions need to be registered as not for profit Trust/Society/ Section 25 Company. Unregulated Institutions can be registered as private/public companies that can legitimately distribute dividends. These institutions do not provide education leading to award of a degree or certificate, they can be incorporated as a company, are beyond the regulatory regime described earlier and can distribute profits. There are a number of private companies operating in the unregulated sector, some of which Language Training, Tutorials/Coaching, Education services companies, Content providers and Corporate Training.

169.1 They further pointed out that there are various regulatory bodies in India but the major one is the University Grants Commission (UGC) under the MHRD, which acts as the coordinator as well as prescriber of standards for education in the country. These institutes have their own set of regulations and approval procedures which seem cumbersome to foreign institutes, as there are multiple agencies involved. This

over-regulation is a deterrent to quality foreign institutes as they perceive it as an infringement of their academic freedom.

170. They further added submitted that regulations placed by AICTE for foreign universities were that franchise is not permitted, fee/seats are prescribed by AICTE, Degree/institution to be recognized in the home country, compliance with affirmative action is mandatory and for degree granting institutions, affiliation/tie-up with Indian university is mandatory.

171. The representative of EdCIL further added that UGC doesn't recognize foreign universities. Foreign Education Institutions (Regulation of Entry and Operation) Bill, 2010 states that only institutions with a corpus of INR 500 mn (USD 11 mn) - the sum of money universities need to set aside as a guarantee - would be allowed to establish a campus in India. Other proposals include the restriction of surplus revenue usage within India and the investment of at least 51% of total capital required for establishing an institution in India. Accreditation of higher educational institutions was made mandatory under UGC (Mandatory Assessment and Accreditation of higher Educational Institutions) Regulations, 2012. Institutions are accredited for a period of five years.

172. They further added that various autonomous bodies grant accreditation; most important of them are National Assessment and Accreditation Council (NAAC), and the National Board of Accreditation (NBA). They pointed out there was no recognition for private agencies to operate in the accreditation space in India. However, the Indian Centre for Assessment and Accreditation (ICAA) is the first private accreditation body, set up in May 2013, and is registered as a non-profit council with T V Mohandas Pai, from Manipal University, as chairman and Arun Nigavekar, former chairman of University Grants Commission (UGC) and founder director of NAAC, as the chief advisor. Currently, it focuses its efforts towards associating with international rating agencies to launch 'Top Indian University Rankings', a first of-its-kind ranking of Indian universities.

173. They further added that Choice Based Credit System (CBCS) has been framed and proposed by UGC. The guidelines will apply to all the undergraduate and postgraduate-level degree, diploma and certificate programmes awarded by Central, State and deemed-to-be-universities in India. The CBCS guidelines have been conceptualized in line with the National Skills Qualification Framework (NSQF), competency-based framework that classifies qualifications based on levels of knowledge, skills and aptitude. The framework gives students the freedom to select programmes from a range of disciplines, which will count towards their overall degree credits. The system will permit students to transfer credits earned in one institution to another within the country or even abroad giving them mobility and complete freedom over choice of institutions. Curriculum will be interdisciplinary, enabling the integration of concepts, theories, techniques and perspectives from two or more disciplines to advance fundamental understanding or to solve problems whose solutions are beyond the scope of a single discipline. The completion of a degree will become credit-based instead of the current time-based. The model focuses on bridging gap between professional education and employers' needs, making the student employment ready.

174. They further submitted some credit transfer systems followed by other countries as:

- a. European Credit Transfer System (ECTS): Sets the standards for comparing the academic achievement and performance of higher education students across the EU and other collaborating European countries.
- b. Australian Qualifications Framework (AQF): specifies standards for educational qualifications.

175. They further added that the Government of India (as well as many states) has recognized the need and importance of private-sector participation to meet the overall demands in the higher and technical

education sector. Many industrial houses and their promoters have established trusts and other non-profit bodies to build and run universities and institutes in accordance with the current regulations – the not for profit approach. Various entrepreneurs as well as other enterprises have setup institutions focusing on training, skill development and employability enhancement – areas that are outside the ambit of regulations governing education. Some of the models suggested by K.B. Pawar Committee constituted by the University Grants Commission (UGC) are as follows:

- (i) Private sector invests in the infrastructure and has the responsibility of operations and in return is compensated by the government – Outsourcing Model
- (ii) Investments are shared among the private sector and the government while the operations and management is handled by the private sector – Hybrid Model
- (iii) Government invests in infrastructure and the private sector takes the responsibility of operations and management – Reserve Outsourcing Model

176. They pointed out that Rasthriya Uchcharat Shiksha Abhiyan (RUSA) was started for Enhancing Higher Education Quality. State universities receive only a fraction of funding compared to the central institutions but cater to a large number of students. As a result, quality of infrastructure and teaching is far below in state institutions and shortage of funds cause vacancies in faculty positions and compels the institutions to look for other funding options. They further added that State institutes rely heavily on the affiliation fees for funding; this along with the introducing courses for revenue-generation has further deteriorated the quality. University Grant Commission (UGC) does provide funds to the state institutions, but its mandate allows it to fund institutes that are in Section 12B and 2F (UGC Act Compliant), which excludes nearly 33% of state universities and 51% of the colleges under such universities.

177. They pointed out that RUSA or Rasthriya Uchcharat Shiksha Abhiyan will cover 13,024 colleges included in 316 state universities. The funding will be provided in 90:10 (Centre: State) for North-Eastern states and Jammu & Kashmir, 75:25 for Other Special category states (Sikkim, Himachal Pradesh and Uttarakhand), and 65:35 for other states and UTs. It is based on performance-based funding model. It will incentivize well performing institutions and to be eligible for funding under RUSA, states will have to meet certain prerequisites which include academic, sectoral and institutional governance reforms, creation of State Higher Education Councils, state accreditation agencies funding by committees by states, filling faculty positions, etc. Its aim is to provide greater autonomy to universities as well as colleges and focus sharply on equity-based development and improvement in teaching-learning quality and research and innovation in higher education. The broad component of RUSA would be to create new universities, new engineering colleges and new degree colleges by the State Governments. The objective of RUSA is to achieve the target GER of 30% by 2020, which has been set by the Central Government.

178. They further informed the Committee that RUSA also states some ways in which State Universities can seek private investment, such as:

- a. Philanthropic contributions
- b. Donations / grants from private companies / trusts / NRIs
- c. Establishing chairs / schools / departments
- d. Public private partnerships
- e. Knowledge parks / innovation centres / centres of excellence



- f. Two per cent corporate social responsibility funds
- g. Viability gap funding
- h. Specific research grants

179. They further added that the guidelines of the mission specify that while “state Plans should include information on all government, government aided and private institutions across disciplines, support will only be provided to government and government aided institutions. These would include all government and aided colleges including engineering, professional and agricultural, except medical colleges. According to CII-Deloitte ASHE 2013, the number of private higher education institutions increased by more than 60 per cent during 2007 and 2012. The exclusion of private institutions in RUSA is thus ironical as 64 percent of total institutions dealing in higher education in India are private. The problem with this is that CSR funds of companies go in various fields – healthcare, elementary education, water, sanitation and now on building toilets and they are not adequate for the purpose of higher education. Another issue with the scheme is that the private sector can logically be a part in RUSA in only selected areas, which include setting up of new model colleges (general); setting up of new colleges (professional); research, innovation and vocationalisation of higher education.

180. The Committee was informed that Digital India concept can revolutionize education sector. The institutes are required to be provided with latest technology and infrastructure and gave various models currently being used in other countries and suggested for Indian scenario are:

- Flipped Classroom Model:
  - Allows students to listen to the lectures online at home and use class time for collaborative learning and activity-style homework assignments.
  - The in-class discussion, personalized student guidance, team based skill development and enrichment activities are allowed by moving content delivery outside of class time.
  - An experiment by Nobel Laureate Carl Wieman in University of British Columbia, found that students who are introduced to ‘flipped classroom model’ resulted into increase in attendance by 20%, class engagement by 40% and interestingly scored more than twice in comparison to respective control group (Study by Deloitte, 2015).
  - This model was adopted by Indian School of Business (ISB) in 2012 for a course on entrepreneurial decision making.
- Massive Open Online Courses (MOOCs):
  - These aim at unlimited participation and open access via the web.
  - Provide interactive user forums to support community interactions between students, professors, and teaching assistants.
  - SWAYAM which stands for 'Study Web of Active-Learning for Young Aspiring Minds' is MOOC platform for Indian students.
  - It will have 3 courses, 2 from IIT Bombay and 1 offered by UC Berkley.
  - NPTEL is another platform which is quite popular among the engineers.
- **ERP for Education Institutions:**
  - **FRONT DESK MANAGEMENT** : Covers the front desk activities, through following modules:
    - Admission Management
    - Fees Management
    - Profile Management
    - Inquiries Management

- **CAMPUS MANAGEMENT SOLUTIONS:** Cover the following modules:
  - Library Management
  - Hostel Management
  - Canteen/Cafeteria Management
  - Classroom Management
  - Laboratory Management
- **ADMINISTRATION MANAGEMENT** : Covers administration of institutions by integrating the below mentioned modules:
  - HR Management
  - Events & Activities
  - Payroll Management
  - User Management
  - Store and Purchase

181. They further added about the Challenges in Creating ICT Framework

- Policy and Direction (IGNOU nominated)
- Infrastructure (Broadband Connectivity, Network, Data Center etc.)
- Viability
- Commercialization
- Technology Infusion
- Backend Supply chain (Hardware, Content etc.)
- Content creation (NPTEL, SWAYAM etc.)
- Absence of Collaborative Platforms (Institutions as well as Industries)
- Data Collection and Analysis (India- second largest in terms of enrollment)

182. The following recommendations were given :-

- a. Government should be creating enabling atmosphere for quality improvement and growth especially which is private sector led.
- b. Increase of scope of the ranking framework.
- c. Incentivizing of research and industry engagement.
- d. Higher number of PPP projects in education.
- e. Incentivize internationalization of education.
- f. Legislate use of technology at least in areas of admission and administration for greater transparency.
- g. Enhancement of industry-academia interaction; faculties at State Universities should be encouraged and allowed to take up consulting works for various industries and for other private stake-holders.
- h. Innovation centers/incubators may be established various universities in collaboration with industries and private players.
- i. Faster implementation of Choice-based Credit System for creating industry ready students.

183. They further added that India already has a well developed ecosystem of higher education in which the top 20% of the institutions enjoy the following advantages *vis-a-vis* competing nations:

- Relative price advantage and hence higher return on investment for students.
- Relevance of education for application in developing countries.
- Industry linked education in terms of placements, especially in services sector.
- Growing start-up culture which makes campus entrepreneurship focused.
- Strong advantage of use of English language.

They further pointed out that the private sector higher education institutions (e.g., Symbiosis, VIT, Manipal, etc.) are presently extremely focused on receiving foreign students and tweaking their syllabus and infrastructure to support this objective. With increased role of private sector being anticipated and ranking method (NIRF) being introduced by MHRD and several initiatives being taken by the Government the overall scenario of higher education in India will vastly become industry and services led and qualitatively improved to competitively match with those available in some in the developed world. The private sector institutions are highly diverse in nature. The best in the class range from BITS, Symbiosis, ISB, VIT and XLRI, etc. In the lower end there are also many institutions which are way below the mark.

184. They further pointed out that the present NIRF (National Institutional Rating Framework) is expected to be a game changer in not only enabling students, employers and other stakeholders to make informed choices but would also resultantly make the institutions raise their quality and benchmark against each other for overall improvement of the sector. The other enabling initiatives of the Government would lay a major role in unleashing a quality revolution in the private sector given the projected inadequate investment ability of the government, it is desirable that enabling atmosphere is created for private sector institutions to take the higher education sector to next level to aid in sustained high two-digit growth for the economy for a long period.

185. The representative of CII submitted that there was a need improve quality by accreditation, compliance, and disclosure of information. They submitted that rapid growth in higher education, especially technical education, in recent years has led to dilution of quality at every level. They pointed out that while the number of seats and students has grown 30-fold since 1983, faculty count has barely doubled because not enough students go on to do Masters and still less do PhD. No amount of regulation, policing or laying down of guidelines can bring quality back into the system. Hence, a radical approach of allowing market forces to determine and sift the good from the bad players will have to be adopted.

186. Regulatory bodies such as AICTE and UGC should lay the guidelines and ensure that all institutes have a proper accreditation and that they disclose all information in a fair manner. It is now mandatory for institutes and courses to be accredited by NAAC and NBA, respectively, but there are no powers with these two agencies to ensure compliance. Institutes can still choose not to go for accreditation if they do not need any funding from the government. The two agencies also do not have the bandwidth to accredit all 600+ universities and 35,000+ colleges in the country. It is another matter that not all universities and colleges still come within the ambit of accreditation as per the criteria set by the government. The government also does not recognize accreditation by private bodies. Ever since NBA has become signatory to Washington Accord early this year, accreditation by independent private agencies will in fact be detrimental to India's interests. This is so because Washington Accord only recognizes NBA as the body which can do accreditation for Indian institutes. In such a scenario, it is recommended that NBA be encouraged to outsource its work to independent agencies which can help it in carrying out the task of accreditation. UGC and AICTE should gradually move into the sphere

of ensuring compliance with the accreditation process and should be armed with suitable powers to impose curbs on defaulters. They further suggested that build world-class full service universities by converting existing IITs and IISc.

187. They further added that excessive focus on professional and technical education in recent years has also resulted in neglect of liberal arts and full-service universities. That gap can be addressed by immediately converting all IITs and IISc into full-service universities where under-graduate and post graduate courses are offered in science, engineering, liberal arts and humanities. At present, some old IITs do have liberal arts schools but they offer supplementary or elective courses to engineering students. IIMs, IISERs and NITs can be gradually converted into full-service universities. The representative further added that taking the gross enrolment ratio to 30 per cent in 2020 means, we not only need to expand the existing institutes but also add more and more numbers at a rapid pace. While the government is doing its bit by announcing more IITs, AIMS and IIITs in more states and regions, it should also give more freedom to private players to set up universities by making the processes easier and not insisting on a legislative order for somebody to be able to start a university. A simple approval formality from UGC should suffice for that and making things easier will also spur more people with “good” intentions to enter the field of education.

188. They further suggested that there was need to increase autonomy through decentralisation of Institutions. They suggested that more and more institutes need to be given autonomy to set their own courses and make changes in the curricula. They should be free to offer their own exam and handle other regulatory issues. This will gradually also lessen the burden of public universities which are saddled with hundreds of affiliating colleges, at times running into 800 or more. Reducing the number of affiliated colleges will also give more freedom and time to universities to focus on academic issues. Overdue stress on centralization is not desirable as it may end up smothering innovation and curbing heterogeneity and excellence.

189. They also suggested that there was a need to encourage academic research by bridging the gap between research and teaching. Two separate ministries and two separate world view have ensured that teaching and research remain forever disjointed in our country. While Science and Technology ministry does all the funding for research, the teaching part is handled by the ministry of human resource development which remains detached from the research system. To correct this anomaly, all funding to CSIR system (under the S&T ministry) can be gradually routed through educational institutes based on competitive bidding. Institutes should vie to bag research projects which are funded by the government, the way they do in the US. They pointed out that there was also a need to attract and retain good faculty by giving them more power and autonomy.

190. They pointed out that the woeful shortage of faculty can only be addressed by making teaching an attractive proposition for youngsters. They should also find more freedom and autonomy and they should be given greater responsibility in designing their courses the

way they want to teach, rather than being treated as students themselves by heads of institutes. Their promotions should not only depend on the number of papers they produce. Interaction with industry and research should fetch them equal rewards and promotion opportunities. Government institutes should be allowed to appoint foreign nationals as permanent faculty rather than as consultants or for short durations, the way they do at present since only permanent faculty can be expected to have long-term vision for the growth of the institute.

191. They further added that there should be freedom to charge fee, and pointed out that while private institutes are free to charge whatever they want, and can command, from students, government funded affiliated institutes do not have the freedom to do so. While giving autonomy to institutes they should also be allowed to charge a reasonable fee from students and there should be a commensurate increase in the quantum of scholarships so that the subsidy on education becomes more need-based. This freedom will ensure that whatever money gets exchanged underhand in the form of capitation fee is brought in a clean and clear manner into the system and is used to subsidise education for those who need it.

192. They further added that there was also a need to enable foreign direct investment to flow into educational institutions. Under the extant FDI Policy, FDI is allowed 100% under the automatic route in education sector but the holding entities of educational institutions are either trusts, societies or section 8 companies. In the case of trusts, FDI is simply not permissible while in the case of last two, special approvals are required in each case. UGC does not recognize “foreign universities” in its act and AICTE does not allow foreign investment directly or indirectly in the sponsoring body. This anomaly has made joint ventures between foreign investors and Indian partners virtually impossible. This is also the primary reason why the country has managed to attract only a few million dollars in this sector since 2000 even though the requirement is in billions. A specific exemption from FCRA for investment in education sector and changes in UGC & AICTE Act are the need of the hour.

193. The representative of JIIT, Noida submitted that Higher education can be made more relevant by regularly updating the curricula, by improving the quality of teachers, by attracting the persons who wish to join teaching profession by choice and not by compulsion, by getting their knowledge update/upgraded as per the status of knowledge in that area in present time, by improving the quality of students at college level as they are the inputs to higher education system and are the product at the end of the day. Overall processes and systems of higher education need remodeling in such a way so that the graduates coming out from such institutions possess sufficient domain knowledge and skills with reasonable level of competency and quality, as per the expectations of the industry/organizations.

194. The representative pointed out that most of the good higher education institutions are in and around metros and big cities. They are not easily accessible and affordable to a large number of masses living in rural areas in our Country. More institutions with focus on quality could be opened in government, private or PPP mode at different locations in rural and semi-rural areas. This will increase the accessibility to majority of the population, at isolated and

remote locations. Quality higher educational institutions to young people in nearby places will also decrease their cost of education as they can cut on many expenses by staying at their own places.

195. He further added that affordability can be increased to deserving students of economically weaker sections of the society by providing them scholarship and hassle free loans by the Government/Banks/Trusts/Societies. The students should get scholarships/loans directly at their own levels. However, they should pay the fee to the Institution regularly by themselves so that the institutions could meet their expenses without any difficulty.

196. The representative pointed out that there was also issue of Employability of Degree Holders. It is rightly being said that about 40 percent degree holders are suitable for some kind of employment and about 60 percent are not employable at all. The reason for sub-standard quality is insufficient domain knowledge and lack of communication skills possessed by the teachers, as they are not able to effectively penetrate in the minds of their students. Most of the Institutions do not revise their curricula regularly; thus no current/state of art knowledge is passed-on to their students. Thus lack of domain knowledge and deficiencies of skills make students unsuitable for employment. Each institution should have clearly defined mechanism in place for improving the quality of its teachers with respect to each one of above mentioned parameters.

197. They also pointed out that the Private Education Providers face a lot of difficulties in running the higher education institutions due to insufficient financial resources, non availability of quality teachers at the cost they offer and getting students of much lower standard. Private sector institutions are not getting any type of financial support from the government and are controlled by Regulatory Bodies and Government Policies. A large number of teachers are working in these institutions and their stability and continuation always remain an issue and with such type of compensations, they are not satisfied and committed and do not deliver upto the expected level. As the passed out graduates from both public and private sectors are serving the nation in industry/organizations, thus private sector institutions should also be provided some support to establish the institutions. Land could be provided to these institutions by the government on a very nominal lease rent. They could also be supported from time to time for modernization and up-gradation of infrastructure/facilities based upon the academic performance of their students.

198. They also pointed out that Regulatory Bodies like UGC, AICTE and DEC should work as the facilitator to higher education institutions in private sector and not merely as Controllers and Regulators. Many times, though the intentions may be good, but in reality at ground level, the assessment being carried out of such institutions appears to be as Controller and Regulator and not as a facilitator. At present, for getting the approval for running different programmes in an institution, the institution has to separately move to different regulatory bodies to get separate approvals for each programme which is quite cumbersome and disheartening. Single window concept should be introduced for the assessment and approval by

the regulatory bodies. One of regulatory body, having wider and main role to play, could carry out complete process of assessment and, thereafter, approval accorded by the higher regulatory body could be accepted as the approval by all other concerned regulatory bodies.

199. They also submitted that there are a large number of vacancies of teachers in Government, Central and State Universities. Private Institutions are able to manage numbers, but by compromising on quality, experience & qualifications. This is due to non availability of quality teachers as per the norms and standards laid down by the regulatory bodies. The expected numbers of Professors, Associate Professors and Assistant Professors should be made more realistic as per the available trained and qualified manpower with desired experience and exposure. They also pointed out that that the traditional Universities are most of the time busy in carrying out routine teaching and training processes at undergraduate and postgraduate levels and are not able to focus much on research and innovation. There should be judicious mix of routine teaching, research and innovation in the assigned responsibilities of each teacher. It should be ensured by the University that this happens in practice.

200. The representative of Lovely Professional University submitted that reforms in regulatory framework are required as mentioned below:

- (i) Providing autonomy and self-regulation of institutions to enable them to explore new and innovative ways to develop and deliver high-quality and relevant study programmes according to diverse needs of industry and society.
- (ii) Easing the norms and providing support/relaxations to encourage creation of new institutions and additional capacity in existing institutions to promote competition in the higher education sector. The increasing demand-supply gap will compel the institutions to provide relevant and high quality education at low-cost to produce employable students for gaining faith of the students and parents for their survival in the long-term.
- (iii) Rationalization of faculty norms and adequate weightage to industry experience to encourage industry professionals to take up faculty positions instead of over-emphasizing the need for doctoral degrees.
- (iv) Easing of norms for foreign collaborations with equal applicability to all government and private institutions.
- (v) Doing away with unwanted stringent laws/regulations providing for punishment of term imprisonment, exorbitant penalty of crores of rupees should not be allowed in the holistic higher education sector as these create undue fear among the academicians, philanthropists etc. and discourage them from engaging in this sector. For example, The Distance Education Council of India Bill, 2014 under consideration of the HRD Ministry containing punishment of 3 years imprisonment and penalty of 2 crore fifty lacs.
- (vi) Distance and online modes of education need to be promoted as these are the best

way for wide spread access of low-cost high quality education with extensive use of ICT tools to masses even in far-flung areas who would otherwise have no access to higher education. For that purpose also, reforms in regulatory framework are foremostly required to do away with the irrational norms limiting the reach and meaning of these education modes. The present illogical restrictions confine the institutions to offer distance education and online education programmes to the students within their state only and further also mandate the private universities to set up study centres with the approval of the UGC for every study centre that too in the affiliated institutions only, which is not feasible and also unwanted. So such norms need to be done away with so that people having no access to regular education in their nearby areas can be reached through these modes.

(vii) Rationalization of norms of the apex bodies for the opening of institutions and enhancing institutional capacity needs to be made rationalized and logical ones by doing away with unwanted exorbitant futile expenditures, adding to the cost of education for the students/parents. To cite a few norms,

- Initial requirement of 500 books per course-division for engineering courses prescribed under AICTE norms seems justified, but annual addition of 250 books per course-division of 60 students for B.Tech courses and 400-500 books per division for other courses like MBA, MCA, B.Pharm, B.Arch., HMCT etc. after the first batches in all years are passed out is irrational and a futile expenditure that can be made for other important institutional purposes. Moreover, presently teaching-learning through E-books and other online/digital study material is preferred over hard bound books and as many editions of good authors are also not available. So these norms also need to be revised.
- Similarly, under AICTE norms, Computer:Student ratio of 1:2 is stipulated for MCA course, which is a technical course, same norms are also made applicable for non-technical course like MBA and similar is the case with courses in Engineering, Architecture and Applied Arts & Craft for which Computer:Student ratio of 1:4/1:5 is stipulated, which is totally unwanted. Students as well as the teachers in large number now use laptops and other modern gadgets for study/teaching and moreover the UGC model curriculum of these courses does not justify the requirement of so many number of PCs.
- Likewise, under the NCTE (Recognition Norms and Procedures) Regulations, 2014, infrastructure requirements are quite excessive and illogical. For intake of 100 students of 2 years B.P.Ed programme, in addition to the classrooms, ten tutorial specialization class rooms are mandated. For B.Ed. alone, initially 1000 titles and 3000 volumes of books are mandated and thereafter these are to be augmented with addition of two hundred titles annually with three copies of each.

201. They further added that quality of higher education needs to be improved as today not a single Indian university features in the top 200 world university rankings. They suggested the following steps:



- (i) Primarily, higher education needs to be synchronized with the industry with active engagement of industry professionals/experts in all the operational areas of institutions. Further regular re-evaluation of the curricula, pedagogy, assessment modules, student-learning etc. with the evolving needs of the economy is also necessary to stay relevant. Students are also much needed to be encouraged to take up entrepreneurship by focusing on developing entrepreneurial skills among them and by supporting them through funding or otherwise during ideation, planning and implementation phases. Various skill-oriented training modules/courses are also required to be provided to the students in collaboration with skill-based training providers to enhance the students' employability.
- (ii) Extensive use of a blended learning model needs to be promoted, wherein teaching at Indian institutions can be offered in combination with those provided by the top global universities. Lectures delivered by local faculty can be supplemented by pre-recorded lectures given by best-in-class faculty from the top institutions. Collaboration with foreign institutions for faculty exchange should also be promoted.
- (iii) Emphasis is also needed on the Faculty development to enhance the effectiveness of their teaching skills.
- (iv) Reforms in regulatory framework are also required for giving level playing field to the private institutions. Private institutions in the school education sector has contributed a lot towards quality and today people prefer to send their wards to private schools and not to the government school even if located nearby. Private participation has mainly flourished in North India during last 15 years and in South India during last 25 years. So it will take some time for private institutions to improve the quality. As far as shortcomings are concerned, government institutions are not an exception to that.
- (v) In spite of a significant contribution of the private sector in increasing the educational opportunities in India, they are not believed upon and rather separate stringent rules and regulations are imposed on private institutions and unwanted allegations of indulging in malpractices or commercialization of education are made against the private institutions. On the other hand, the government institutions enjoy a protected environment. As many cases of malpractices like leakage of papers, charging of bribe or donations, shortage of staff, deficiency of infrastructure etc. are reported each other day, but no action is taken against them. E.g. eight new Indian Institutes of Technology (IITs) were established after the government's decision in 2008 to increase the number of these premier education bodies. Years after their establishment, the new IITs at Gandhinagar, Ropar, Jodhpur, Hyderabad, Indore, Mandi, Bhubaneswar and Patna are functioning on temporary campuses, still they are allowed to operate. Had any such deficiency reported in any of the private institution they might not have been even allowed to start.
- (vi)

Similarly, while government universities established by the State Legislature are

allowed to open study centres at their discretion after obtaining approval for offering distance education programmes, however private universities established by the State Legislature are required to obtain separate approval for opening study centres.

Similarly, applicability of unwanted and illogical stringent criteria enforced for allowing foreign collaborations is also limited to the private institutions only, and government institutions are given an exemption.

202. Besides this, while the UGC regulations for mandatory accreditation were framed for the purpose of all government and private universities and institutions, however later on extension was given to the government universities alone while private universities were not given such extension. So, equal opportunities to government and private institutions and equal applicability of rules and regulations in all respect is much needed to encourage the private participation in higher education so as to promote healthy competition and ultimately to increase the access and quality of education. As far as commercialization is concerned, it is a matter of past, due to demand exceeding the supply. At present due to supply exceeding the demand, students now themselves are the Regulators. As many seats in various institutions are lying vacant, as the students have as many options to choose the best institution as per their requirements and affordability. The pointed out that at present in market driven education scenario, the institutions are not in a position to charge donations, excessive fee etc. from the students for admission, however any institution still if indulged in such practice, that will itself loose the students as many other options available to the students and will not be able to survive longer. As observed, a large number of private engineering colleges have applied for closure.

203. They further added that educational programme offering need to be synchronized with the needs of industry and the society, with active engagement of industry professionals/experts in all the operational areas of institutions. Further regular re-evaluation of the curricula, pedagogy, assessment modules, student-learning etc. with the evolving needs of the economy is also necessary to stay relevant. Students are also much needed to be encouraged to take up entrepreneurship by focusing on developing entrepreneurial skills among them and by supporting them through funding or otherwise during ideation, planning and implementation phases. Various skill-oriented training modules/courses are also required to be provided to the students in collaboration with skill-based training providers to enhance the students' employability. Further reforms in regulatory framework are foremostly required to give a conducting, level-playing and enabling healthy environment to the institutions to deliver their best.

204. The representative further added that inspite of a significant contribution of the private sector in increasing the educational opportunities in India, they are not believed upon and rather separate stringent rules and regulations are imposed on private institutions and unwanted allegations of indulging in malpractices or commercialization of education are made against the private institutions. On the other hand, the government institutions enjoy a protected environment. Further, it is mentioned that the existing regulatory framework does not support the private participation in higher education sector. New bills/ regulatory measures are being worked upon to regulate the activities of private institutions in specific. To cite a few, restructuring of AICTE and

UGC as well is ongoing to empower these bodies to regulate the private entities in specific apart from other regulatory measures. Similarly, UGC Regulations for private universities, 2014 are also framed/finalized though the Constitution does not permit the Union Government to regulate the universities, whether private or government. Equal opportunities to government and private institutions and equal applicability of rules and regulations in all respect is much needed to encourage the private participation in higher education so as to promote healthy competition and ultimately to increase the access and quality of education. It is reiterated that private institutions are rather compelled to provide high quality education and affordable education to attract more students for their survival. As far as commercialization is concerned, it is a matter of past, due to demand exceeding the supply. At present due to supply exceeding the demand, students now themselves are the Regulators. As many seats in various institutions are lying vacant, as the students have as many options to choose the best institution as per their requirements and affordability. We understand that in the present market driven education scenario, the institutions are not in a position to charge donations, excessive fee etc. from the students for admission, however any institution still if indulged in such practice, that will itself loose the students for as many other options available to the students and will not be able to survive longer. As observed, a large number of private engineering colleges have applied for closure.

205. Private contribution in educational investments, not-for-profit, so far has been possible due to equal treatment with the private and government institutions; and in case separate/tougher regulations, norms etc. are enforced for the private universities, that will be sufficient enough to discourage the philanthropists and reduce the educational opportunities in the country. On the steps the private education providers are taking to achieve quality in the higher education system in the country to make it globally competitive they submitted that a few steps being taken to improve quality and relevance of higher education system and make it globally competitive:

- Skill-related training is embedded in the curricula to make the students ready for employability soon after their graduation like functional skills that are core to the profession/industry of the students' course, critical thinking skills and problem solving skills to produce well rounded leaders and soft-skills such as written and verbal communication.
- Industry-aligned courses are offered.
- Content, pedagogy etc. are developed in a manner that support experiential, interactive, and student-centered learning and their regular re-evaluation with the evolving needs of the economy to stay relevant.
- Faculty with industry experience is preferred.
- Maximum industry engagement to synchronize the programmes offered with the requirements of industry such as in the governing bodies, in designing curricula, seminars/ conferences, industry tours, live industry projects, partnerships with industry for offering programmes, internships etc., sharing of research facilities etc.
- Students are supported in monetary terms as well as supporting them in ideation, planning and implementation of start-ups/ventures.
- Collaborations with the corporations are also made to make industry-relevant research.
- Students and faculty are also sent to visit foreign institutions and industries to get global exposure.

206. They said that they did not agree with the view that traditional universities in the country, being over-burdened with imparting undergraduate and postgraduate education and managing the affiliation system, are not able to focus on research and innovation. They further added the existing system comprising of affiliating universities, on-campus universities and affiliating as well as on-campus universities is going well. The universities engaged in teaching along with the research have internal pool of expertise to be deployed for research, innovation etc. for which otherwise they have to depend upon external sources. Moreover these are in better position to co-relate the research and innovation with teaching.

207. The Pro-Chancellor of Noida International University (NIU) submitted that the higher education system in India should contain the qualitative approach towards the teaching methodology and meeting the needs of the corporate sector and the nation. As of 2012 there are 152 central universities, 316 state universities 191 deemed universities, 33 universities that are of national importance and large number of private universities in India. The centers of higher education do not get adequate support from the higher education bodies in terms of grants, subsidies and other facilitates related to education, which automatically enhances the cost of higher education. To make the working viable, the private higher institutes are bound to charge more as compared to those institutions which are getting grant and subsidy from central, state and any government local authority. Therefore the government should facilitate the good private higher institutions by different ways like providing scholarships, grants and educational equipment at the subsidized rates. Without the support of government authority, the private higher institutions will not be able to survive.

208. The further added that the higher education in India should focus on the curriculum and teaching methodology which should be industry based, cotemporary and indeed have a relevance today. This can only be possible when combination of corporate and academic experience based people come under one roof. We must synergize the combination of these two specialists. Add on to lectures should be discussions, brain storming, generating new thoughts and ideas and more importantantly, to come out with something new, which is not written in books and beyond the beaten tracks. He pointed out that the lay great emphasis on infrastructural development, rather than creating an environment of academic excellence in the students. Teaching, apart from providing knowledge, must equip them to make them industry-ready, providing knowledge as well as self-employment entrepreneur skills. The regular revision and updating of curriculum is an imperative. The curriculum should be contemporary, incorporating latest developments, making the students market/job oriented and also men and women capable of independent thinking, imbued with values, ethics and nationalism. The faculty engaged in higher education, should be more research oriented, with focus on patenting, wherever possible.. This will help generating new ideas and innovation.

209. The Pro-Chancellor further added the Establishment of Private Universities has been a major milestone in the field of higher education in India. A number of private universities have been established in various States as also Central Government of India has granted Deemed University status to a number of educational institutions. In this era of liberalization and global education, it is to attract, encourage and promote the private sector investment in the realm of Higher Education and lay the legislative pathway to establish and incorporate private self-financing Universities in India. It is the right time to develop and implement a progressive framework that provides for opportunities to deserving private institutions and educational promoters, with relevant and sufficient experience and exposure in the field of higher education, so as to contribute towards the expansion of higher education and research.

210. He also pointed out that the three major regulatory bodies, that is AICTE, UGC and DEC should be more flexible and work as a facilitator and one cannot expect the private higher educational institutions to fulfill the norms of applicable bodies without state backing. He submitted that they have to full fill the norms and on the other hand have Fee Regulatory Committee which monitors the fees charged by the higher institutions. The three bodies should consider the compulsions of Private higher institutions in terms of fund and should have flexible norms for them accordingly so that they instead of investing heavy cost on infrastructure, they can utilize the same on the quality of teaching so that they can produce excellent results. Though the RTI which came into effect fully on October 12, '05, mandates "access to information under the control of public authorities, in order to promote transparency and accountability", all information given to UGC which is a public authority is available to the public.

211. He also submitted that students and parents can now demand from institute's documentary evidence, such as certificates to prove their recognition by regulatory and accrediting bodies. Still lots of reforms are to be made by keeping unaided private higher education institutions, like time should be given to Higher Education Institutions (HEI) to establish themselves in terms of infrastructure, faculty and other facilities; the functioning institutions should be given adequate guidance to enhance the standards of education. The UGC, AICTE and DEC should conduct their seminars and workshops to collect, incorporate and disseminate the best practices of higher education.

212. The Pro-chancellor further added that the absence of good faculty has assumed epidemic and chronic proportion. The unfortunate incidents of fake degrees have only aggravated the problem. This problem is confounded by the law of demand and supply. Another dimension is of fake degrees and mark sheets. Different scales of marking and evaluation have made the task even more complex, Universities grade them high, but their students do not seem to agree. The faculties are, primarily, appointed on the basis of their qualifications (I.Q.) rather than their experience, quantum of research, their potential to be lifelong learners, patience, integrity etc. He submitted that if there are 50 faculties in an institution and if every faculty publishes four research paper in a year, this adds to 200 research papers in a year from one HEI. This not only increases the knowledge bank but has a snow balling impact. He also added that the serious private educators are keeping their benchmark very high to compete globally. They have built excellent infrastructure, motivating the faculties to be research oriented, rewarding and recognizing their original and sincere work, undertaking academic collaborations with Industry and HEIs outside India for student/faculty and exchange program, encouraging their faculties to attend conferences, seminars and Management development programmes (MDPs ) program of various levels for executives in the Industry. The HEIs are also doing Faculty development programmes (FDPs) for their faculty, regularly. Clubs like Management, IT, Sports, Quiz, etc are initiated where the students participate regularly, to channelize their energy and harness their talent.

213. The representative of NBA submitted that India had a complex multi-tiered, multi-layered system, from internationally renowned IIT and equivalent systems to colleges focussing on UG education. It was a large part of relatively recent vintage where some were definitely suffering from resource crunch, leading to infrastructure issues, but improving. They submitted that faculty

numbers and quality improving remain an area of concern. On the NBA's Accreditation Policy they submitted that NBA was following general policies and the guiding principles for the accreditation of programs were :

- (i) Programs, and not Educational Institutions, are considered for accreditation.
- (ii) Programs from which at least two batches of students have graduated are considered for accreditation.
- (iii) PG Programs: Corresponding UG program must first receive accreditation.
- (iv) Major Changes is Introduction of outcome based accreditation, rather than inputs based.

214. They further added that following steps were required to improve the quality of education:-

- (a) evolving changed methodology
- (b) Rewriting all the documents to conform to the new system
- (c) Training institutions to reposition their internal processes to effect self-evaluation on the new system
- (d) Training and mentoring evaluators who would form the evaluation teams, and important committees of NBA.
- (e) Introduction of Two-Tier System based on Types of Institutions.
- (f) Ranking Autonomous Institutions: applicable to the engineering/technology programs offered by academically autonomous institutions and by university departments and constituent colleges of the universities.
- (g) Ranking Affiliated Institutions: (also non-autonomous institutions): colleges and technical institutions which are affiliated to a university.
- (h) Similar set of criteria to be prescribed for accreditation for above both institutions , with some differences in emphasis and approach.

236. They also informed about the quality initiatives taken by NBA:-

- (a) Development of e-NBA portal.
- (b) Constant re-alignment of its accreditation processes with international practices.
- (c) Development of Training Material and Training eco-systems both for evaluators and for mentoring institutions.
- (d) Development of a strong system for empanelment of volunteers with sound professional background and in-depth knowledge of accreditation systems.

The Major Challenges in front of NBA were also given:-

- (a) Build a large pool of volunteers to act as:
  - (1) Evaluators,
  - (2) Visit team Chairs,
  - (3) Mentors to academic institutions.

215. The representative of SRM submitted that to make education more relevant Curriculum of any program should be application oriented and the application shall be appropriate to Indian requirements and ethos. He gave the following suggestions to tackle the issues and challenges in higher education:

- a) Industry-University partnership—student internship, faculty sabbatical —some in industries in responsible assignments
- b) Faculty autonomy/freedom; faculty development program —teaching/learning enhancement—use of master teachers
- c) Research support/expectation of high levels of research; tenure system—faculty to be made permanent after a substantial period like 7-10 years
- d) Research must be encouraged at all levels—Research Experience for Undergraduates (REU) should be encouraged in addition to graduate and doctoral levels
- e) Qualitative improvement of doctoral programs
- f) There shall be single portal which will contain all the updated basic information about the institutes of higher education including the fee structure of different programs offered by them, procedure for admission etc. Existing information available with UGC/MHRD websites are not current.
- g) Access can be ensured by extending credits at soft terms to students. In doing this, the decision is taken by the students and parents considering the needs and interests of the students. Institutions compete for their attention via excellence in teaching/learning, research and career prospects. Marketplace (or reputation of an institution becomes the guiding criterion—competition ensues among the institutions to become the best in class) Independent accreditation and Autonomy of educational institutions
- h) “Make in India” will only happen if we can educate our children with the right skills for the 21st century; this will determine if we end up with “demographic dividend” or “demographic disaster”.

216. They further added that industry’s opinion that only 60% of graduates are employable is questionable. Educational institutes cannot churn out graduates to suit the needs of every type of industry. Industry should also take up the responsibility of training the graduates to suit its needs. The following are the measures to be taken to increase the employability:

- a) Curriculum reengineering—rigor versus relevance—role of group project work, hands-on experience. Obsolete courses shall be removed and in their place contemporary ones to be added. Case studies / project shall be mandatory as well as seriously implemented.
- b) Courses and programs have to be relevant via close Industry-University collaboration. Visiting faculty from industry to be engaged to frame and conduct a few courses.
- c) Faculty to be sent to industry to understand its dynamics. Faculty sabbatical in Industry.
- d) Existing mechanisms to be revamped drastically. Considering the importance of enlarging the enrolment ratio, private players to be encouraged to set up institutions without much hindrance. They should be asked to publish the details of the institutes in public domain through an affidavit and in a competitive environment only the fittest can survive.

- e) As for the students are concerned, in this era of information explosion, they can make suitable choices on their own. Banks should advance soft loans to set up infrastructure. Higher enrolment is not usually matched by corresponding increase in quality faculty. Only way out of this is to train and re-engineer the available faculty by systematic training programs. State-wise, region-wise training centres shall be set up and faculty from renowned institutes shall be used as resource persons on rotation basis. Use of MOOCs may be encouraged and faculty training abroad may be introduced.
- f) Transparency in decision-making and infrastructure requirements must be clearly stated in website and meeting this should result in automatic approval
- g) Mandatory for higher educational institutions to obtain independent autonomous body accreditation within five years failing which approval must be withheld until remediation completed.
- h) MHRD should stay at arm's length and institutions should be free to experiment with education. Marketplace and accreditation will determine their success or failure.

217. The Committee during its study visit to Goa and Pune interacted with the Vice Chancellors of Goa University and Savitri Bhai Phule University, Directors of IISER, Pune, NIT, Goa and College of Engineering, Pune and also the representatives of UGC and AICTE.

218. The representatives of IISER, Pune pointed out that at present UG education lacks both breadth and depth without any research component. UG education with research component is implemented in the newly established IISERs and other elite institutions such as IISc. However, its implementation in mass scale in science and engineering colleges is difficult at this moment. The main issue with UG science education is the lack of quality teachers in colleges who can excite students not only in science, but also help them in preparing for a world beyond academics. There is a need to bridge the gap between theory and experiments in science and to link teaching closely with broad evaluations of students' abilities rather than their scores in exams. After 2 years of UG education, students should be counseled about their aspirations in science to Identify and promote a small number of highly motivated students aware of science based social sectors to direct their interests and necessary skill development. He further, added that UG science education curricula should be redesigned to broaden the development of science based societal skills, at the same time mentoring highly talented ones to take up career in research.

219 . They also pointed out that for India to be an economic power, we need to become science-focused rising powers as Korea, Taiwan, Mexico, Brazil and China. These countries have



invested heavily in science education and research amounting to 1.5%-3.0% of their GDP. For every one academic scientist, they have anywhere between 5 to 10 industrial contribution, India has to not only increase governmental contribution, but also make schemes attractive to entice industry contribution (from the present 0.9%) to science. Some of the important features to become world-class institutions are Outstanding faculty recruited based only on merit and competitiveness, promoting a strong postdoctoral culture and attracting international fellows, fundamental research and scholarship should coexist in mutual respect with applied and industry-relevant research, secured, regular flow of funds and continuous top-up for new initiatives, Endowments and creation of chairs to attract distinguished and eminent scientists, Internationalization of faculty and students, Increasing the opportunities for International conferences-organizing and participation and Establishing inter institutional consortia to attract national and international funding. Unfortunately, even the best of our research institutions hardly meet even half of the above criteria.

220. The representatives further added that research as a part of UG and PG courses are being effectively practiced only in the newly set up institutes such as IISERs, NISER, IISc and a few IITs. The quality of students graduating from these institutes is almost at par with international levels. Most universities seriously lack research infrastructure even for PhD program, let alone for UG and PG programs. Further, the quality and quantity of faculty passionate about research is very low in most universities, leading to lack of an eco system. In such a situation, universities should be organically connected with national laboratories (CSIR, ICMR, DAE etc) that can provide research infrastructure to train UG/PG students to some extent.

221. He further informed that India has a paradoxical situation and pointed out that we have a number of doctoral students (>8000/year), but have a large number of unemployment of doctoral students. At the same time, more than 10,000 faculty positions are not filled up because of non-availability of right candidates, in addition to several administrative blockades. Attracting motivated teachers needs a good, healthy academic ambience, which in turn needs good institutional management and governing systems. While some of the private educational institutes are rapidly emerging good in this area, most government institutions are lagging behind due to outdated and highly bureaucratic recruiting systems and poor leadership.

222. He further added unless the teachers are given a good status, comfortable salary, professional amenities and security, the profession will not attract the best. Not only, we need to address the basic necessities of profession, but also keep updating the teachers with new knowledge through well defined systems Faculty training in a systematic manner is neglected in Indian education system. Somehow, teaching has become the last resort for those who cannot get any other job, it is such an important profession in society (perhaps most important), we need to redefine our education program to encourage quality teachers.

223. They further informed that the points system introduced is a disaster and quantification of performance through numbers (foreign publications, international conferences etc) should be disbanded. The performance appointments should be done through competent committees that are unbiased. They further submitted that research not becoming the first choice of meritorious students. The number of scholarships offered by CSIR/UGC is decreasing in numbers and many students in universities do not get sufficient money under scholarships. The schemes for award of scholarships needs overhaul, to make sure that interested students get scholarships. All funds available with different agencies should be pooled so that there is a one-point scheme for scholarships with same rules and regulations for amount of award and monitoring progress etc.

224. They informed that the industry-academy interactions are very poor in India. Industry should take the first step of interfacing with academia, since they are the main beneficiaries of our academic system. Right from supporting faculty with exposure to industry requirements and to fund them to cover inadequate government support to taking part in appropriate course design and execution are important. If academia is not exposed to industry challenges, there is no way they can train students for effective use of industry.

225. They further added that the syllabus and teaching methods in UG and PG courses in most universities are highly teacher centered and exam-oriented. They are not learner centered and concept driven. The information is passed on from teachers to students, with neither of them understanding the value of the same and unable to convert into knowledge. We need “inquiry based learning” , teaching through asking questions, which alone will help in students understanding concepts and learn how to solve problems. The teachers should get constant training in new forms of teaching to train students in 21<sup>st</sup> century skills.

226. On the issue of accreditation, the representatives submitted that rules have become more of procedures than the real intention of quality control/evaluation. Same set of rules are applied to

different institutions, without consideration of the original objectives and aims of their establishment and too many organizations unprofessionally managing the process of regulation and accreditation. Many of the members of these bodies are also heads of institutions, who themselves may not have the standards (at their institutes) that they evaluate in other institutes. This leads to conflict of interest and erosion of credibility of the process. The members of such committees should be drawn from institutes that have high standards.

227. The representatives further pointed out that significant number of bright students originating from rural areas have serious economic problems in affording tuition fees and hostel expenses. As such, fees amounts are ridiculously low in government institutes and coupled with insufficient and irregular flow of funds from government, quality infrastructure cannot be provided in these institutions. Topping that fee waivers to economically and socially weaker students means that more than half of students in many institutes do not pay anything at all. This issue should be linked to CSR (Corporate Social Responsibility) policy of the government. Instead of making institutes deficient in funds due to genuine reasons of economic hardship of students, incentives are given to promote industry situated locally to absorb such costs, so that institutions are not devoid of funds. The fee structure needs to be revised to enhance the same for affordable section, while those who cannot afford should be taken care by CSR. There should not be a 'Waiver' which leads to lower fee revenues to already income deficient institutes.

228. They further added that the IITs, IIMs and recently IISERs are reaching world class levels because of two factors higher per student capita investment that has led to better facilities and high quality faculty and autonomy of governance and self regulation.

229. The VC of Savitribai Phule Pune University submitted that following are a few major issues before higher education sector in India:

- Unified Control of Higher Education: There is multiplicity of Statutory Authorities controlling various aspects of Higher Education System in India. This structure has led the education system to rigid compartments isolated from each other. The focus on inter-disciplinary work and trans-disciplinary work in higher education and research, it would be appropriate to have a single apex body controlling the Higher Education Sector in India.
- Internationalization of Higher Education: It is essential to develop a policy framework that encourages and incentivises interactions/collaborations with leading foreign institutions.

Select higher education institutions in the country may please be allowed to institute joint degrees with foreign collaborators. The legal framework may please be suitably modified in this discretion. Faculty and students mobility needs to be encouraged and a reasonable level of foreign hospitality may please be kept out of the provisions of Foreign Contribution Regulation Act (FCRA).

- Enhancement of Access: e-Content Development: Aspiration of the students to pursue quality higher education have led to concentration in urban areas and lower enrolments in rural institutions. Universities need to evolve framework to support rural institutions by developing e-contents, which could be shared with all. Open online courses may please be incentivised. Select universities could be allowed to institute programs in blended mode (partially on campus and partially distance mode) without any additional approvals. Such an arrangement shall facilitate access for rural students to quality faculty.
- Examination reforms: Increasing burden of affiliation system can be relieved to some extent by carrying out thorough reforms in the examination system of the universities. The Government may consider supporting the higher education institutions in the country for carrying out examination reforms using ICT. Some significant steps taken by our university in this direction can guide development of such a system.
- Skill-Development Initiatives: Universities clearly need to underline the employment/career prospects of each of the programs in their portfolio. Every curriculum needs to be supplemented by skill-development components. Employability audit of all the students need to be carried out to identify gaps for policy inputs.
- Enhancement of Quality of Research: Quality and impact of research work in India has always been a matter of concern. In my opinion, the issue needs a long-term phase-wise planned effort to improve the research quality. It essentially begins with creation of research culture amongst the universities and development of necessary research infrastructure. The Government has a major role to play in this area. Sometimes, rigidity of the rules/norms to be a hurdle while attracting researchers of eminence to the institutions, for example, recruitment of foreign faculty, flexibility of pay scales etc.

- Vacancy Faculty Positions: Substantial number of teaching positions are vacant across higher education institutions either for want of quality applicants or for permission from appropriate authorities to fill the positions. Considering that, recruitment of quality teachers is a challenge; a leniency of policy in this regard will be highly appreciated.
- Uniformity in service conditions for teachers in central and state universities: It is essential to have uniform service conditions including pay and other service related conditions. This would prevent talent-drain from state universities to central or private universities.
- Downsizing of affiliating universities: Most leading universities have very high number of affiliated colleges leading to burdening the entire affiliation system. This issue has been pointed out by many studies and policy documents in this regard. One of the effective ways to resolve the issue is to create and strengthen sub-campuses of these universities at district level to eventually evolve them as full-fledged universities. The kind consideration of the Committee is earnestly requested in this regard.
- Meaningful autonomy of state universities: The state universities though believed to be autonomous in their functioning are actually bound by a deep nesting of rules and regulations by the apex bodies and state governments. Thus, the universities cannot institute degrees programs of specialized nature or award degrees other than those specified. Further, specialized efforts for retention of exceptional talent are challenging within the framework of rules. These issues coupled with several circumstantial approvals constrain the autonomy. It is requested to ease out framework of regulations, at least for select performing universities.

230. The representatives of AICTE submitted before the Committee that the research in the required fields of study in Technical Education is affected because of shortage of funding from the Ministry. During the last 2-3 years there is gradual decline in the funding under the Plan Grants from the Ministry which is affecting the research project in technical education. To encourage research at under graduate level, AICTE supports funding for “Research Park Scheme” which are established at the institutes jointly through the initiative of AICTE and Industry who share 50% of funds requirement for innovation centre. The National programme on technology untenable over 600 courses on video and are available on the Portal free of cost for institutions imparting

technical education. In addition to NPTEL video courses a few new courses are now available in selected institutions (i.e IIT Mumbai, IIT Kanpur, IIT Madras etc) on Massive on Online Open Courses (MOOCs) platform through which a student can earn credit for the respective courses. AICTE has also taken a policy decision to support up to 20% credit earning in a semester through MOOCs. AICTE has been entrusted with the task of developing SWAYAM MOOCs Portal.

231. The Council of AICTE has recently approved a new scheme called (Trainee Teacher Scheme) for identification of bright students at graduate level (B-Tech Level) who would be given admission to Post-Graduate Programme and their stipend will be paid by AICTE against minimum teaching assignment during PG Education. On completion of PG they will be absorbed as faculty members for regular teaching.

232. He further added that Accreditation should have a central role in the regulatory arrangements for higher education. It would be mandatory with clear incentives and consequences. In order to handle large volume accreditation, there is a strong case for Capacity creation in the existing bodies i.e. NAAC (for institutional accreditation) and NBA (for programme accreditation mainly technical education. Each of these accreditation agencies should be professionally strong, independent and capable of using a combination of self-assessment and external reviews to accredit institutions. The present status of barely 5% of the Engineering institutions, with their courses being accredited by NBA, presents a grim scenario speaks of the quality of technical education offered by our technical institutions and a lot needs to be done in this context.

233. The Council is providing grant-in-aids to AICTE approved Technical Institutes to maintain quality of education. Further, in order to maintain the uniformity in the syllabus and keeping in view the requirement of the industry and to enhance the employability of graduate, AICTE also develops the model curriculum of engineering, management, pharmacy, architecture and town planning courses at degree level and engineering courses at diploma level. As per the provision under AICTE Act no Institution can offer any technical programme without seeking prior approval of AICTE. A number of Govt./Private Institutions are offering specialized short duration programmes for passed out students like courses in Computer Programme, Entrepreneurship, CAD/CAM, Cyber Security, embedded system etc. Such short duration courses are not under the ambit of AICTE.

234. The representatives of UGC submitted that the Commission had taken following initiatives for Equity & Inclusion. In accordance with the national policy, the Commission has taken measures to ensure that access to higher education in India percolates society thereby facilitating the entry of the underprivileged in the mainstream of civic-public life through education. A few of the schemes and regulations launched by UGC which address the principle of equity and inclusion are as under:

- UGC (Promotion of Equity in Higher Educational Institutions) Regulations, 2012
- Scheme of Women's Hostel
- Post Doctoral Fellowship of SC/ST
- PG Scholarship for Professional Courses for SC/ST
- Rajiv Gandhi National Fellowship for SC
- Rajiv Gandhi National Fellowship for ST
- Maulana Azad National fellowship for Minority Community
- Indira Gandhi Single Girl Child Scholarship

235. In order to encourage research and development in the country, UGC has laid out a number of schemes, awards, fellowships, assistance is provided to institutions of higher education as well as faculty members working therein to undertake quality research in almost all areas of knowledge across disciplines including revival and promotion of indigenous languages. The following schemes have been initiated:-

- Universities with Potential for Excellence: This scheme has continued since IX Plan wherein financial assistance is provided to eligible institutions to the tune of Rs. 60.00 crores which is increased to Rs. 100 crores after 5 or 10 years. The grant under the schemes is to be utilized partly (50%) on holistic development of the university.
- Centre with potential for excellence in particular areas: (CPEPA) - UGC introduced the scheme of Centre with Potential for Excellence in Particular Area (CPEPA) during IX Plan period, which has been continued upto XII Plan period for development of academic/research infrastructure to improve the programmes and activities in a chosen discipline at the selected university. The CPEPA Scheme focuses on supporting the development of inter-and/or multi-disciplinary areas and specific research projects in these areas at the selected Centres. Under the scheme financial assistance is given as under.
  - Rs. 10.00 Crores for Science/Technology areas; and
  - Rs. 8.00 Crores for Social Sciences/Humanities areas;
- Special Assistance Programme (SAP): Special Assistance Programme is intended to encourage the pursuit of excellence and teamwork in advanced teaching and research as well as to accelerate the realization of international standards in specific fields. The major objectives of the SAP are to identify and support university departments that have the potential to undertake quality teaching and research in various educational disciplines including allied disciplines. The programme caters to the society needs by facilitating interaction and collaboration among universities, industry and eminent research organizations. Further the financial assistance provided under the scheme helps build up

research infrastructure and human resources.

- Research Projects: UGC provides financial assistance to teachers teaching in universities and colleges to promote excellence in teaching and research. Research project may be undertaken by an individual teacher or a group of teachers.
- Basic Science Research : With a view to providing an opportunity for continuance of research contributions in Basic Science Research by talented Science and technology scholars/teachers. The objective of the programme has to give a big boost to scientific research. The scheme provides for:
  - Improvement of Infrastructure in Universities (544 Depts. (SAP) 500 (non-SAP Dept.)
  - Support to Colleges (Up gradation of Science Laboratories in Colleges) (617 Colleges aided so far)
  - Doctoral Fellowship (6860 in last five years)
  - Post Doctoral Fellowships (1242 awarded)
  - Developing Networking Centres (10 Centres)
  - Faculty Recharge Programme (163 awards)

236. The requirements of funds are based on the demand received from different Sections/Bureaus in different schemes. It has also been noticed that the funds received from Ministry of HRD are less than the demand raised by the UGC. There has been more than 100% utilization of the by UGC as allocated by the Ministry of HRD, based on actual expenditure.

237. The representatives further added that one of the most evident indices of this growth and expansion is the tremendous increase in to number of Universities/University level institutions and Colleges over a span of six decades. While the number of universities has gone up to 727 (about 34 times) from meagre 20 during this period, the number of colleges has also registered massive increase from just 500 in 1950 to as many as 10724 now. Given below are the details of the universities:

- Central Universities - 46
- State Universities - 351
- State Private Universities - 246
- Institutions Deemed to be Universities - 122

In addition to these institutions, the Government of India has established 51 Institutions of National Importance under Act of Parliament for providing globally-competitive, quality education while 04 such institutions, have been established under various state legislations.

238. He further submitted that some of the parameters of assessment employed by world ranking agencies do not fit in Indian context and as a result Indian Universities loose out weightings in terms of International students, international faculty, inbound and outbound exchanges etc. given its size and population and the socio-economic and geographical diversities, Indian universities countries. Further, the National Institutional Ranking launched by Honourable Minister of HRD on 29<sup>th</sup> September, 2015. This framework outlines a methodology to rank institutions across the country. The parameters broadly cover "Teaching, Learning and Resource," "Research and Professional Practices," "Graduation Outcomes," "Outreach and Inclusivity," and "Perception". Ranking methods have been worked out for Universities and Colleges.



239. The Commission has been constantly striving to develop a system of higher education of quality appropriate to the national needs and aspirations and in tune with global trends. In order to encourage research and development in the country, UGC has laid out a number of schemes, awards, fellowships, chairs and programmes under which financial assistance is provided to institutions of higher education as well as faculty members working therein to undertake quality research in almost all areas of knowledge across disciplines including revival and promotion of indigenous languages. The maximum limit of financial assistance for a period of five years at different levels of the programme will be as under:

Programme/Status	Financial Assistance (Rs. In lakh)	
	Science, Engineering and Technology	Maths, Statistics, Humanities & Social Science
CAS	300	200
DSA	200	150
DRS	150	120

240. He further added that the introduction of CBCS is the part of the numerous measures taken by UGC to enhance academic standards and quality in higher education through innovation and improvements in curriculum, teaching-learning process, examination and evaluation systems. The introduction of CBCS will help resolve various difficulties faced by the students due to the diversity of evaluation system followed by different universities in India. Further, CBCS would ensure seamless mobility of students across the higher education institutions in the country as well as abroad where such system is a norm.

241. Further, Ministry of HRD had convened a meeting of the State Education Ministers/Principal Secretaries (Education) on 6<sup>th</sup> January, 2015 at Vigyan Bhavan, New Delhi. The meeting, chaired by the Hon'ble Union Minister for HRD, deliberated on the two critical areas of reforms pertaining to introduction of Choice-based Credit System (CBCS) and adoption of credit Framework for Skill Development (CFSD) at the earliest. During the meeting, a consensus emerged on the implementation of CBCS across the universities and colleges from the coming academic session i.e. 2015-16, as it will not only provide wider options to students but also ensure their seamless mobility across the institutions.

242. Under, CBCS, universities are requested to shift from numerical marking system, which is followed presently in universities, to grading system of evaluation. The grading system is considered to be better than the conventional marks system and hence it has been followed in the top institutions in India and abroad. So it is desirable to introduce uniform grading system. This will facilitate student mobility across institutions within and across countries and also enable potential employers to assess the performance of students. To bring in the desired uniformity, in grading system and method for computing the cumulative grade point average (CGPA) based on the performance of students in the examinations, the UGC has formulated detailed guidelines.

243. Further, under CBCS HEIs will move from the conventional annual system to semester system. The semester system accelerates the teaching-learning process and enables vertical and horizontal mobility in learning. The credit based semester system provides flexibility in designing curriculum and assigning credits based on the course content and hours of teaching. The choice based credit system provides a 'cafeteria' type approach in which the students can take courses of their choice, learn at their own pace, undergo additional courses and acquire more than the required credits, and adopt an interdisciplinary approach to learning.

244. On the faculty position the representatives of UGC submitted that the total number of sanctioned teaching posts in various Central Universities under the purview of UGC is 16699 (2383 Professor, 4731 Associate Professor, 9585 Assistant Professor). Out of the total sanctioned teaching posts of 16699, 5925 teaching posts are lying vacant (2183 Associate Professor, 2459 Assistant Professor). Central Universities are adopting different methods/process to address faculty shortages in order to ensure that studies of students are not affected, which inter-alia, include hiring ad-hoc faculty, Guest Faculty, Contract Faculty and Re-employed. While approving the Budget Estimate (Non-Plan) and Revised Budget Estimate (Non-Plan), from the year 2010-11 onwards twice in a year, all the Central Universities have been requested by the UGC to fill up the teaching positions at the earliest.

245. Further, in order to meet the situation arising out of shortage of teachers in universities and other teaching institutions and the consequent vacant positions therein, the age of superannuation for teachers in Central Educational Institution has already been enhanced to sixty five years; Vide Department of Higher Education letter No. F.1-19/2006-U.II dated 23.3.2007. Chairman, UGC requested to all Vice Chancellors of Central Universities, State Universities and Deemed to be Universities vide his letter dated 12.11.2014 to make a serious effort to ensure that all vacant positions are filled by the University before the start of the next academic session. Further, UGC initiated a scheme called Operation Faculty Recharge for augmenting the research and teaching resources of universities to tackle the shortage of faculty in university system.

246. UGC also framed the guidelines for empanelment of Adjunct Faculty in Universities and Colleges. These guidelines enable higher educational institutions to access the eminent teachers and researchers who have completed their formal association with the University/College, to participate in teaching, to collaborate and to stimulate research activities for quality research at M. Phil and Ph. D levels; and to play mentoring and inspirational role. As per these guidelines Adjunct faculty will be provided travel cost, as per entitlement, from his/her institution/place of stay and back, maximum six times per academic year. No reimbursement for hiring accommodation will be permissible. However, she/he will be provided free lodging and boarding in the guest House. Beside above, an honorarium of Rs. 1000/- per lecture to a maximum of Rs. 4000/- per day of service subject to a maximum ceiling of Rs. 80,000/-. The Adjunct Faculty will work at the host institution for a minimum of 02 days per visit.

247. The National Mission on Education through Information and Communication Technology (NMEICT) is envisaged as a Centrally Sponsored Scheme to leverage the potential of ICT, in teaching and learning process for the benefit of all the learners in Higher Education Institutions at any time any where mode. Its motte being "to provide connectivity up to the last mile", the NMEICT aims to extend computer infrastructure and connectivity to over 32000 colleges existing at present and each of the departments of over existing 550 universities/deemed universities and institutions of national importance in the country. NMEICT seeks to bridge the digital divide, i.e., the gap in the skills to use computing devices for the purpose of teaching and learning among urban and rural teachers/learners in higher education domain and empower those, who have hitherto remained untouched by the digital revolution and have not been able to join the mainstream of the knowledge economy. This will enable them to make best use of ICT framework for teaching and learning.

248. The MHRD has decided to launch the Massive Open Online Courses ((MOOCs) on the platform named as SWAYAM (Study Web of Active Learning by Young and Aspiring Minds).

University Grants Commission is the National MOOCs Coordinator for the Non-Technology PG Courses. UGC has notified the Credit Framework for Online Learning Courses through SWAYAM Regulation, 2016 in the Gazette of India on 19<sup>th</sup> July, 2016 wherein credit transfer for online courses under SWAYAM platform of Government of India has been defined.

249. Further, the UGC has also written a letter to all Vice Chancellors of Indian Universities to peruse the list of MOOCs Courses and UGC Regulations and take appropriate action for introduction of MOOCs courses through SWAYAM platform of Government of India for the benefit of the students of the University and affiliated Colleges after approval of the various academic bodies of the concerned Universities.

In addition to the above mentioned efforts aiming of making academics an attractive career proposition for talent youth, UGC has launched guidelines for establishing University-Industry Inter-Linkage Centres in Universities. The objectives of the scheme are to identify the expertise available in the university which can be of use for the industries in the locality/region by way of consultancy services, evaluation of R&D activities of the industries, etc. It would also help in the following:-

- (a) Take the help of the expertise of the industries to improve/ redesign the curriculum periodically in tune with the requirements of the industries;
- (b) Help create skilled manpower for industry requirements at various levels;
- (c) Conduct Management Development Programmes Entrepreneurship Development Programme etc.
- (d) Initiate schemes for student/teacher training joint research;
- (e) Undertake R&D in the areas related to skill education and development, entrepreneurship, employability, labour market trends, etc. at the postgraduate and research levels;
- (f) Maintain 'Labour Market Information' for the region in coordination with government agencies and industry associations;
- (g) Help set up Science and Technology Entrepreneurs Parks (STEPs), Technology Business Incubators (TBI) etc.
- (h) Work for coordination between the University and industry/industries in the neighbourhood to make the Centre a Centre of Excellence for skill development in specified areas; and
- (i) Conduct all other activities as are incidental or conducive to the functioning of the Centre.

250. The University Grants Commission is implementing three schemes namely; community College, B. Voc degree programme and Deen Dayal Upadhyay Kaushal Kendras for imparting skill based vocational courses at certificate, diploma, advanced diploma degree and masters as well as research level. The UGC has framed the guidelines for curricular aspects, assessment criteria and credit system for skill based vocational system through which road to understanding is paved with the clearly prescribed assessment criteria and requirements of skills competency for specific certificate, diploma or degree level programmes.

251. It is further added that the skill component of the programmes will be assessed by the concerned sector skills council and the same will be certified for being qualified if found fit towards skills abilities this will lead to requisite skill credits. The general education component is being assessed as per the university/collegiate education norms. The courses offered under UGC schemes of Community Colleges/B. Voc degree programme/DDU KAUSHAL Kendras have provision for multiple entry and exit options. The students who have certificate/diploma/advanced

diploma etc awarded by a recognized university/board corresponding to skill competency of NSQF level 4/5/ or 6 have the option for lateral entry to these programmes to next highest level as per national Skills Qualification Framework providing vertical mobility.

252. The knowledge-skill mixed programmes of different durations under NSQF are available in CC/B.Voc/KAUSHAL institutions depending on the need of industry leading to a certification at various levels of NSQF (4-10) starting from certificate to research degree level. This would enable the graduates completing B. Voc to make a meaningful participation in accelerating India's economy by gaining appropriate employment, becoming entrepreneurs and creating appropriate knowledge. The private/self financing institutions recognized by UGC can also run such programmes without financial support from UGC.

253. The UGC supports operation faculty recharge through strengthening high quality research in science related disciplines and promote innovative teaching in the universities through induction of fresh talent at the level of Professors, Associate Professors, and Assistant Professors. Many universities require the support of professionals and experts beyond those available to the university in its regular faculty especially in strengthening high quality research in science related disciplines at internationally competitive level and in promoting innovating teaching in universities. Besides, it has provided positions of Adjunct Faculty and Scholars-in-Residence to enrich the teaching and research programmes of the university system at M. Phil and Ph. D levels.

254. The representatives of UGC further informed that the Union Cabinet has approved a new program titled Global Initiative Academic Networks (GIAN) in Higher Education aimed at tapping the talent pool of scientists and entrepreneurs, internationally to encourage to their engagement with the institutes of Higher Education in India so as to augment the country's existing academic resources, accelerate the pace of quality reform and elevate India's scientific and technological capacity to global excellence. The GIAN initiatives would help in the following:-

- i. To increase the footfalls of reputed international faculty in the India academic institutes.
- ii. Provide opportunity to our faculty and students to learn and share knowledge and teaching skills in cutting edge areas.
- iii. To create avenue for possible collaborative research.
- iv. To increase participation and presence of international students in the academic institutes.
- v. Opportunity for the students of different Institutes/Universities to interact and learn subjects in niche areas through collaborative learning process.
- vi. Provide opportunity for the technical persons from Indian Industries to improve understandings and update their knowledge in relevant areas.
- vii. Motivate the best international experts in the work to work on problems related to India.

255. He further added that 26 Universities with 'A' Grade from NAAC and 10 National Law Universities were identified by UGC under the 'GIAN' Programme. All the universities have identified the Local Institute Coordinator. A workshop was held on 28<sup>th</sup> September, 2015 in the UGC office along with Director, IIT Kharagpur and Dr. A.K. Samantha to apprise the Local Institute Coordinators of the details of the scheme and the procedure to be followed for active participation in the GIAN portal and 34 Local Institute Coordinators attended the workshop;

256. He further added that issues were raised in the workshop with regard to duration of the course, minimum number of participants for each course, payment to be made to the foreign experts (whether on lump sum basis or against receipts) and the method for selection of foreign experts; how to popularize the scheme amongst the scheme amongst foreign participants.

257. UGC has also framed guidelines for the scheme of Joint Appointment for Exchange of Human Resource between universities and other Institutions/Organisation. The objective of the scheme is to improve the academic environment in the university system by promoting collaboration and formal linkages with other universities, National Laboratories, Institutes of national importance and Industrial R&D Laboratories in all branches of knowledge through programme of teaching training and research and also to encourage non university institutions to benefit from the expertise in the university system. The scheme aims to provide for and support joint appointments of human resources between universities and a university and other institutions/organisations and vice versa. These guidelines have been approved by the Commission as well as the Ministry of HRD and have been circulated to all the universities for implementation. These guidelines are also available on the UGC website. A copy of the guidelines is enclosed.

258. The establishment of Academic Staff Colleges is to serve as nodal centres in certain identified universities for the purpose to offer orientation and refresher courses for academic and professional development of the faculty of universities and colleges to newer concerns in educational thought and pedagogy besides advanced level programmes in university disciplines of teaching and research.

The objective of the scheme is that the Tata Institute of Science and Economic Political Weekly would formulate a 10 days Modular Course for the Social Scientists to enable them to learn Research Methodology and also motivate them for Research Publications. Eligibility Criteria - Each Modular Course may have approximately 50 participants and they may be programmed 4 times in a year with 2 programmes at each of the Academic Staff College(s). The invitees/participants may be Assistant Professor(s)/lecturer(s) from Undergraduate Colleges and Universities. UGC regulations, 2016 on pursuing M. Phil and Ph. D program mandate that the dissertations are to be submitted to INFLIBNET for uploading on the electronic depository Shodhganga maintained by them. This system has contributed a lot in the democratization of research data and knowledge base across academic fraternity in India.

259. The Government of India in the recent part has set up the number of central universities, IITs, IIMs and NITs. In addition, the Government has set up 5 IIERs, 3 SPAs, and 5 IIITs with a view to increasing Gross Enrolment Ratio (GER) in Higher Education. The Government has also increased the intake capacity of 27% CEIs by 54% with a view to providing reservation to OBCs. Also the Government has made constant efforts to utilize the residual capacity of existing institutions.

As a result of expansion effort, the GER in Higher Education has reached up to 23.6% in the year 2014-15 as compared to 23% in 2013-14 as per the AISHE provisional report for the year 2014-15.

260. They further submitted that the main reasons for the shortage of faculty in Central Universities, inter-alia, includes:

- i. The expansion of the capacity of existing Centrally Funded Educational Institutions (CFETs) due to implementation of the Central Educational Institutions (Reservation in Admission) Act, 2006

- ii. The establishment of new CEFIs and their operation from temporary campuses.
- iii. The slow pace of development of permanent campus of the newly established CEFIs.
- iv. The lack of space in temporary campuses to expand academic activities.
- v. The remoteness of the new locations of some of the CFEIs.
- vi. Non-availability of suitable candidates.

261. The UGC has sanctioned, for expansion and strengthening of teacher education in 19 Central Universities, various teaching and non-teaching posts and during XII Plan an amount of Rs. 110.00 crore was also sanctioned and released to these Central Universities. He further added that the quality of education is dependent on several factors including the quality of teachers, pedagogy employed, evaluation and appraisal of students, students learning, periodic up gradation of curriculum, thereby keeping it updated and academic and physical infrastructure like Library, Computer Centre, adequate Academic blocks etc. The quality of faculty requires continuous exposure and training of the faculty so that they are attuned to the latest knowledge available internationally and remain the part of best academic ecosystem.

262. Cumulative Professional Development Allowance (CPDA) is provided to each faculty to the tune of Rs. 3.00 lakh during the period of three years. The CPDA aims to provide opportunity for faculty to participate in international conferences, symposiums and workshops etc., to either present their research papers or to deliberate and discuss the research and subject matter. The above funding equips the faculty with latest knowledge, acquisition and also disseminating research conducted by him/her.

264. The Director, NIT, Goa submitted that there are several reports expressing concerns about the lack of quality teachers in the institutions of higher learning. While established institutes could somehow manage with existing strength, the key challenge is to fill vacant positions in new IITs and NITs. Among the new, IITs the vacancies were huge. It was 56.67 per cent in IIT-Jodhpur, 21.11 per cent in Patna, 14.44 per cent in Indore, 20 per cent in Hyderabad, and 10.18 per cent in Gandhinagar. One of the major reasons for this problem might be delay in construction of adequate infrastructure in new institutes. In addition to this, provisions should be made for faculty recruited in technical institutes with no formal training, in education, to take up induction training courses designed and offered by institutions like UGC-Academic staff colleges. This would help the new faculty, with only PhD in their respective disciplines, to equip themselves with additional skills and aptitude for teaching.

265. There is also a strong need to motivate teachers based on their performance. The major challenge could be to quantify the teaching and research accomplishments of faculty over a period of time. But, there is a strong need to develop a good mechanism to identify and reward teachers based on their performance. The Priority issues faced by NIT Goa were that it was operating in transit campus near to GEC campus and the process of acquiring land is in progress. There was need for development of infrastructure facility to the students as well as faculties and staff at par with other NITs and IITs and Inadequate hostel facility to have campus environment.

266. He further submitted the challenges faced by NIT Goa were attracting good students for the UG, PG and Research programme because of transit campus and other lack of facilities at NIT Goa. The percentage of students interested or continue higher education is less due to the financial constraints or better opportunity existing in the industry in terms of remuneration. He submitted that to have quality higher education one must have good campus facility to be recognized

globally. The support of state governments to have higher publicity towards higher education and promoting research projects to support & enhance tourism activity. He further added that problems related to society (local/national) should be addressed and need to be solved using engineering skills and given higher priority for funding and alternate to B.Tech degree, B.Tech Research degree may be introduced to promote innovation at the graduate level.

### **Observations/ Recommendations**

**267. The Committee has been voicing its concern from time to time on the acute shortage of faculty in higher educational institutions across the country. The Committee is anguished to find out that right from well established Central Universities to those set up recently, State universities as well as private universities, premier institutions like IITs, NITs and IIMs, this problem has emerged as the biggest handicap for the development and growth of Higher Education vis-a-vis maintaining the quality of education. Situation continues to be grim with no improvement foreseen in the near future. The Committee points out that the availability of adequate and qualified faculty is a pre-requisite for quality education. The Committee appreciates the steps taken by Department like increase in the retirement age up to 65 years, improvement of salary structures. The Committee points out that there can be only two possibilities, either our young students are not attracted towards the teaching profession or the recruitment process is a prolonged one and involves too many procedural formalities. In either case, the Department being the nodal authority for the entire country so far as higher education sector is concerned has to take proactive role so as to expedite the filling up a existing vacancies.**

**268. The Committee recommends that recruitment process should start well in advance before the post is vacated so that after retirement the newly recruited person takes up position immediately. The Ministry should work in tandem with Institutions to have this exercise on yearly basis and recruitment must be done in advance so that shortage does not develop into crisis. While appreciating the steps taken up by the Department for filling vacancies but recruitment of faculty is a continuous process, the Committee recommends that to make the teaching profession more attractive, the faculty should be encouraged to undertake consultancy and are given start-up financial support.**

**269. The Committee observes that all these Schemes are meant for providing an opportunity to students belonging to marginalized sections to get proper coaching so as to enable them to compete for higher studies and become eligible for teaching in higher educational institutions and for getting gainful employment in Central/States/ private sector services. The objective behind all these Schemes is very laudable. The Committee can only emphasize that these schemes need to be administered in the real sense, with the benefit reaching the targeted beneficiaries. The Committee would like to have a status note on all the schemes.**

**270. The Committee feels that a major concern is the lack of employable skills in our technical education students. We are looking at the country's large youth population as an**

advantage point. But in order to leverage this demographic factor, we need to ensure that our youth are empowered with the right skills to meet the challenges of knowledge based market economy. The Committee observes that based on the identification of the skill gaps in different sectors, possible approaches, such as, setting up of finishing schools, offering courses for enhancing employability are proposed. Some strategies for increasing employability factor, which are either faculty-centric or student-centric are: Industry Institute Student Training Support, Industrial Challenge Open Forum, Long Term Student Industry Placement Scheme, Industry-Institute Continuous Interaction Scheme-Industry, Industry-Institute Continuous Interaction Scheme-Faculty, Intensive Interaction-Train the Teachers, Industry Training Programme and Support Scheme, Centre for Qualified manpower, National Employability Portal, tax Benefit for Teaching Laboratory Support. Some strategies for the Skills component with focus either on institution or students are: Skills Requirement Assessment Revitalizing the Diploma Education, Lateral Entry of ITIs to Diploma programme, Vocation based Certification Programme, Industrial Finishing Schools, Bridge Courses for Skill Enhancement, Special Manpower Development Programme. The Committee's concern is how all the above mentioned strategies/measures are translated in action in a structural and result oriented manner. The Committee desires that the Department of Higher Education apprise the Committee of the progress made in this regard.

271. The Committee is happy to note that a number of initiatives have been taken for integrating the differently-abled students towards mainstream higher education. These initiatives are indeed major steps for providing equal opportunities to such students. The Committee, however, feels that initiatives will have more impact if awareness about such facilities is there among the targeted students. Every conceivable effort has to be made to sensitize such students towards the kind of opportunities waiting for them. Details of all schemes for differently-abled students should be mandatorily displayed on the websites of UGC, the regulatory bodies and also all the categories of universities and institutions. In addition, strict and constant monitoring at all level is also required so as to ensure that all such initiatives for differently abled students are being implemented in the real sense. For both these aspects, higher education department being the nodal authority for higher education in the country will have to take the lead role.

272. The Committee would like to highlight another area of concern regarding the quality of education being imparted in our universities, colleges etc. The Committee notes that at present there is no mechanism for ensuring the accountability and performance of teachers in the universities and colleges. The Committee finds that such a mechanism is a well established norm in foreign universities where the performance of college professors/teachers is evaluated by their peers and students. The Committee feels that it is high time that such a mechanism is introduced in our University system. The Committee, accordingly, believes that in order to ensure quality teaching, as system of Performance Audit of teachers may be evolved which would be based on the feedback given by the students and peers of



teachers. Gradually, other inputs like research papers, publication brought out by teachers should be added in the Performance Audit. This Committee is of the view that in this way, the faculty would also try to improve their quality of teaching which would be assessed periodically and improve upon their teaching methods.

273. The Committee considers Higher Education as an increasingly global enterprise; hence Indian institutions should embrace internationalization that could provide them with new opportunities. While most of our universities and colleges are required to build human resources to reach desired levels of competence, we also need to go beyond this to ensure that the country has several institutions of higher education that strive to achieve excellence in both teaching and research. Universities and colleges should be encouraged to engage more intensively than before with wider society and contribute to local and regional development and provide intellectual leadership to society.

274. The Committee recommends that certain universities and institutions should be converted or upgraded by creating centres of excellence within the universities/institutions building on their existing strength. Accreditation should be at core of regulatory arrangement and must have clear incentives and consequences. There should be more funding for university based research and policies that create right incentives for quality research and promote collaboration among institutions.

275. The Committee recommends that the Government of India may undertake exercise to encourage credit rating agencies, reputed industry associations/media houses and professional bodies to carry forward the process of rating of Indian Universities/Institution in scientific, transparent and fair manner. A robust rating system would give rise to healthy competition amongst the Universities/Institutions to improve their ratings by enhancing their performance in the desired fields.

276. The Committee recommends that this situation could be improved through allocation of research funds based on student strength, funds for ICT infrastructure to promote better research and more scholarship scheme for basic and applied research.

277. The Committee highlights that Indian Higher Education Scene is very dynamic and undergoing rapid strides in quality improvement and has a complex, multi-layered structure, with each layer playing a very important need and filling gaps. The Committee recommends that there was a need for quality assurance agencies crucial to guarantee basic minimum standards of technical education to meet industry demand for quality manpower and NBA should act as a catalyst towards quality enhancement and quality assurance of higher technical education. NBA needs to continuously improve its own organisation and processes to meet its obligations.

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