The Concept of GTU Post Graduate Research Centers

The Universities all over the developed world have set up research centers at the University Campuses. The Centers help the University develop and sustain a research culture and play a key role in expanding the frontiers of knowledge for the world. The Centers bring a wealth of experience from outside the University and through a scientific methodology, use it to deepen the understanding in a variety of fields of work. The Centers are wide open to the Society. Thus if a center has not been established by an industry or a business, industries and businesses are invited to be members of the Center so that they can benefit from the research at the Center. The academicians from other Universities of the world and business professionals and innovative leaders from a variety of inter-disciplinary fields may be invited by a Center and may inter-act with faculty and students of the University. The Centers may also work with various United Nations entities or Regional Research Networks in the world. Each of the Research Centers may be set up by a University. Or it may be set up and managed by an industry. Or it may be a joint project of some Universities or a University and a government department. In USA, large industries, NSF, Defense research entities or Department of Energy usually provide help for establishing Centers or Research Laboratories at Universities. The Centers have an access to the University library and have excellent linkages with other research centers of repute in their area of interest. Faculty members, associated with the field of interest of the Center and their research students work at the research centers. The centers also employ full-time Research Associates or Post - Doctoral fellows. For promoting research, the research centers not only provide facilities, they also provide scholarships/ fellowships to the students to the research students.

Post Graduate Research Centres of GTU

1. Center for Environmental and Green Technologies
2. Center for Mobile Computing and Wireless Technologies
3. Center for Cyber Security
4. Center for Environment & Energy Efficiency Tools (CE3T)
5. Center for Infrastructure, Transportation and Water Management (CITWM)
6. Center for Technology Education
7. Center/ School for Global Business Studies
8. Center for Business Ethics and CSR
9. Center for Financial Services
10. Center for Marketing Excellence
11. Center for Governance Systems in Businesses, Industries, Universities, Hospitals, NGOs and Governments
12. Center for Project Management in Chemical Engineering

13. Center for Pharmaceutical Studies and Drug Delivery Technologies

14. Centre for Environment & Energy Efficiency Tools

**Center for Technology Education, Public Policy and Universities of the 21st Century (GTU-CeTEPU-21)**

Established in 2011, GTU’s Centre for Technology Education, Public Policy and Universities of the 21st Century (GTU-CeTEPU-21), in pursuance of the national objectives of maintaining excellence in education, its strives to improve the quality education through teaching, research and leadership with the help of technology. Whether it is by creating leading-edge online tools, managing data or developing high quality professional development, CTE works in innovative ways to promote high quality teaching and learning which by then ultimately transform GTU into a “World Class Technological University”.

Major Activities of the Centre include providing support for the upgrading teaching-learning process, conducting academic research etc. Also the Centre has a well-established Programme for faculty development.

**Vision:**

To contribute towards the research and development, innovative technical education and serving the needs of 21st Century Higher Education System there by making GTU a World Class University.

**Mission:**

- To create capabilities to upgrade infrastructure of global standards for education, training and research in the areas related to Engineering, Management, Technology and Sciences.
- To establish close linkages with industries in order to make teaching, training and research at the University, relevant to the needs of industries at national and international levels.
- To study innovative activities under taken by the universities of national/international importance.
- To prepare a formal administrative structure of Gujarat Technological University.
- To undertake collaborative projects which offer opportunities for long-term interaction with academia and industry.
- To create the opportunities to develop center of excellence to create knowledge, skills and competence in technical education according to the needs of its stakeholders.
Further taking a step ahead in becoming a World Class Technological University, an extension to this research project “Designing the Structure of Technological Universities (DSTU)” has been taken up jointly with the ‘Center for Governance Systems in Businesses, Industries, Universities, Hospitals, NGOs and Governments (GTU-CGS)’ and with ‘GTU Skills Council On Human Resource Studies & Organizational Structures (GTU-CHRSOS)’.

The aim of the DSTU project is to improve the current set up of India’s universities and to create a road map for the universities, which offer the best of learning environment to the students and the faculty members. The basic idea behind initiating this project is to sensitize the members in all the institutions at various levels to encourage them to put in their best efforts in making GTU a World Class Technological Institution. The Project is step forward to research and review the design and layout of a technological university. With the advent of technology, changes in teaching and learning process and new modes of implementation of various strategic programs; a need arises for a constant change, up gradation and evaluation of the current setup.

**Objective of DSTU:**

- To develop a system of Governance by which GTU is able to integrate education, training and research in its four disciplines namely Engineering, Pharmacy, Management and Computer Application at the level of Diploma, Degree, Post - Graduation and Research;
- To identify those organizational components which are needed to pursue the objective of GTU and to monitor its activities related to admission, education, training, research, industry interaction, inter institute collaboration and international collaborations and
- To sensitize the members in all the institutions at all levels and to encourage them to put in their best efforts in making GTU a World Class Technological University.

**Report on Designing the Structure of Universities of the 21st Century**

- **GTU Research project**

Designing the Structure of Technology Universities (DSTU) - *a GTU Research project:* A research project on Designing the Structure of a Technology University (DSTU) has been taken up by GTU’s ‘Center for Technology Education, Public Policy and Universities of the 21st Century (GTU-CeTEPU-21)’, jointly with the ‘Center for Governance Systems in Businesses, Industries, Universities, Hospitals, NGOs and Governments (GTU-CGS)’ and with ‘GTU Skills Council On Human Resource Studies & Organizational Structures (GTU-CHRSOS)’.

Most of the larger 631 Universities in India are essentially based on the structure devised by East India Company for Universities of Calcutta, Madras and Bombay¹ (1957), in response to the Wood’s note of 1854. None of our Universities has been able to provide world-class education to its students. After 156

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¹ The other prominent types are (i) IITs, established on the MIT model, according to the recommendation of the Sarkar Committee (1946) to the Viceroy’s Council (ii) Agricultural Universities of 1960s, established on the Land-Grant University model.
years of working with the system, it is very clear that the existing system is unable to provide as good an education to the young in India as the top-most 100 Universities of the world are able to do.

**Padmabhushan Dr. P.V. Indiresan**, Former Director – IIT Madras appreciated GTU for taking leadership for conducting the Research Project of this kind for the first time in the country. The aim of the research project is to improve the current set up of India’s universities and to create a road map for having universities, which offer the best of learning environment to the students and the faculty members.

A large majority of students (estimated at about 90%), working for obtaining a University degree, are with affiliating type Universities. The central institutions like IITs, IIMs, NITs and IIITs jointly with residential Universities like M. S. University of Baroda and deemed Universities take care of the remaining 10% of University students in India. Hence even though the research project has a focus on affiliating type Universities, some of its findings may be of some use to others also.

In developing countries like India, Egypt and China, middle-class parents push their young to opt for studies in the fields of engineering and medicine. The result is that very few students choose studies in other fields of learning as their first choice, except for a few top-ranking institutions. This has resulted in the winding down of work in the fields of pure science and social science. It is also reflected in the ranking of the Universities, where among the first 400 Universities of the world, the only institutions from India happen to be some of the IITs. None of the other or our older Universities has been able to reach the rank of the first 400 Universities of the world. This research project has named itself as DSTU, only because it has been initiated by a Technology University.

The project is studying the work of GeorgiaTech Center for 21st century Universities (C21U), set up in 2011 and Shanghai Jiao Tong University’s Center for World-Class Universities, set up in 1985. The research project is studying the technology Universities in India and other Universities like Norwegian University of Science & Technology, MIT and Georgia Tech, USA, Imperial College London, as also the structure of the National University of Educational Planning and Administration, New Delhi and the London School of Economics.

The first step for the research project on DSTU was taken on 27th April 2011, when at a meeting of some of the Faculty members, interested in the area of organizational structures, the GTU Forum for Human Resource and Organizational Structures was set up. A 2-page Discussion Paper was developed for GTU by Professor Satinder Kumar and Dr Shweta Patel.

I. **On 12th May, 2012** the first meeting of the core group was organized to introduce the Research project on the Design of the Structure of Technology Universities. All the members of the proposed GTU SKILLS COUNCIL for HUMAN RESOURCE STUDIES & ORGANIZATIONAL STRUCTURES (GTU- CHRSOS) and some faculty members of management participated in the meeting under the

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2 The first Director is the Head, Department of Computer Science at GeorgiaTech.
3 The first Director is the Head of Department of Chemical Engineering at SJTU.
chairmanship of Hon. Vice Chancellor Dr. Akshai Aggarwal. Dr. Aggarwal initiated the discussion by explaining the concept of DSTU. He said that there were major issues being faced by the Universities all over the world and it was clear that the Universities will have to change a great deal, if the challenges of the 21st century are to be faced squarely. He added, "In India, the challenges are greater since we have to offer higher education of the same quality, as is available to the young in the developed world and in the best Universities of China, Taiwan, Singapore, Malaysia etc. At the same time, we cannot copy any other country since our journey has to begin from where we are today." Even though the design was to be for an affiliating type of technological University, it may turn out to be applicable to the other large comprehensive Universities of India. After a detailed discussion, it was resolved to constitute a Core Committee for this research project. (The Report was published on 15th May, 2012 at: http://www.gtu.ac.in/circulars/12May/DSTU%20meeting.pdf)

The next meeting for this project was organized on 2nd June, 2012. In that meeting, the committee members devised a strategy for conducting the DSTU research at different campuses of GTU and distributed the preliminary work in the following areas:

- Ancient University of India by Dr. Rajesh Khajuria, Director, SMJV’s CKSVIM, Vadodara
- Understanding the other Technological Universities of India by Dr. Rajesh Khajuria, Director, SMJV’s CKSVIM, Vadodara
- Structure of IIT Khargpur by Dr. K.N. Sheth, Director, Shri Saraswati Group of Colleges, near Ahmedabad
- Asian Universities by Dr PGK Murthy, Director, Parul Institute of Management, Waghodia
- Global Universities by Dr. Trupti Almoula, In charge Director, Narmada College of Management, Bharuch

On the basis of these studies and the current structure of Gujarat Technological University, the Committee members decided to prepare a draft of the proposed structure of the technological University for the next meeting.

During this meeting, the committee members proposed to invite other technological Universities’ Vice-Chancellors and registrars so that the research project could get inputs from the other technological Universities of India. The date for the second plenary meeting was decided as 16th June, 2012.

On 9th June, 2012, all the committee members prepared the schedule for the meeting of 16th June, 2012. They also prepared a presentation on a draft of the organizational chart for GTU’s development.

II. At the meeting of 16th June, 2012, 40 Directors and Principals of management and engineering college participated in the meeting. Padmabhushan Dr. P.V. Indiresan, former Director –IIT Madras, Dr. A.K. Malik, Registrar of South Asia University, New Delhi participated in the meeting. After the inauguration Dr. Akshai Aggarwal talked about the vision of DSTU. Dr. P.V. Indiresan drew parallel from Vedas through various Shlokas, which signified the importance of knowledge, skills and human development for the benefit of society at large. He appreciated GTU for taking leadership for conducting
the Research Project of DSTU for the first time in the country. He advised GTU to develop a vision for the next 50 – 100 years. He said that GTU should aim at becoming a world class University like Georgia Tech, USA surpassing even the best institutions of the country like IITs (and other universities), where he had taught for 40 years. "But," said he, "do not try to copy an IIT." In session-I, Dr. Ajit Rana presented the vision for the Post graduate center for Technological Education, Public Policy and Universities of 21st century. Prof. Bharat Dalal presented ideas about the Post-graduate Center for Governance Systems in Businesses, Industries, Universities, Hospitals, NGOs and Governments. Prof. Trupti almoula shared the vision of GTU- CHRSOS.

Dr. A.K. Malik talked about his experiences in developing the structure of South Asia University (SAU), as its founder Registrar. He said, “The South Asia University is developed and funded by SAARC Countries. Therefore, the admissions are at Asia level, based on the quota reserved for each country. Currently, the SAU offers 6 - 7 PG Programs in Humanities. It plans to offer undergraduate programs in the near future”. He emphasized the need for developing an excellent library with online and print media books and journals from the whole of the world.

Detailed discussions were held throughout the session. The presentations were made by Core Committee Members on the strategy adopted by them for the DSTU research. The Report of the meeting of 16th June was published at: [http://www.gtu.ac.in/circulars/12June/report_26612.pdf](http://www.gtu.ac.in/circulars/12June/report_26612.pdf)

A post- 16th June, discussion meeting of the Core Committee was held on 7th July, 2012 at Ahmedabad Management Association, Ahmedabad. Hon. Vice chancellor said that the aim should be to publish a book on this research project. As a first step, it was decided that the Committee members would prepare the material according to the allocation in the meeting of 2nd June 2012.

III. At the 18th August meeting, Dr. H. Maheshappa, Hon’ble Vice Chancellor, Visvesvaraya Technological University, Karnataka, Dr. M.L. Ranga Hon’ble Vice Chancellor Guru Jambheshwer University of Science & Technology, Haryana, Prof. V.K.Kathal, Director, Academic Staff College, Dr. Harisingh Gour University, Sagar and Dr. A.K.Malik Registrar, South Asia University were present and there were interesting presentations by all the distinguished participants. (The Report of the meeting of 18th August was published at: [http://www.gtu.ac.in/circulars/12Aug/28082012.pdf](http://www.gtu.ac.in/circulars/12Aug/28082012.pdf))

IV. At the 29th September 2012 meeting, Dr Akshai Aggarwal gave a brief idea about the best universities in Asia. He said that a university, while conveying the knowledge to the next generation, must critically examine it for its relevance and truth and it must contribute to generation of new knowledge. He described GTU’s project on Active Learning and Creating Excitement in Classes, Laboratories and Workshops (ALCE). He said, "Under ALCE, it is proposed to develop excellent courseware through joint efforts. Under Active Learning Video lecture Communication (ALVCOM) – a telecast program of lectures has been started with technical support from BISAG."

Dr. Aggarwal also talked about the ‘Networking of Colleges for joint research.’ Kotler’s Incubator on Ayurvedic Medicines is one such project, taken up under the World Marketing Summit projects. He said...
that on 16th August 2012, GTU had joined two research projects, for which the Chief Investigators are Professors Dr. Friedrich Augenstein and Dr. Ramesh Shah from DHBW. For promoting joint research, the GTU Board for Mobile Computing and Wireless Technologies had issued a Request for Collaborative Research Proposals (RCRP) in the area of Mobile Computing, Networking and Applications (MNA). Subsequent to the address made by Dr. Akshai Aggarwal, the core committee members were invited to give the presentations on DSTU project.

In the post Lunch Session Dr. Anirudh Pratap Singh, Dean – Research and Consultancy and Director – Punjab Technological University Campus made very systematic presentation on the following aspects:

- Brief Introduction of PTU
- Regular Academic and Distance Education Programs
- Examination system of PTU,
- Constituent college system and,
- Finance system in particular.

While concluding Dr. A. P. Singh gave the information about Breaking of Language Barrier project of PTU. He said that all the developed countries used their native language in higher education. The second important interesting matter that Dr. A. P. Singh discussed was about “PITs” i.e. Punjab Institutes of Technology, which were designed to be similar to IITs. The University has plans to establish the first PIT at Kapurthala (only for PG Programs) and three other PITs for Under-Graduate programs at Mansa, Nandgarh and Rajpura.

At the end Dr. Kamal Taori, former IAS officer and Ms. Irma Marla, from Germany, made presentations. The Report of the meeting of 29th September was published at: http://www.gtu.ac.in/circulars/12Oct/15102012.pdf.

V. On 24th November, 2012, another plenary meeting on DSTU was organized at Gujarat Technological University at GTU, Gandhinagar Campus. More than 45 Directors and Principals of Management and Engineering colleges, senior faculty members and GTU officials participated in the meeting of this research project. Dr. K. L. Chopra (Padmashri), Former Professor, IITD & Former Director, Indian Institute of Technology, Kharagpur, Dr. Akshai Aggarwal, Honorable Vice Chancellor of Gujarat Technological University, Dr. D. S. Chauhan, Vice Chancellor, Uttarakhund University, Dehradun, Dr. Premmatha Rajan, Director, Academic Courses, Anna University, Chennai and Dr. H. P. Khincha, former Vice Chancellor of Vishwasaraya Technological University, the Technological University of Karnataka, Principals and other invited guests and core committee members, DSTU core committee member were present in the meeting.

While giving a brief account of today’s environment Dr. Aggarwal stated that after 2000, India has started being counted along with China as the upcoming countries. He said, “Our industries are able to compete with the world at least within India very successfully now.” In Gujarat, during the last decade, the number of seats for technology education has been increased eightfold. But our technology teachers have no
practical experience and not ready to be evaluated by their peers for research or by students for their teaching skills. Dr. Aggarwal gave the report on Research output on China and India. Dr. Akshai Aggarwal stated that GTU and its Colleges jointly perform Quality Assurance in studies, teaching and research. Dr. Akshai Aggarwal briefly stated the measures taken in creating joint networking systems among Colleges.

**Prof. K. L. Chopra** (Padmashri), Former Professor, IITD & Former Director, Indian Institute of Technology, Kharagpur gave an address on Technical Education in knowledge era. He then stated that the educational models go on changing as rightly stated by Dr. Aggarwal. Guru-Shishya Parampara is augmented with Data and Skill-based, Information-based (Broadcast Teaching Model) and Knowledge-based (Outcome –based) models. He further said that to create, innovate or discover something hitherto unknown which will enhance our knowledge of nature in its various manifestations, and/or which will benefit the society in some ways “Any innovation or creativity of knowledge is good research, neither low or high, nor basic or applied”.

In Afternoon Session **Dr. D. S. Chauhan**, Vice Chancellor, Uttarakhand University, Dehradun, said that Dr. Chopra presented input on favorable Governance. When the universities are funded by the Government, it becomes very difficult to design the structure. Dr. D. S. Chauhan said that when he joined as Vice Chancellor, no single person was Ph.D but more than 730 teachers were B.Tech in 19 colleges. It was difficult in the beginning for him to understand the ordinance of UP Technological University.

**Dr. Premlatha Rajan**, Director, Academic Courses, Anna University, Chennai, started addressing the session by introducing the Anna University which includes:
Established on 4th September 1978 as a unitary type of University for Engineering, Technology and Applied Sciences.
Currently there are 8 Faculties, 30 Departments and 46 Centres on the campus.
Over 550 engineering colleges in Tamil Nadu State are affiliated to Anna University making it the largest technological University.

Dr. Premlatha gave a brief account of broad research areas covered by Anna University, Tamilnadu. She also gave details of centers promoting the research in the University.

**Dr. H. P. Khincha**, Former Vice Chancellor of Vishwasaraya Technological University, Technological University of Karnataka State, said that there are two critical points for consideration – the Vision of the University and the Mission of the University. He gave the example of the Vision and Mission of the Harvard University.

In session 3 On behalf of DSTU Core Committee, the presentation was made by Dr. Rajesh Khajuria. On account of shortage of time, Dr. Khajuria made efforts to be as brief as possible. He stated that following are the objectives of DSTU research project, prevailing structure of GTU, and proposed structure of GTU. At the end Dr. Trupti Almoula gave vote of thanks.

(The report of the event is available at: [http://www.gtu.ac.in/circulars/12DEC/20121124_Report.pdf](http://www.gtu.ac.in/circulars/12DEC/20121124_Report.pdf))

**VI. The next plenary meeting on DSTU was organized by Gujarat Technological University on Saturday, 18th May 2013 at Paryavaran Mandir, Naroda, Sardar Patel Ring Road, Ahmedabad.** More than 70 Directors and Principals of Management and Engineering colleges, senior faculty members and GTU officials participated in this meeting. 10 Vice Chancellors / Pro- Vice Chancellors / Registrars from
various universities across the country were also present. Dr Akshai Aggarwal, GTU’s Vice-Chancellor welcomed all, introduced DSTU and described GTU’s own work for offering a high quality learning environment to its students.

He explained the definition and characteristics of a World Class University taking reference from “Centre for World-Class Universities (CWCU) at Shanghai Jiao Tong University’s (SJTU) - a strategic research unit of the Chinese Ministry of Education (http://gse.sjtu.edu.cn/EN/centers.htm)

He quoted the 9-point agenda developed by Aghion, Dewatripont et al. 2010 for a University to be more competitive and autonomous.

He shared that GTU had been working on the challenge of creating a team of Students, Researchers, and Faculty members, which could work collaboratively even though they might be working in different Colleges. “GTU,” he said, “is now working for leadership in learning outcomes, research and industrial collaboration; relevant research and development of systematic study and creating a ranking system. GTU has created networking of Colleges for jointly improving the quality of learning processes through ALCE (Active Learning and Creating Excitement in classes, laboratories and workshops) and ALVCOM (Active Learning Video lecture Communication) – a telecast program started with technical support from BISAG, for preparing Courseware through joint efforts (Design Your Courseware competition for students), for doing Joint Research projects etc.

Prof. P. B. Sharma, Vice Chancellor of Delhi Technological University, gave examples of premier technological Institutions of India and he very appreciatively said that GTU is one of them! He said that almost 90% of India’s higher technical education (degree level onwards) was under private ownership. But he said, “The underlying assumption for bringing private ownership in technical education was that it would promote quality and relevance much better than the Institutions under the public ownership system. This objective has however not been realized to a large extent.”

He suggested some major attributes and structural dimensions of Technological University in 21st Century and suggested Five Vital Connects for a Technological University in 21st Century. He emphasised that research cannot flourish without effective linkages and mechanisms for collaboration and cooperation between Universities and Institutions in India and at the global levels.

His Excellency Mr. Ndubuisi Vitus Amaku, The High Commissioner of Nigeria, Prof. P.P.Mathur, Vice Chancellor of Kalinga Institute of Industrial Technology, Prof. S. Narayanan, Pro - Vice Chancellor VIT University and Mr. Harishkumar Sharma, Registrar, Maharshi Markendeshwar University and many Directors of GTU Colleges, industrialists from Naroda engineering estate and others also participated in the event. A detailed report of the plenary session was published at: http://www.gtu.ac.in/circulars/13June/Report%20DSTU_18052013.pdf.

A Report on the meetings, described above was published at http://www.gtu.ac.in/circulars/13Dec/DSTU_AGTU.pdf.

On the basis of this study the core committee members of DSTU have prepared the proposed structure of GTU Regional Centers, Schools and various GTU wings. And in this meeting of DSTU, a compile book of DSTU research work was presented to Dr. Akshai Aggarwal by DSTU core committee member.
Since the work for DSTU was applicable for the other affiliating type universities also, it was decided to organize a seminar for all the Universities in India. At this seminar of 8th-9th of January 2014, representatives from 108 universities, including 44 Vice-Chancellors and many from the Research, Development and Innovation wings of industries were present. A brief report of the seminar is given on the next three pages.

Seminar on
Re-designing the Structure of Universities for coping with Challenges of the 21st Century (RSUC)
(with a special focus on Universities in the Indian sub-continent)
http://projects.gtu.ac.in/DSTU

8th & 9th January, 2014

The Seminar was organized by GTU’s Center for Technology Education, Public Policy and Universities of the 21st Century (GTU-CeTEPU-21) jointly with the Center for Governance Systems in Businesses, Industries, Universities, Hospitals, NGOs & Governments (GTU-CGS) and GTU Skills Council on Human Resource Studies & Organizational Structures (GTU- CHRSOS) along with Department of Education, Govt. of Gujarat as a pre-summit event of National Education Summit (http://www.vibrantgujarat.com/nes.htm).

A two day seminar on Re-designing the Structure of Universities for coping with Challenges of the 21st Century (with a special focus on Universities in the Indian sub-continent) was organized on 8th and 9th January, 2014. The seminar was organized as a pre-education summit event for the National Education Summit (NES) by the Department of Education, Government of Gujarat. During this Seminar, the entire body of work, done since April 2011 to till date was presented — including the contribution made to DSTU by the leaders of Higher Education in India. To the seminar were invited all the Vice-Chancellors, Deans and Directors and some Ex-Directors/Vice-Chancellors. The objective of the seminar was to provide a platform for thinkers, policy makers, academicians and other stake holders, to come together to develop a roadmap for higher education, to design the structure of the higher education system and the Universities for the 21st Century and also to formulate a set of policies, which can bring innovation and unleash the creative spirits at the Universities in India.
The seminar was inaugurated by Shri Bhupendrasinhji Chudasamaji, Hon. Minister of Education, Government of Gujarat in the presence of 44 Vice Chancellors / Pro-Vice Chancellors from various universities across the country. Dr. Jayanti Ravi, Commissioner, Hon. Technical Education, Govt. of Gujarat was also present.

The seminar had four sessions:

1. **The Existing state of higher education, policy regime and eco-system on the theme of the Seminar and the new directions, required by the system:** Prof. Wasudev Gade, Vice Chancellor, University of Pune, Puna said that education is the basis of National Development – economic, social, political, industrial, and cultural and shared the reasons for declining research quality in Universities and the current status of Research in India.

   **Dr. Ganesh Natarajan**, Vice Chairman and CEO, Zensar Technologies, Sensar Knowledge Park, Pune said that Professor should have passion to change the life of the 100 to 1000 peoples of the society and gave proposal of creating joint activity between industry and university in terms of research, mentoring, teaching, Faculty development programs and to jointly create skills development center within university or out of the country for vocational education qualification through Active learning, distance learning etc.

   **Dr. Shalishesh Takker**, Hon. Director, GTU Post-graduate Research Center for Business Ethics and CSR said leadership is nothing but results (performance). Stressing on the importance of good leadership at Universities, he said leadership requires a vision and a focus on change and development.

2. **Innovations, Linking Academia to Industry and Creating Supportive Ecosystem, Creating facilities for creative work, IPR and Entrepreneurial Systems at Universities was chaired and co-chaired respectively by Professor Anil Gupta, IIM Ahmedabad and Dr. Harke B Mitnal, Member Secretary & Head, National S & T Entrepreneurship Development Board, Secretary, Technology Development Board. The speakers at the session were from different fields.** **Dr. Rameshwar Rao**, Vice – Chancellor, JNTU, Hyderabad, **Prof. H.P Khincha**, Chairman, Karnataka State Innovation Council, **Dr. Kumar Iyer**, JSW Steel LTD, Vijaynagar, Mr. S. A. Nayak, Co-founder, MD, CEO - Tejas Networks Ltd, **Dr. R. Venkata Rao**, Vice Chancellor, National Law School of India University, Bangalore. **Dr. Uma Ganesh**, Global Talent Track, **Dr. Dipankar Pal**, Director, Northern Eastern Regional Institute of Science and Technology, Arunachal Pradesh and **Prof. Prabodh Shukla**, North Eastern Hill University Meghalaya, **Dr. D. P. Lokwani**, Vice Chancellor, M.P. Medical University, **Prof. S.P Bansal**, Founder Vice Chancellor, Maharaja Agrasen University, **Dr. A.K Malik**, Registrar, South Asia University jointly with creative interventions by the Chair, made the session highly interesting and inter-active.

3. **Project-based learning, Design-oriented Education and Making the work - in classrooms, laboratories and workshops- exciting** was chaired by Prof. C Amarnath, Professor (Retd) Department of Mechanical Engineering, IIT Bombay. It was co-chaired by Dr. Swami Manohar, JED-I, Bangalore, Karnataka along with **Prof. Amaresh Chakrabarti**, Professor at Centre for Product Design and Manufacturing Indian Institute of Science Bangalore. The participants were **Padmashri Dr. K.L. Chopra**, President, Society for scientific values, New Delhi & Retd Director, IIT Kharagpur, **Prof. P.P. Mathur**, Vice-chancellor, KIIT University, **Dr. Diapankar Pal**, Director, North Eastern Regional Institute of Science and Technology, Arunachal Pradesh, **Mr. Ravi Kuke**,
Vice President, Microsoft, Mr. Hasit Kaji, Vice President, Tata Consultancy Services, Dr. K.K Raina, Director – Thapar University, Prof. Milind Atrey, Professor-In-Charge, SINE (Society for Innovation and Entrepreneurship) and Professor in Mechanical Department, IIT Bombay, Prof. N.K. Goyal, President CMAI and Mr. Saket Modi, CEO & Co-Founder, Lucedius, Director CMAI.

The session showcased best practices of project based learning for the students. The projects should be based on authentic and real world problems which will make the education more exciting. It also included some of the innovative initiatives to make education interesting rather than burdensome by leveraging the use of IT.

4. Re-designing the Structure of Universities and Public Policy Regime in India for coping with Challenges of the 21st Century was chaired and co-chaired by Prof. B. Thimme Gowda, Vice-Chancellor, Bangalore University, Bangalore and Prof. Shashi Kumar Dhiman, Vice Chancellor, Himachal Pradesh Technical University, Hamirpur, Himachal Pradesh respectively.

Dr. A. D. N Bajpai, Secretary General, AIU and Vice Chancellor of Himachal Pradesh University, Prof. K Lal Kishore, Vice Chancellor, Jawaharlal Nehru Technological University, Anantapur, Maj.Gen. (Dr) Ranjit Singh, Vice Chancellor, Central University of Haryana, Prof. D T Khathing, Vice Chancellor, Central University of Jharkhand, Ranchi, Prof. K. C. Singhal, Vice-Chancellor, NIIMS University, Jaipur, Mr. Mukul Kanitkar, Bharatiya Shikshan Mandal, Nagpur, Dr. Bhushan Dewan, Pro Vice Chancellor, AKS University, Satna, Prof. Manzoor Ahmed, Vice Chancellor, Swami Vivekanand Subharti University, Meerut, Prof. R P Bajpai, Chancellor, Vel Tech University, Dr. Anju Singh, Provost JJT University, Dr. Gopal Trivedi, Former Vice Chancellor, Rajendra Agricultural University, Pusa, Prof. A.P. Singh, Dean, Panjab Technological University and Dr. A.K. Malik, Registrar of South Asia University were the learned speakers and they discussed the issues of policies, powers of Vice chancellors, bureaucratic hurdles at university level, political interventions, technological advancement and implementation issues. In order to become a world class university, the speakers said that the leaders at Universities have

a) to find innovative ways to improve performance and services,
b) to encourage innovation and research activity amongst the students and faculty members,
c) to train the trainers by conducting large-scale FDP’s,
d) to build strong relationship between industry – academia (The successful example of the work at GTU was cited as an example.),
e) to build collaborations with the other universities and to create a synergical brick and click model,
f) to adopt concept based learning and problem based learning,
g) to improve the governance systems at Universities.
For the Seminar of 8th and 9th January 2014, you may contact Mr Naresh Jadeja at deputy_dir2@gtu.edu.in or Ms Almas Juneja at almasjuneja@yahoo.co.in.

7th seminar on “Designing Structure of Technological University”

The 7th seminar on Designing the Structure of Technological Universities (DSTU) was organized by GTU PG Research Center for Technology Education, Public Policy and Universities of the 21st Century along with the 2nd Conclave on Afro Asian Countries and 2nd CCI Technology Education Excellence Awards 2014 on 19th July, 2014. 20 Vice-Chancellors, Deans and Directors and some Ex-Directors/Vice-Chancellors were invited and participated in the seminar. The seminar was organized to have an insight of what is happening in the Higher Education system. The objective of the seminar was to provide a platform for thinkers, policy makers, academicians and other stakeholders, to come together and share their experience and present what they think are the loopholes in the present education system.


Session 1: Prof. K. L. Kishore, Vice Chancellor, JNT Anantpur, gave presented his views on quality education in Technological Universities; he talked about his university and the Indian scenario viz. number of universities and colleges in India, ranking of India in terms of research, number of Ph.D.’s awarded in India, issues in quality education. He also talked about the e-learning, laboratory programs, project works, examination systems, enabling research environment, affiliation process and finally concluded his speech by stating that drastic change is required in the structure of admissions, faculty recruitment, examination system and training.
Session -2: (Post Lunch)

Dr. H. Mahesappa, Vice Chancellor of Visvesvaraya Technological University, Belgaum, talked about the establishment of VTU, awards won by the university, examination management system implemented at VTU. He further presented on Designing Structure of a World Class Technological University, its vision, mission, objective, creating effective university model, difficulties in structuring a world class technological university.

Mr. R.P. Bajpai, Chancellor of Vel Tech refer India as a service provider and we should think on the parameters to overcome the constraints of the higher education as sometime getting the grant becomes very much difficult and the change should be in the structure, the industry has requirements and we should develop the course structure according to the requirements of the industry and convert the course structure into the degree along with quantifying the credit hours.

Prof. P.P Mathur, Vice Chancellor, KIIT University gave introduction about their university, its vision, mission, genesis, university association, infrastructural facilities, academic program, admission process, academic strength, academic facilities, innovations in teaching, their teaching quality monitoring system, research activities done, interdisciplinary research programs, publication done till date of the university, technology innovations initiatives taken at KIIT named KIIT TECHNOLOGY BUSINESS INCUBATOR.

Dr. (Mrs.) S. K. Pandey, Director, NIT Puducherry made a presentation on the Quality Management in World Class Institutions, she first started with the necessity for world class institutions, how should we create and sustain World Class Educational Institutions (WCEI) in India and We need to benchmark Institutions in India by observing institutions abroad in respect of the academic leadership, Academic and infrastructure enablers to nurture talent, Effective institutional

Prof. K.R. Venugopal, Bangalore University briefed about their university and its outreach. He share his experience at work that he was given the task of separating/dividing the university and made a committee and discussed as to how to bifurcate the universities and done it as per the zones as per the RUSA’s requirement there should be 100 colleges per university and then dividing the Bangalore into 4 zones Bangalore north university, Bangalore East University, Bangalore west university and Bangalore south university and they came up with the model and that is to be presented before the cabinet for the approval.

Dr. S.P. Bansal Vice Chancellor, Maharaja Agrasen University, presented about the quality education in higher education, starting with the meaning of education, goals of higher education, quality higher education, Best practices in the higher education, needs of higher education, problems faced by the youth, the upcoming challenges and probable solutions, gaps in our knowledge, education and social justice, the teacher and the pupil relationship, character education and universal values.
Prof. K.P Mishra, Vice Chancellor, Nehru Gram Bharati University, Allahabad avers that the education system needs to be restructured and there is a need to upgrade the recruitment and promotion in the university system and improving the examination system and make the universities India class first and don’t compare with the top institutions and fundamental changes are the requirement as the system that we have inherited are promoting the family system and nepotism in the university. The governance system has to be changed in order to bring change in the education system and the university should promote research and publications.

Prof. (Dr.) K.C. Singhal, Vice – Chancellor, NIMS University, Jaipur presented on research update on fluorosis, he talked about Fluoride, Mission and Vision, National Status of Fluoride toxicity - India is among the 23 nations around the globe where health problems occur due to excess ingestion of fluoride (>1.5 mg/l) by drinking water.

Dr. Chelvam Venkatesh, Dean Administration and Head school of sciences, Indian Institute of Technology Indore presented about research, technology and innovation at their institute and the sponsored research Programme, publication in journals, Key publications, major international projects, Innovation and recognition, Thrust areas viz. Experimental Astrophysics, Surface Science and Engineering, Bio-sciences and Bio-engineering, Memorandum of Understanding with other institutions, Green Initiatives taken at IIT Indore Campus, Social Work and Outreach Activities like Voluntary Teaching etc.

He talked about the Academic Innovations & Research at VIT started with the briefed history of their university, administrative structure, various schools and center of excellence established, library, accreditations, infrastructure facility, academic innovations, features of Fully Flexible Credit System (FFCS), etc.,

Overall Interaction was carried out throughout day of the seminar between the Ambassadors, Vice Chancellors, Directors and Participants. Inputs given by them is very useful towards achieving the stated objectives of the DSTU Research Project.
Press Coverage:

National Workshop on November 21-22, 2014:
Development of Policy Framework for Innovation, Student Entrepreneurship & IPR for Universities with a large number of affiliated Colleges

Organized by
All India Council of Technical Education (AICTE)
in association with
Gujarat Technological University (GTU)

The national workshop was organized to develop the policy framework for Innovation and Student Entrepreneurship for Universities so that the environment in Engineering Colleges which are affiliated with Universities, may become conducive to innovations by students.

The workshop aimed to provide a platform to every University to present the work, which it was doing for promotion of innovations in its affiliated Colleges. There were presentations from Universities about student start-up support systems, IPR studies and efforts to encouraging student projects, which are relevant to the needs of the society and the requirements of industries.

From these dialog and discussions of two days, Gujarat Technological University has come up with a set of Good Practices, a Policy Framework as well as a Roadmap, for helping the University system become both a platform for innovations in its fields of studies and an active facilitator for student entrepreneurship.

GTU had invited and welcomed all the incubators, accelerators, co-working spaces, start-up networks, start-up research bodies, lead entrepreneurs, student start-up movements, institutions of higher learning, financing institutions and policy makers to join and contribute to the deliberations at the Workshop.

Contact: Ms. Krutika Raval, Assistant Professor, GTU [Email-ap2_cbe@gtu.edu.in] Tel: +91-79-23267541, Ms. Hema Rajput, Research Assistant [Email - ra_dstu@gtu.edu.in] Tel: +91-79-23267536.
Also all the affiliating-type universities were invited, since such Universities occupy as much as 95% of engineering educational space in our country.

The workshop was inaugurated with lamp lighting and felicitations of the dignitaries on dais. Dr. Akshai Aggrawal (Hon’ble VC – GTU) gave the inaugural speech and emphasized that the policies should also be formed for 94% students enrolled in Universities with large number of affiliated colleges. He also stated that Indians are innovative but not in India. It is because of the skewed policies and creation of a system, where the Universities had no freedom to conduct any experiments. Dr. Aggrawal also focused on positive attitude, value of work, doing work without worrying about brand value. He also motivated the audience by saying that we are as good as others if not better. Along with Dr. Aggrawal, other guests also shared their thought on the occasion.

Dr. H. K. Mittal, Adviser & Member Secretary, NSTEDB said that in Entrepreneurial work, the examples and cases of failure are more than those of success. Dr. Mittal shared his wide experience by informing that the real flow of money will be based on education and skills. At the same time, he said that it was important to channelize the energy of the youth. Dr. M. K. Hada, Adviser of AICTE emphasized on activities related to patenting and IPR. Professor. N. K. Goel, President CMAI said that he had more faith in the current government for framing the policies in Entrepreneurship Development. Also he said that everyone should strive to leave the world a better place to live than what he/she gets.

Every session was very well steered by Mr. Yash Saxena (Founder, Openfuel) and Mr. Hiranmay Mahanta (Honorary Director, GTU Innovation Council)

Session 1: Best Practices and Dialogues on Next Practices

Theme: Learning from policy makers about the interventions made by them for promoting start-ups and to understand the strategies, challenges in implementation and opportunities ahead.
Chairman: Dr. Akshai Aggarwal, VC-GTU
Panelist: Shri Sanjay Vijaykumar (Chairman-Startup Village), Mr. Raghunandan Rajmani (Treasurer-ISBA, Chief Executive, JSSATE-ISBA), Dr. H.K. Mittal (Adviser & Member Secretary, NSTEDB)

During the session, Dr. Akshai Aggarwal focused on major policy aspects that were currently being followed at GTU and the future policy prospects for supporting student start-ups. GTU, being a young and growing university, he said, is itself a start-up in that GTU is developing new policies, validates them, re-modifies them as required and then implements them across its system. However he added that GTU is not eligible for any support from any governmental agency since it does not follow the well-beaten track. Mr. Sanjay Vijay Kumar enlightened about the ongoing activities of Startup Village, Kalamassery, Kochi, Kerala and their policies. Mr. Kumar emphasized on the use of Internet resources to gain current knowledge, practical approach to innovate the things and interactions with industry to satisfy their needs. Dr. Raghunandan Rajmani shared his wide experience by sharing current need of such policy and impact from future point of view.

Session 2: Success Strategies for Academic Incubator/Accelerators/Co-working Spaces at Universities; Challenges and opportunities for affiliating – type universities

Chairperson: Dr. Manoj Soni (VC – Dr. Babasaheb Ambedkar Open University, Ahmedabad)
Panelist: Mr. Sushanto Mitra (CEO, Leadangels), Mr. Pranay Gupta (Partner – 91springboard), Mr. Paresh Vora (Venture Studio)

Mr. Yash Saxena raised a series of questions regarding the theme to all panelists like the **challenges faced by private and academic incubators; how to make academic incubator more sustainable; the way innovative ecosystem should be designed; Do Universities need to rethink on the entire education/innovative ecosystem; how to get highly motivated Mentors for the entrepreneurial ecosystem.** The renowned members of the panel responded with very fruitful and satisfactory answers.

In a nutshell, everyone suggested that incubation activities at academic level should not be evaluated over a short term. Academic incubators have to inculcate entrepreneurship in the young generation. It has to link academia to industry and create the supportive ecosystem. **The marketing function plays a major role for growth and sustainability of budding enterprises. Prototyping helps one to learn many new things and one should always enjoy the risk.** There is a need to develop the entire Ecosystem in an “Organic Fashion” rather than in a “Mechanical Fashion”. Do not force any student to be an entrepreneur. A student should not be judged on the basis of the direct output from the first effort. If he/she fails, then encourage them to try again and again. Allow outsiders to get benefit from the innovative ecosystem. Any new entrepreneur must not face any bias due to the race, family background and qualification. There are lots of career options, available in the field of innovation.
SESSION 3: IP Creation, Protection and Successful Exploitation

Chair Person: Dr. M.K. Hada (Advisor, AICTE)
Panelist: Dr. Padma Shatish (Chief Technical Officer IIT-B), Shri Padmin Buch (Managing Director GITCO), Dr. Manish Rachchha (Associate Professor, GTU)

The session was started with a presentation given by Dr. Padma Satish about the IPR policy at IIT-B. We have to create e-cell at every college, legal support for contracts/agreements, provide faster submission process for faster/effective processing for patents. The discussion was about time and cost to file the patent and need to get proper mindset for innovation and patents.

Session 4: Rejuvenating Academic Pre-incubation support systems like E-Cell, for that the discussion is going to be done on making such cells helping higher quality in skill building.

Panelist: Prof. Ajeet Khurana (CEO - SINE, IIT-B), Prof. P. Dan (Associate Professor, Rajendra Mishra School of Engineering Entrepreneurship, IIT, Kharagpur), Prof. Arya Kumar (Chief Entrepreneurship Development & IPR Unit and Professor at BITS, Pilani)

The main points of the discussion during the session were regarding the motivational strategy for the E-cell or Pre-incubation to all; Strategy to run the incubator and entrepreneurship courses and difference between Pre-incubation and Incubation process. All panelists agreed that E-cell should get highly motivated mentors to successfully drive it. Entrepreneurship courses should be entered as Minor courses and whoever developed their products, must be supported to establish a company. Prof. P. Dan gave a presentation on pre-incubation and described all necessary features of it. Every college must have an E-cell and it should be an independent and individual portfolio for a person and it should be handled by a person other than the TPO.

SESSION 5: Emerging Pedagogies In Academic Incubators, PPP And Other Incubators

Keynote Address by Shri Kris Gopalkrishnan (Co-Founder & Ex. CEO Infosys)
Chairman: Prof. H.P. Khinchra (Ex. VC Visvesvaraya Technological University)
Co-Chairman: Prof. D.T. Kapadia (VC Kadi Sarva Vishwavidyalaya, Gandhinagar)
Panelist: Mr. Kunal Upadhyay (CE- CIE, IIM-A), Shri Varun Kapoor (IPS IGP-Cyber Security, MP)

During this session, case studies of efforts in emerging pedagogies to develop new models of incubation including - both in situ and ex situ - were discussed. GTU’s case of a hub-and-spoke incubation process, wherein the University made both pedagogic and co-curricular interventions in engineering colleges was described. It was felt that it made the academic incubation model scalable and sustainable. Shri Kris Gopalkrishnan’s address was on facilitating start-up environment through universities in India and requirement of new policy interventions. He added that it was the best period for starting a new business in all industries like education, healthcare, utilities etc. He particularly mentioned the challenging field of cyber security and said that the proper syllabus should be designed and continuously updated in view of the fast-changing technologies. He said,” The maximum number of jobs will come from small and medium scale enterprises. We need to introduce design and make research and innovation as a part of our education.” He added,” For entrepreneurship there is no age barrier. At start-up centers at Universities, the mentor should explain terms like funding, accounting, balance sheet, profit-loss, HR-plan. The connection with local community for support is extremely necessary to take the cause ahead. It may not be possible for every institutes to have an incubator. Then a cluster of institutions should have an incubator.” For
emergence of women, he said that more motivation should be provided in all possible ways to induce women to become entrepreneurs.

SESSION 6: Role Of Start-Up Ecosystem, Start-Up Network, NPOs, NGOs, NGIs And Other For Supporting Start-Ups Across State Universities.

Chairman: Dr. Jagdish Joshipura (Director, Som LalitInst of Management)
Panelist: Prof. H. P Khincha (Ex. VC Visvesvaraya Technological University), Prof. D.T. Kapadia (VC Kadi Sarva Vishwavidyalaya, Gandhinagar), Shri Bethune Bhowmik (Regional head-start-up weekend)

The session included presentation by various start-up ecosystems, start-up networks, NPOs and discussions on how these informal and formal knowledge networks can help to develop/strengthen student start-up culture across academic campuses. The entrepreneurship journey includes these stages: Inspire, learn, action, start-up, scale-up, champion. A team is the most crucial element of a start-up. The students should be encouraged to read blogs and other literature regularly. The contextual familiarity of new developments in one’s field generates innovative ideas.

Session 7: Financing Student Start-ups through Academic Incubation: hand holding at early stage of Incubation Value Change through Alternative Funding Mechanism

Chairperson: Dr. Jagdish Joshipura (Director, Som LalitInst of Management)
Panelists: Mr. Atit Bajaj (Founder, Start51.com), Mr. Harsh Kaul (Business Head–North & West, SIDBI, Mumbai) and Mr. Arvind Modi (Associate Vice President, Gujarat Venture Finance Ltd. Ahmedabad)

This session mainly informed about the government’s support. It was pointed out that start-ups could not get banking support as they could not give any collateral. Under such circumstances students had no other available option except CrowdFunding. Greater facilities of Venture Financing or of raising capital through debt financing from SIDBI are required. Mr. Atit Bajaj gave details of how CrowdFunding is different from other avenues of raising money and he stressed why CrowdFunding becomes the most important source of finance when the money required is only one to two lacs.

Mr. Harsh Kaul gave a presentation on SIDBI and related activities giving details of various financial schemes for MSMEs. He also identified thrust areas for SIDBI. Policy of GVFL was discussed and the differences between venture financing and debt financing was described. The need of right future valuation of a start-up was stressed.

For More Information please visit: http://www.gtu.ac.in/circulars/15Apr/29042015.pdf
Vice Chancellor's Roundtable conference on 'Innovations in University Systems', on 17th July, 2015, GTU, Chandkheda, Ahmedabad, Gujarat.

Around 30 Vice Chancellors, Deans and Directors of different universities had participated in the Roundtable conference on 'Innovations in University Systems', on 17th July, 2015. H.E. Mr. Bothata Tsikoane, High Commissioner, High Commission of Kingdom of Lesotho, New Delhi, H.E. Mr. Chung Kwang Tien, The Ambassador, Embassy of Taiwan, New Delhi, H.E. Mr. Jorge Cardenas Robles, The Ambassador, Embassy of Bolivia, New Delhi, and Prof. N K Goyal, President, CMAI Association of India and Member- BOA committee had also participated in the conference. Dr. Akshai Agagrwal, Hon’ble Vice Chancellor, GTU had chaired the conference.

Dr. P.P Mathur, Vice Chancellor, KIIT University Bhubaneswar, discussed about the digitalisation in education system, he talked about the present teaching system in India and steps need to be taken to overcome the hurdles. He also talked about the universities research activities.

Dr.(Mrs.) S. K. Pandey, Director, NIT Puducherry talked about the Quality Management in World Class Institutions, she started with the necessity for world class institutions, how should we create and sustain World Class Educational Institutions (WCEI) in India and we need to benchmark Institutions in India by observing institutions abroad in respect of the academic leadership, academic and infrastructure enablers to nurture talent, effective institutional governing mechanisms and source and means of funding. She further said that the Critical Requirements of a world class institution is Leadership, Mindset, Meritocracy and Humility.

Dr. Uma Bhardwaj, Vice Chancellor, Maharaj Vinay Global University, Jaipur, talked about the present research activities going on in university. She also talked about the old NIT is much better that the IITs in terms of teaching pedagogy.

Prof. Dr. S.H. Pawar, Vice Chancellor, D.Y. Patil University, Kolhapur, shared his views on Innovative Initiative for Medical Research with Thrust on Nanotechnology, talked about the make in India concept and about the present health care system in India.

Prof. G.S.N. Raju, Vice Chancellor, Andhra University talked about the initiatives taken at his university, publication and research, Innovation and Incubation centre and CBCS and there is a need to maintain the research activities.
Prof. S.C. Chaubey, RGPTU, talked about the university system and further moving towards the university system he talked on about the changes in syllabi required and requirement and importance of qualified teachers in university.

Prof. Rajit Goswami, from R.K. University, Rajkot talked about the professional development in education system, the inception of the RK University, about different schools and students at his university, outcome based learning and academic advisory council and student activity advisory council. He also informed about the faculty orientation program.

Prof. B.V. Babu, Vice Chancellor, Galgotia University, briefed about the Galgotia University’s structure and its subsidiaries and it is five year old institute with eight thousand students and eighteen schools having all streams except medicine and in future to increase the capacity to 25000 students along with starting a medical institute. He also describe about the three characteristics requires in education system i.e: 1) Academic excellence 2) Corporate Ready Professional 3) Industry Partnership.

Prof. R. Venkata Rao Vice Chancellor, National School of Law, Bengaluru also talked about his universities inception i.e 47 years ago and the journey after that and achieving excellence in legal education. He further goes on to describing about the activities going on in the National School of Law and Memorandum of Understanding with other university.

Dr. Sivach, Vice Chancellor of Shridhar University, talks about the problem the university system is facing i.e. of diminishing enrolments and students leaving the job. The technology is creating two masses of people one the technology enablers, those who are creating technology and technology disablers are those who are disabled by technology and the emerging society is going to face. The technology disabled people becoming burden to us and 20% would be the technology enablers and 80% would be the technology disabled.

Prof. S. Narayana, Pro-Vice Chancellor, VIT University, Vellore, Tamilnadu, talked about the faculty’s performance and research activities. He said that class room teaching should be done as per the curriculum. The students are losing their interests in the classes. The teachers should improve their method of teaching. He further talked about the system they have at their university like faculty performance evaluation, categorisation of faculty and freedom of students to choose their faculty, importance to publication and qualitative journals as per the UGC Norms and there should be a perfect monitoring system regarding the quality.
Dr. P.K. Garg, Vice Chancellor, Uttarakhand Technical University talked about why the research is going down and what is the actual reason behind it and placements at private institutions is quite low and students who don’t get a good job or don’t make up to the MNC go for further PG Programs and after completing it go for research program. He also talked about the need of good faculties and need of beyond class room teaching. There is a need of motivating teachers and students. He also laid importance to train the trainers and also 360 degree development.

Dr. Akshai Aggarwal, Vice Chancellor, GTU talked about the process syllabi, teaching pedagogy adapted by GTU. He discussed about the GTU’s doctoral program undertaken and choice based credit system etc. He also shared about the GTU’s Active Learning (ALVCOM) program and various other initiatives taken for the design engineering, patent and research at university. Further he talked about the various faculties training program and steps should be taken to motivate the faculties to improve their selves.

Prof. N K Goyal, President, CMAI Association talked about the various types of universities. He said that about 95% students in India studies in the affiliating type, deemed and private universities and we should learns good things from each one of us and try to speak good about others. He also talked about teaching and education in rural or remote areas.

H.E. Mr. Bothata Tsikoane, High Commissioner, High Commission of Kingdom of Lesotho, New Delhi, H.E. Mr. Chung Kwang Tien, The Ambassador, Embassy of Taiwan, New Delhi, H.E. Mr. Jorge Cardenas Robles, The Ambassador, Embassy of Bolivia, New Delhi appreciated steps taken by GTU for expanding the horizons of technical education, and they also shared about the education system of their respective countries and discuss about future possible educational celebrations between the countries.

For More Information please visit:
http://gtupgcenters.edu.in/Events/Report_DSTU_19th%20July%202014%20%281%29.pdf
A Roundtable Conclave on 'Higher Education In India', on 05th December, 2015, GTU, Chandkheda, Ahmedabad, Gujarat

Around 20 Vice Chancellors of Different Universities of India, Deans and Directors of GTU affiliated Institutes participated in Roundtable Conclave on ‘Higher Education In India’ on 5th December, 2015.

Objectives of the conclave:
- To bring together the vice chancellors of Indian universities on a common platform.
- To benefit from the valuable insights and views of the Vice Chancellors on all the different issues of Higher Education.
- To continue to work for new ideas, new directions and new reforms, required in higher education.

Six Themes for discussion during the Round Table Conclave:

Theme 1: Governance Reforms for quality enhancement in higher education and improving the quality regulations

Theme 2: Integrating the skill development in higher education, Industry linkage, Partnership with private sector and Students Support Systems

Theme 3: Role of State public Universities & Central Institutions in Education reforms, financing the higher education

Theme 4: Developing best teachers, Promoting research and innovations and Fostering new knowledge

Theme 5: Internationalization of higher Education, Ranking of institute and accreditation and addressing the regional disparity

Theme 6: Promoting online Courses, Opportunities for Technology enabled learning and linking higher Education to Society

For More Information please visit Circular: http://files.gtu.ac.in/circulars/15DEC/04122015.pdf

Theme 1. Governance Reforms for quality enhancement in higher education and improving the quality regulations

Dr. M K Verma, Vice Chancellor, Chhatisgarh Swami Vivekanand Technical University suggested the Performance Evaluation measures should be flexibly framed for different university. He further said about the more power of state university, they should be free from state government and Internal Governance of University/Institute i.e. Procedural time bound charters should be prepared for different tasks. The teachers’ quality should be ensured Institution - Autonomy with accountability should be established.
Dr. S.S. Chahal, Vice Chancellor, Desh Bhagat University suggested radical changes in university system, sectoral government: Micro management by state university and interventions between higher education and regulatory bodies, weak quality assurance in university system, amendments in legislation, strong accountability and Institutional government: the position of vice chancellor, transparency of search committee, appointment of vice chancellors, robust mechanism of appointment of vice chancellor, need of reforms of board of governance (10 – 20 people) and Importance should be given to education.

Dr. Katta Narsihma Reddy, Vice Chancellor, Mahatma Gandhi University, talked about the Insufficient Resources and Infrastructure, low student enrolment ratio; outgone model of teaching ICT enabled education because of lack of funds and training to faculties. He further said that bigger geographical area and affiliated colleges, problems of hostel, autonomy and accountability of universities.

Theme 2: Integrating the skill development in higher education, Industry linkage, Partnership with private sector and Students Support Systems

Dr. B.V. Babu, Vice chancellors of Galgotia University, talked about involving skill based courses as electives, B.Voc to be encouraged with different specialisation in universities, Industry Linkages through Research Partnerships, Research Services, Shared Infrastructure, Academic Entrepreneurship, Human Resource, Training & Transfer, Commercialisation of Intellectual Property, Scientific Publications, Informal Interaction etc. and Need of Provision for slow learners & fast learners through well structural student support systems.

Dr. H.P Khincha, Former VC, Vishveswarya Technological University, said that policies should be made for future and what is the basis to frame policies for future. He further talked on biotechnology revolution, globalisation etc. He urged that the vision statement, act and statutes of the university should be changed, there should be balance of skills courses and knowledge, and there are issues of price vs. cost of higher education and price vs. cost of individual institutions.
Dr. Babu Sebastian, Vice Chancellor, Mahatma Gandhi University, Kerala briefed about the MGU universities and its activities. He further talked on national education policies mainly focuses on areas of higher education system i.e. quality, innovations, skill development and employability. The basic need is to bridging academia, Industry and Global Job Market. He further added that inclusion of Aptitude test and communications skills of the students and empowering the teachers for teaching communications skills.

Dr. Ranjit Goswami, Vice Chancellor, R.K. University, talked about Engaging faculties, skill development centre, getting more faculty members from industry, be it in regulation or as faculty, irrespective of Ph.D., Develop faculty to understand industry engagement and Engage with SME’s, PSU’s should support it.

**Theme 3: Role of State public Universities & Central Institutions in Education reforms, financing the higher education**

Prof. Nupur Prakash, Vice Chancellor, Indira Gandhi Delhi Technical University for women talked about hurdle faced by the university, university’s education reforms, inclusion of component of E-Learning, NPTEL Lectures, CourseEra, Edex, Courses on Disaster management, Business entrepreneur, process improvement technique, Human value and professional ethics. She then talked about the skewed gender ratio, placement activities, lack of University infrastructure and funding and financing the Higher Education. She talked about the financial autonomy and financial hurdles faced at university and included courses as per industry requirement and courses of renewable energy and shared their success stories of Industry which supported M.Tech Programmes and funding from various government agencies.

Dr. R. P. Bajpai, Chancellor, Veltech University talked about giving autonomy to the colleges and administering or monitoring through VC Office and powers of vice chancellors should be very well defined in advance and Leadership of VC should be implemented. Give importance to niche area while asking for grants or funds to the government.
Theme 4: Developing best teachers, Promoting research and innovations and Fostering new knowledge

Dr. S. H. Pawar, Vice Chancellor, D.Y. Patil University talked about the need of reforms in higher educations, the Innovative initiatives to be introduced in Higher Education system for promoting research and fostering new knowledge and Higher education system be restructured for intensive research to meet the global needs. He further said that the researchers to be encouraged to elevate their quality on par with Nobel Laureates. The Inter and Intra faculty interdisciplinary research with multi-national programmes be introduced and intensified.

Theme 5: Internationalization of higher Education, Ranking of institute and accreditation and addressing the regional disparity

Dr. D.P. Lokwani, Vice Chancellor, Madhya Pradesh Medical Sciences University, said that universities are struggling for funds and autonomy of designing fee structure and he said that a university needs to develop vocal skills programs to cater the local problems. He told that it is equally important to identify the institutions/universities which are just short of the world class ranking just like smart city policy; the universities should be liberally funded and given more autonomy, authority and liberal exchange programmes. He finally emphasised on the various points like brand making of Indian Education, identify emerging markets, role of certain recruiter agencies, making easier admission procedure for students, need of International Networking, focusing on teachers training program, good positive media coverage of university, migration from the public sector to the private sector.

Dr. A.K. Malik, Registrar, South Asia University, talked about the achievements and activities of South Asia University and suggested that we need to review our existing regulatory and policy framework for admission of foreign students and participation of teachers in academic program, the infrastructure has to be in place and there has to be policies and program for credit mechanism and provision of admissions without entrance examinations, need to identify the subjects of the areas in which the university awards the degree which can be offered to foreign students, need to continue the fellowship and scholarship to attract the foreign students, deciding upon the fee structure for the foreign students, allowing entry to the quality education providers for academic and research excellence and to meet the quality assurance standards, developing regional hubs in India, to set up quality institutions In India, to encourage innovations and thereby attract best students, need to frame policies and enhance the mobility of
Higher education i.e. teachers, students and staff need to be encouraged in exchange programs preferably with the defined objectives.

**Dr. S.S. Chahal, Vice Chancellor, Desh Bhagat University**, started with the open access to higher education to all in specific institution in India, enabling and fostering internationalization between the international students and international community. Emphasis should be on more seminars, workshops, more exchange of students and MOUs. We need to strengthen more on quality and quantity in order to attract more number of students. The state universities are more dependent on state and they need to spare at least 20% on FDPs on Education International Education. He also raised a point that under RUSA, (Rashtriya Uchattar Sikhsha Abhiyan) the more funds are lying with central govt. and not being distributed at the state. He further suggested the synchronisation of courses to enhance capacity, efficiency and standard quality, the dual degree programs, the common courses should be collaborated with the foreign universities and frequent exchange of faculties and students should be conducted between Indian and foreign universities. We need to improve quality education particularly establishing a forum to understand Indian culture and evolving economy of the society among foreign universities. He suggested that the ranking of the institutions should be done at departmental level instead of institutional level, so that the students can see that which department is better and can opt for that department of university. The university has to address the regional disparity as India has vast regional disparity and students come from different strata, different background and find difficulty in adjusting in other universities. There is less movement of students and faculties from one university to other university and when the cross faculty of ideas do not occur from one place to other place, the higher education system will suffer.

**Mr. Palak Sheth, Director, Pandit Deen Dayal Petroleum University (PDPU)**, put an emphasis on to build International office in every University and inclusion of Internationalisation in National Education mission. He said that International exposure could be a training program, workshop, presenting a research paper or may be exchange. He also said that Accreditation to be more preferred method than ranking system and the Admission policy to be revamped to inculcate diversity.
Theme 6: Promoting online Courses, Opportunities for Technology enabled learning and linking higher Education to Society

Prof. K.Venkata Chalam, Telangana State Council for Higher Education talked about promotion of online courses, AICTE has announced that they will encourage the universities which will initiate such online programs and JNTU has been running correspondent courses in engineering and technology. He also said that the problem being faced by them after becoming a new state (telangana) as there are no regular vice chancellors.

He talked about the Online certificate course related to subject like SPSS & Foreign Language and Webinar - Video Lectures by renowned academicians and industrialist

At the end of the each theme, there was an open discussion for all. It was a very interactive and we have received valuable recommendation from all.

Some other suggestions at the open discussion:

- From beginning of the course, student must think over society related issues and try to resolve at least a problem before completion of course include in course.
- Increase relevant skills and lifelong learning opportunities.
- Include in the APIs marks for industry background and foreign background for recruitment as permanent faculty.
- Need to strengthen participatory educational governance, embed accountability mechanisms,
- Higher Education should be not for profit. It should be primarily a responsibility of the state.
- The horizons of these meetings and conclave must be broadened and the resolutions proposed must be followed so that we can review the results in next meeting just in the beginning.
- To Create stable environment
- Provision of funding to Private institutions beyond NAAC/NBA; based purely on students’ need and for faculty development/ research grant
- For quality of Ph.D Programmes in interdisciplinary, Multi guide systems.

For More Information, Please Visit:
http://gtupgcenters.edu.in/Events/Report%20Round%20Table%20Conclave_05_12_15.pdf
A Report: Ninth Seminar under the DSTU* Project

“THE IDEA OF OUR UNIVERSITIES”

in the context of

THE IDEA OF INDIA

organized with as the knowledge partner

Date: Monday, 7th March 2016 | 10.30 AM to 5 PM
Venue: GTU, Chandkheda Campus, Ahmedabad, Gujarat

BACKGROUND: In the Indian tradition, learning is through questioning. This one-day seminar was designed to answer the question:

Should the idea of our University be rooted in the idea of India?

Around 200 participants inclusive of GTU affiliated colleges and students participated in the seminar.

The seminar was graced by a number of experts viz: Shri. Mukul Kanitkarji, Bharatiya Shikshan Mandal, Shri. Vidhyut Joshi, Former V.C., Bhavnagar University, Former Director, Centre for Social Studies, (ICSSR), Surat and Columnist of Divyabhasker News Paper, Prof. Makkhanlal, Professor, Delhi Institute of Heritage Research & Management, Delhi, Shri. Bharat Gupt, Former Associate Professor, Delhi University, Dr. Girishbhai Thaker, Former VC Somnath Sanskrit University, Prof. E. Vayunandan, Faculty of Public Administration, School of Social Sciences, Ex Member, Board of Management, Indira Gandhi National Open University, Delhi, Shri Koshor Makwana, Columnist, Divya Bhaskar Editor of 'Namaskar', Shri. KG Suresh, Sr. Consulting Editor and Shri. Kapil Kumar, Professor, IGNOU, Delhi.

Besides some of the leaders of the universities in Gujarat were also present. They were Dr. Harish Padh, Hon. Vice Chancellor, S.P.University, Dr. Shashiranjan Yadav, Hon. Vice Chancellor, IITE, Dr. C.B.Jadeja, Hon. Vice Chancellor, Kutch University and Prof. Shailesh Zala, Hon. Vice Chancellor, Bhavnagar University. Dr. Ajitsinh Rana, R.B.Sagar College of Education and member of DSTU project, coordinated the seminar.

* Designing the Structure of Technological University (DSTU) – GTU Research Project
The delegates deliberated and raised their viewpoints on the following themes:

**Technical Session 1:** The idea of our Universities and the idea of India till the Pre - Kalidas era (till the end of 3rd century AD) and **Technical Session 2:** The idea of our Universities and the idea of India till the end of Nalanda University (From the beginning of the 4th century AD to the end of 13th century).

**Chairman:** Vidhyut Joshi, former V.C., Bhavnagar University, former Director, Centre for Social Studies, (ICSSR), Surat and columnist of Divyabhasker News Paper and **Shri. Girish Bhai Thaker,** former VC Somnath Sanskrit University.

**Dr Vidhyut Joshi** talked about creative teaching and status oriented society. He talked about the changing economy and education system. He also pointed out the difference between ‘leaning to do’ and ‘learning to work’. He concluded his speech urging that there is a need to revamp the entire educational system.

**Shri. Girish Bhai Thaker** talked about the education system in ‘Arya Vart’ and in ‘Bharat Varsha’. He went on to discuss the ancient education system, the present education system and need to change the education system. He described the requirements of life viz. Dharma, Artha, Kama and Moksha and the need for living a life of wholeness.

**Prof. Makkhanlal, Professor, Delhi Institute of Heritage Research & Management, Delhi** stated that education tells us about how one must behave in the society. There should not be materialism in the education system. These days the structure of Social Sciences does not teach the students about taking pride in our country and in our culture. He talked about quantum physics and roots of modern sciences. He finally ended his speech by saying that we should not live in the past. But our history gives us the light for the future.
Prof. Bharat Gupt, former Associate Professor, Delhi University shared his views on the Indian economy and silos-based learning in the education sector. He talked about the UGC system, the courses of Humanities and Social Sciences and its importance and the classical teaching education. He laid importance on developing research in the universities system and said that there should be freedom with responsibilities.

Technical Session 3: The idea of our Universities and the idea of India as of today (From the beginning of the 14th century AD to today).

Chairman: Shri Kishor Makwana, Columnist, Divya Bhaskar and Editor of ‘Namaskar’ shared his work experience as a columnist and how he had dealt with it.

He also talked about the issue of JNU and he urged that it should not be made a national issue and should not affect the students and education system.

Prof. Kapil Kumar, Professor, IGNOU, Delhi briefed about the present status of Higher Education and changes in curriculum and choice based system education.

He said what happened in JNU was a mere aberration in our nation’s life. He suggested that reforms in the present education system is a need of the hour in order to change the mind-set of the students.

E. Vayunandan, Faculty of Public Administration, School of Social Sciences, Ex Member, Board of Management, Indira Gandhi National Open University, Delhi shared his views on the activities that are being taken up by the universities and the mis-placed motivation among the leaders of students’ unions. He urged that students should take responsibility and teachers should come forward and should be assertive and they should sensitize them to avoid such kind of thing that happened in JNU.

Shri. KG Suresh, Sr. Consulting Editor shared his personal experience of road rage accident in Delhi and his educational experience. He talked about freedom of speech and responsibility of a university towards the society. He urged that student politics should be removed from the colleges, one has to see whether the student politics is right centric or duty centric. He discussed the rights and fundamental duties of every citizens and laid stress on culture and values. He finally ended his speech by talking about the ‘Make in India’ concept and said that a university should think for India.
Dr. Shashiranjan Yadav, Hon. Vice Chancellor, IITE briefed about university and courses offered at the IITE viz. Entrepreneurship, Yoga, cleanliness and Project Based Learning. He also shared views about what should be the idea of the country for developing the curriculum. He finally said that the country’s aim should be ‘Make in India’ and not ‘Break India’.

More details about the seminar:

http://files.gtu.ac.in/circulars/16Apr/02042016.pdf
A Collective Certification Program of Modern Teaching Practices in Learning System

A proposal prepared for Setting up A Collective Certification Program of Modern Teaching Practices in Learning System at the GTU, which also includes Induction of Faculties. The aim of taking up this is to provide a formal training to the new entrant faculties in a form of a common certification program instead of the conventional training and also to validate the same in all over Indian Universities. The program will take the base of the components of syllabus of academic staff college

- COMPONENT A: Awareness of linkages between society, environment, development and education
- COMPONENT B: Philosophy of education, Bhartiya education system and pedagogy
- COMPONENT C: Resource awareness and knowledge generation.
- COMPONENT D: Management and personality development.
- COMPONENT E: Bhartiya Knowledge System in the field of Science and Technology
- COMPONENT F: Program Evaluation

Introducing a Bridge Course

The Centre also initiated a seminar on Introductory Session on “Bharatiya Knowledge System in the Field of Science and Technology” with an intention to introduce it as a Bridge course for the Diploma students and are going to pursue the degree program. The objective is to make them understand the Basic Principles of BHARATIYA PHILOSOPHY OF SCIENCE AND TECHNOLOGY with the Examples of actual Scientific and technological developments from ancient literature.

Part I: Basic Principles of BHARATIYA PHILOSOPHY OF SCIENCE

UNIT I:

- Integrated approach towards development.
- Bharatiya way of life that defines its approach towards science and technology.
- Environment friendly, Sustainability, Long lasting benefits.
- Aesthetics and art in technology
- Optimized utilization of natural resources.
- For the benefit of masses.
• Without side effects.
• Spherical concept of time- KALCHAKRA- instead of linear concept of the west.
• Decentralized applications- Small is divine.
• Knowledge driven society.

Part II: Examples of actual Scientific and technological developments from ancient literature.

UNIT II:

• Mathematics and Astronomy.
• Metallurgy.
• Alchemy

UNIT III:

• Town Planning
• Civil, Structural Engineering
• Architecture.

UNIT IV:

• Science for villages(i) Agriculture (ii) Irrigation(iii) Industries for making villages self - sufficient (iv) Soil Conservation (v) Organic Farming.
• Environmental Science (i) Water Conservation (ii) Air Purification (iii) Ecological Balance.
• Medicine: Ayurvedic System for perfect Health (i) Mental (ii) Physical.
• Surgical Instruments.

Part III: Application of Bhartiya knowledge to the present day

Unit V:

• Projects
  o Development of appropriate technology.
  o Developing Models based on ancient literature.
  o Problem solving using Bharatiya Approach (Ex. Vedic Mathematics)
• Research Dissertation.
Statutory Provisions & Regulations for the teachers & employee of the GTU affiliated colleges

Gujarat Technological University being a new university has no statutory provisions & regulations for the teachers & employee of its affiliated colleges. As per the directives of Hon. Vice Chancellor one Committee is constituted to work upon the same.

The first meeting of all the committee members were arranged in order to discuss the Road Map and taking a step further to form such kinds of rules and regulations abiding for the affiliated institutes of GTU.

Following Agendas have been discussed in the Meeting:

- Objective of the preparing Committee for the Formation of the Statutory Provisions and Regulations
- Problems faced by the Employees (Academic and Non-Academic) of the affiliated Institutes
- Challenges confronted by the University in employee administration of affiliated Institutes
- Study the other universities norms for formulating the Statutory Provisions and Regulations for the teachers & employee of the GTU affiliated colleges.
- Involving the persons from the Institutes and All registered Teachers Associations and Other Associations.

In Nutshell various points has been raised and discussed between the committee members which university may consider in the formation of the Statutory Provisions & Regulations. Such as:

- Employee leave rules,
- Employee Recruitment (appointment and Exit/termination) rules
- Teacher’s Identity card with Unique ID Number and teachers/faculties portal etc.
- It was considered that the rules formed such must be abiding to the entire institute affiliated to the GTU.
- Initially all committee members were agreed to study the Gujarat University’s Hand Book of Provisions & Regulations for the teachers & employee and Based on which GTU may prepare first Draft of the Statutory Provisions & Regulations for the teachers & employee of affiliated Institutes after making necessary amendments as per the University Requirements.
A One Day Induction Training Programme (ITP) For Fresh Engineering Teachers on ‘Active, Interactive & Effective Teaching’

Pedagogy is the art of teaching. Pedagogy involves knowledge and skills which are being able to convey in easier ways that students can understand, remember and apply. The pedagogical skills can be classified into classroom management skills, presentation skills and content-related skills.

Any good teacher knows that a class full of out-of-control students is not going to learn much. A teacher’s first major focus is to learn about managing behavior in his or her classroom. This set of pedagogical skills involves establishing clear rules and expectations, because students who do not know what is expected of them are more likely to misbehave. Interactive classroom will never have such behavioral problems as all students are involved in the process. A skilled teacher is able to handle behavioral problems with a minimum amount of disruption to the learning environment. To strengthen learning about all these issues many interactive activities are included under this Programme.

The other major area of pedagogical skills is that of teaching content effectively. The teacher should have good command on content and should be able to present according to the level of the students. A good teacher will present information in ways that actively engage the students in the content part that they are learning. Good pedagogy involves not only imparting information, but also providing opportunities to apply that information.

Apart from these, preparing balanced question paper and effective evaluation is also incorporated under this one day induction training Programme. It is a perfect packet of teaching attributes, GTU is offering to fresh teachers. The purpose is to address such a mass of the teachers who have never and ever undergone any kind of pedagogical training after being assigned the role of a teacher.

The program is consisting of sessions on Understanding Human behavior, Development of Communication Skills, Planning & Preparing for effective Lecture and formulating good question papers. Till now around 350 teachers have been trained and benefited by total four rounds of this one day induction training program on Active, Interactive & effective teaching.

Programme Objectives

- Orient the mass of fresh teachers at GTU affiliated colleges towards effective teaching
- To train teachers so that they can create active involvement of students in classroom
- To Improve overall classroom efficiency
- To enhance the quality of education
- To create awareness on designing balanced question paper in line to the prevailing curriculum

ITP- I (Completed on date: 08-08-2015) - http://files.gtu.ac.in/circulars/15SEP/09092015_03.pdf
ITP-III (Completed on date: 01-11-2015) - http://files.gtu.ac.in/circulars/15DEC/14122015_05.pdf
ITP-IV (Completed on date: 09-01-2016) - http://files.gtu.ac.in/circulars/16Feb/19022016.pdf
BACKGROUND OF THE GURUKUL

Indo Universal Collaboration for Engineering Education (IUCEE) has played a key role in enhancing the quality of engineering education in India since its inception in 2007. A variety of workshops and webinars have been offered for faculty in more than 200 engineering colleges, with the help of a network of experts from academia and industry from around the world. More recently annual conferences and a journal have provided platforms for faculty to connect and share their experiences in transforming engineering education at their institutions. Now there is a need for these transformations to become institutionalized. The IUCEE Gurukuls for Learning and Outcomes Based Education (iGLOBE) program addresses this vital need for institutions to develop self-reliance towards achieving excellence in engineering education. IUCEE will facilitate these Gurukuls (i.e. Centers for Excellence) which will be modeled as a blend of the Centers for Engineering Education and Centers for Teaching and Learning around the world.

MISSION AND OBJECTIVES OF IUCEE GURUKUL

The primary role of the Gurukul in an institution is to provide an ecosystem for faculty development in a manner that will directly contribute to enhance students’ learning experience. The mission of the Gurukul is to guide and mentor its faculty in improving their teaching and learning methods, in implementing outcomes based education and in conducting engineering education research.

ABOUT SITE VISIT

The meeting started with the floral felicitation of Dr. Yogesh Velankar, Director, IUCEE Gurukul Program followed by brief introduction of each internal stakeholder present at the meeting. Dr. Velankar outlined about the IUCEE Gurukul Program and he further added that it’s been taken up by 15 other institutes across India.

Dr. Rajul Gajjar, Principal VGEC & Director GTU; Dr. Rupesh Vasani, Dean GTU; Dr. Chanchal Dass, Advisor, GTU; Dr. Dilip Ahir, Asso. Dean GTU; Dr. Siddharth Jadeja, Student Regional Advisor, Asia Pacific, ASME and Executive Director, BHGCET and other academic and administrative staff were present at the meeting. Around 30 members from GTU have attended the meeting.
OBJECTIVES OF MEETING

- To ensure a common understanding of the concepts related to “engineering education” (e.g. papers, conferences and certification in this field)
- To identify and prioritize the Gurukul Domains in which your institution has potential to build initial strength and/or elevate existing domains to the next level
- To explore the potential for seeking assistance from existing networks of experts at your Institution and its advisory groups
- To review existing infrastructural support for the program and plans
- To ensure commitment of your leadership team
- To address any issues or concerns, if any

Dr. Velankar briefed about the outcome based education is one of the main components of IUCEE Gurukul with an objective to improve the engineering education by conducting webinar and FDPs. The IUCEE Gurukul welcomes multi-disciplinary perspectives. Dr. Velankar then started explaining detailed application and its various dimensions.

For More Information, Please visit: http://gtupgecenters.edu.in/Events/FINAL%20MOM.pdf
Team (GTU-CeTEPU-21)

Chief Mentor – Dr. Akshai Aggarwal, Hon. Vice Chancellor, Gujarat Technological University

Core - Committee Members of the Project:
- Dr. Rajesh Khajuria, Director, CKSVIM, Vadodara
- Dr. K.N. Sheth, Dean, Alumini Association, GTU
  - Dr. P.G.K.Murthy, Dean, GTU
- Dr. Trupti Almoula, Director, Narmada College of Management, Bharuch
- Dr. Ajitsinh Rana, Associate Professor, R.B. Sagar College of Education

Committee Members from GTU:
- Ms. Krutika H. Raval, Assistant Professor, GTU-CeTEPU-21 and GTU-CBECSON
- Ms. Hema P. Rajput, Research Assistant, DSTU, GTU- CeTEPU-21

For More Details about DSTU, GTU-CeTEPU-21.

- Visit: http://gtupgcenters.edu.in/home.aspx?id=6
- University Website: http://gtu.ac.in