



KSHEC

# The National Seminar on Rejuvenation of Undergraduate Education in India

INDIA

AUGUST 10-11, 2018 | BENGALURU

- A Report

Institute of Advanced Studies, IISc campus, Bengaluru



Centre for Educational and Social Studies  
National Assessment and Accreditation Council  
Association of Indian Universities  
Karnataka State Higher Education Council

10 & 11 August, 2018

Report of the National Seminar on “**Rejuvenation of Undergraduate Education in India**” organized by Centre for Educational and Social Studies in collaboration with National Assessment and Accreditation Council (NAAC), Association of Indian Universities (AIU) and Karnataka State Higher Education Council (KSHEC) held on 10 & 11 August, 2018 at Bengaluru.

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# **REJUVENATION OF UNDERGRADUATE EDUCATION IN INDIA**

**Report of the National Seminar held  
on  
10<sup>TH</sup> and 11<sup>th</sup>AUGUST 2018.**



**CENTRE FOR EDUCATIONAL AND SOCIAL STUDIES (CESS)**

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## **Foreword**

It gives me immense pleasure in presenting the report of the National Seminar on 'Rejuvenation of Undergraduate Education in India' organized by Centre for Educational and Social Studies in collaboration with National Assessment and Accreditation Council, Association of Indian Universities and Karnataka State Higher Education Council held on 10<sup>th</sup> and 11<sup>th</sup> August 2018 at JRD Tata Auditorium, National Institute of Advanced Studies, Bengaluru.

The very conception of the idea of conducting a seminar on undergraduate education of this nature and scale emerged for the reason that undergraduate education was identified as one of the main thrust areas of education from the very many discussions that we held with different stakeholders of CESS and extended teams. The objective of the seminar was to break the mental models on several aspects concerning undergraduate education and to bring in a mindset change in those involved at the micro level. The approach to the seminar and its themes were very positive so that it is future directed and positively oriented. In this direction the seminar was able to achieve the subtle objectives and also initiated thinking amongst all participants on the various aspects concerning undergraduate education. In all we could sense that there was great enthusiasm to take this mission forward and reach the unreached areas.

The inauguration of the seminar marked a good beginning and set the both direction and expectations from the seminar. Dr. K. Kasturirangan, former chairman ISRO and Chairperson of the National Education Policy Committee inaugurated the seminar and his speech highlighted on the need for introducing liberal arts education and research at the undergraduate level. The eminent speakers of the plenary sessions was highly thought provoking and left the audience at a point of readiness towards action.

The unique sessions like the panel discussion on the expectation of stakeholder where in representation from the user systems like Industry, Voluntary organizations, Student leaders and the academia brought a sense of responsibility amongst the participants to meet such expectations through effective delivery of the Undergraduate system. The session on the interaction with an author of the book 'College: pathways for possibilities', brought out the authors views on the liberal arts/science education and the contradisciplinary courses in undergraduate education.

The seminar was a participative exercise where the participants had ample opportunities to express their ideas through paper presentation sessions and the Rejuvidea conclave.

The Cultural program added splendour to the entire seminar where the children of Sparsha Trust danced with the beats of the drums and performed the traditional folk forms of Karnataka.

The support of our academic partners, NAAC, AIU, KSHEC is immensely appreciated. Look forward to take the outcomes of the seminar to the next level and on a mission mode. For all that is to come through in the forthcoming days we solicit your participation.

Dr. Manasa Nagabhushanam  
Director CESS

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## **About the Seminar**

Undergraduate education contributes significantly for the development of the nation as human resources for the nation are primarily generated from the UG Programs. In India, 79.4% of Students are enrolled in B.A/B.Sc/B.Com programs and only 7% of the undergraduate students move on to PG programs. Undergraduate Education in the country suffers from many challenges like inadequate GER, uneven penetration, poor infrastructure, outdated courses, irrelevant and rigid structure, one size fits all design, archaic pedagogy, commercialization, absence of student orientation, unresponsive to societal expectations, low morale among and poor leadership of institutions etc. These have declined the value of undergraduate education in general and courses like BA, B.Sc. and B.Com etc. in particular. At the same time, these general courses and institutions have many intrinsic advantages like good enrolments, willingness of parents and society to impart education, availability of institutions, affordable education and reasonable investment on institutions/teachers. Hence, the need of the hour is to rejuvenate Under Graduate Education based on its intrinsic strengths in order to minimize the impact of challenges.

The approach for rejuvenation of undergraduate education in India needs to be

- Rejuvenate, not regret
- Leverage strengths, not highlight weaknesses
- Contribute, not criticize
- Shoulder responsibility, not blame

With this approach and agenda in mind, Centre for Educational and Social Studies (CESS), Bengaluru and Association of Indian Universities (AIU) announce a two- day national seminar on “Rejuvenation of Undergraduate Education in India”

## **Objectives**

The proposed seminar aims

- To rekindle the enthusiasm among all concerned for rejuvenating education in India,
- To discuss and deliberate on the ways and means for rejuvenation,
- To influence action for rejuvenation at the levels of individuals, colleges, Universities and policy making bodies; and

- To build the roadmap as well as the blueprint for rejuvenation of UG courses.

The program includes plenary and paper presentations on major themes, panel discussion, group discussions and Idea conclave

### **Themes of the Seminar**

#### ***1. Course Structure, Curriculum Development and Assessment***

- a. Duration, Nomenclature, Architecture, Entry, Exit, Credit Framework, Minor/Major courses and mode of delivery
- b. Liberal Arts Education
- c. Graduate Attributes and Learning Outcomes
- d. Continuous and Comprehensive Assessment

#### ***2. Pedagogical Practices and Innovation***

- a. Innovative Practices in Pedagogy
- b. Experiments and Experiences of Teachers, Students and Institutions
- c. Professional Development of Teachers
- d. Best Practices in UG Education

#### ***3. Skill Development and Employability***

- a. Integration of Skills
- b. Entrepreneurship Development
- c. Internship, Projects, Field Work and Social Orientation
- d. Industry/User System Interaction

#### ***4. Governance, Institutional Management and Leadership***

- a. Structure and mechanism
- b. Role of Technology
- c. Participation of Students and other Stakeholders
- d. Institutional Development Plans



## **Approach To and Issues For “Rejuvenation Of Undergraduate Education In India”**

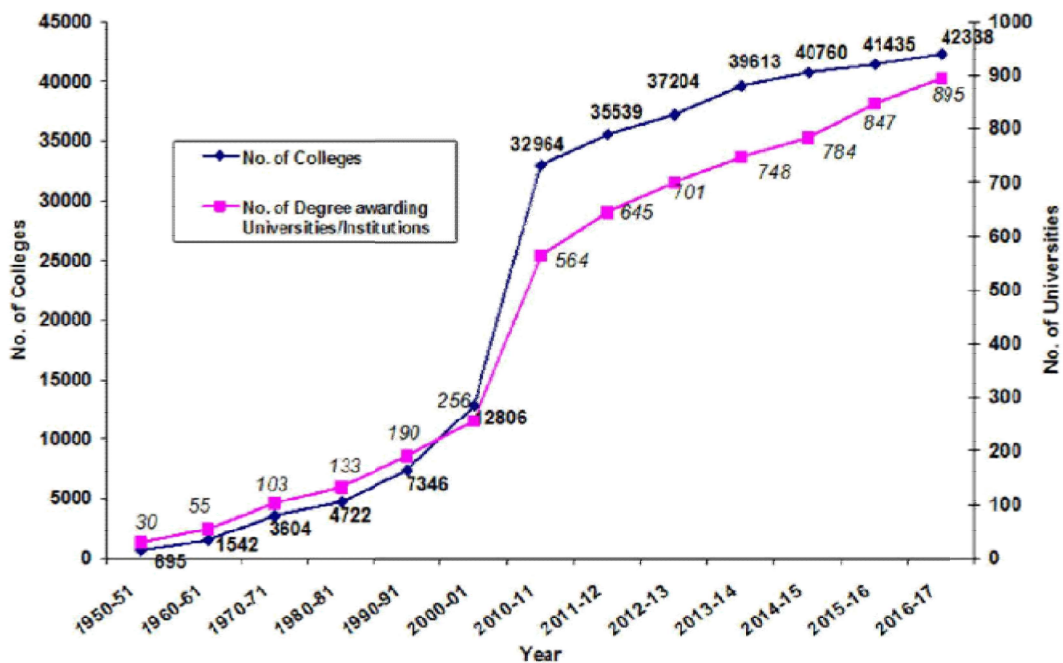
### **AN INTRODUCTION**

The Higher education structure of India comprises of three levels. At the first level, there is Department of Higher Education under the Ministry of Human Resource Development, various regulatory bodies like University Grants Commission (UGC), All India Council for Technical Education (AICTE) and other statutory bodies. The second level consists of institutions of national importance, Central Universities, State Universities, deemed-to-be Universities and Private Universities. The third level consists of a wide network of affiliated, autonomous and constituent colleges offering undergraduate programmes in large numbers. It is these colleges at the grass root level impart higher education through numerous undergraduate and post graduate programmes, normally with the duration of three and two years respectively. Further, most of the colleges are affiliated to State Public Universities offering under graduate programmes in the disciplines of Arts, Commerce and Science with different combinations of related disciplines. They come under the purview of State Public Universities and UGC.

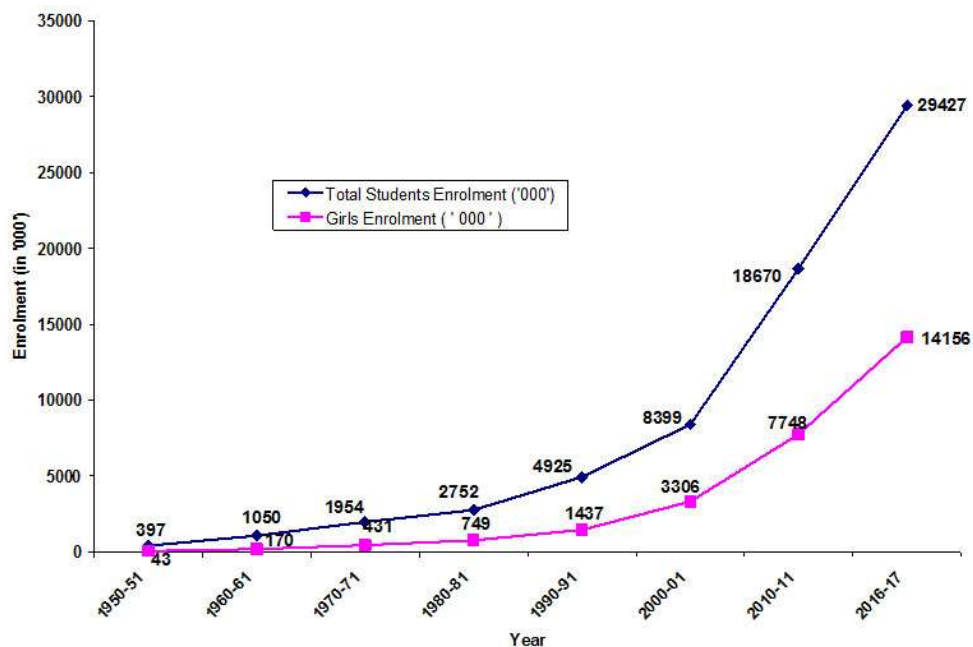
The affiliating system is a British legacy, under which, the Universities affiliate colleges in a specified geographical area. Subsequent to affiliation, the course structure, syllabus, admissions, examinations, award of degree and all other matters are regulated by the affiliating University. In other words, all the affiliated colleges of the university will have a uniform nomenclature whether it is in the case of the degree, subjects offered, syllabus, reference books, examination, internal assessment, eligibility for teaching, academic calendar etc. whereas, autonomous colleges have academic freedom to some extent to introduce changes in the nomenclature, subjects offered, syllabus, examination system, pedagogy etc. The concerned University and the autonomous college will jointly award the Degree. The constituent colleges are directly under the regulation of the concerned university.

## GROWTH OF HIGHER EDUCATION

The following charts bring out the growth in the post-Independence era of India.



Source: University Grants Commission website



Source: University Grants Commission website

## **PRESENT STATUS OF UNDERGRADUATE EDUCATION IN INDIA**

According to All India Survey on Higher Education (AISHE) Report 2016-17, there are 864 universities, 40,026 colleges and 35.7 million students in Higher Education. Gross Enrollment Ratio (GER) in the age group of 18-23 years in higher education is 25.2%. About 79.3% of enrolments in higher education are found in the Under Graduate programs, whereas the enrolments in Post Graduate courses are 11.2%.

At Under Graduate level, about 2.17 million students (38%) are enrolled into Arts/Humanities/Social Sciences courses, 1.12 million students (16.7%) in Science, 0.84 million students (14.7%) in Engineering and technology and 0.95 million students in Commerce (14.1%). Only ten programmes cover 84% of the total students enrolled in Higher Education. These numbers reveal that the major chunk of students in higher education are pursuing courses like BA, B.Sc, B.Com. Hence, any reform in higher education has to necessarily start from Under Graduate education in general and Under Graduate courses offered by colleges affiliated to the State Public Universities in particular.

## **CRITICALITY OF UNDER GRADUATE EDUCATION**

The big edifice of higher education is built on the foundation of undergraduate education because an under graduate course is the first encounter for the student within the realm of higher education. The way the student pursues under graduate courses not only determines his /her intrinsic value but also provides for pursuing further education including research. In majority of the cases, the students discontinue higher education after the completion of under graduate course. In other words, it has become a terminal course.

The gainful engagement of the students in society largely depends on the quality of undergraduate education the student has obtained. The age ranges from 18 to 21 for those who are studying in Undergraduate programs. It is the first phase of the adulthood after completing school education up to 12<sup>th</sup> standard. The goal of higher education should be to promote professional development and personal growth as well as that of contributing to the development of the society/nation. It is believed that the contribution of the present UG education is much desired. Hence, reforms and

rejuvenation of under graduate education has become the concern and priority of all stakeholders of higher education- the students, teachers, institutions, industry, voluntary organisations, regulatory bodies and the society in general.

Such criticality of under graduate education leaves with no other alternative than to work towards 'Reforms and Rejuvenation'.

## **REFORM OF UNDER GRADUATE EDUCATION**

Considering the experience of the past and the quality of products of Higher education, the present under graduate education offered by colleges and universities across the country has to undergo drastic reforms in terms of course structure, curriculum, assessment, pedagogy, skill development, employability, governance and institutional management. With the universalisation of elementary and secondary education, the pressure on under graduate education is increasing day by day with increased enrolments of students whose profiles are diverse.

Novelist and academician Saikat Majumdar's new book '*College: Pathways of Possibility*' opines that "the existing BA, BSc systems in the large public universities, as we know, is largely the legacy of a colonial system, designed by the British to train and certify government employees. The book *College* proposes a shift away from this understanding of education merely as the consumption of existing knowledge, verifiable through examination". Thus, it is imperative that the massive human resources in undergraduate courses have to be converted into a value added, intrinsically strong, and socially focused, value driven and employable persons who, in turn, become the valuable assets of the society.

*The reform of under graduate education involves the following questions.*

- 1. Does the duration and the architecture of the UG courses need change?*
- 2. Should single entry and single exit be continued or do we need to have lateral entry/exit with a combination of certificates, diplomas and degrees?*

3. *Whether the assessment/examination must continue with marks and grades or should be replaced by graduate attributes and learning outcomes?*
4. *Whether the pedagogy in UG needs to be innovative and relevant to the present day adults and their learning styles?*
5. *Should UG programmes be integrated with employability/entrepreneurship development? If so, how?*
6. *Do we need reforms in the Governance/Management/Leadership of colleges and Universities for better focus on change management?*
7. *Should there be increased role of technology in teaching and institutional management?*
8. *Does faculty development need a complete overhaul focusing on best practices, innovation and value orientation?*
9. *Do we need to empower students more and closely listen to their voices, views and suggestions?*
10. *How do we ensure Change Management in undergraduate education?*

Providing answers to the above questions in a constructive and imaginative manner will ensure better reform in the existing under graduate education in India. In fact, mere reform is *not* just enough. It must encompass rejuvenation in the spirit and mindset of all concerned.

### **TOWARDS REJUVENATION**

Many a time, following questions are raised in the context of under graduate education.

1. How do we convert teaching into learning?
2. How to add more value to students by the time they graduate?
3. How to make students unlock their talent and competency in academic and non-academic dimensions?

4. How to inspire/motivate the leaders and teachers in undergraduate colleges to try out experimentation, innovation and out of box thinking in everything that they do?
5. How to make under graduate courses holistic, integrated and value/society driven?

The above questions could be answered by thought and action by stakeholders-students, teachers, institutions and others. This necessitates positive approach to rejuvenation. The elements of such an approach are

➤ *Rejuvenate, not regret*

*Leverage strengths, do not highlight weaknesses*

*Contribute, not blame*

➤ *Shoulder responsibility, do not blame others*

### **Final Word**

On the whole, National Seminar on “Rejuvenation of Undergraduate Education in India” aims to think, explore, brainstorm and innovate ideas for solutions at the level of individuals or colleges without waiting for anybody or any body.

**Inaugural Address by Dr. K. Kasturirangan,  
Chairman, National Education Policy Committee**

This is a very important gathering which is most appropriate and timely to introduce the very important component of higher education focus by debating the multiplicity of issues that break the undergraduate education in our country. The step taken by CESS is truly a farsighted one considering that the country is getting here to adopt a new education policy as announced by the present government. The changing scenario in the country's socio- economic development has brought in a sense of urgency to examine the different aspects of the countries education which is less researched. I also see the importance of this meeting in the context of separate professionals, in a sense, who is who in the educational sector of this country and whose inputs in this meeting is sure to provide fresh insight in the issues to be dealt with in rejuvenating the undergraduate education. To get a scale of undergraduate education as per AISHE report 2016-17, as of now higher education is imparted by 864 universities, about 40000 colleges, student's strength is about 35.7 million, GER 25.2 % and the undergraduate education constitutes nearly 84% in higher education. Further, the present undergraduate education has nearly 38% in arts, humanities and social sciences and 31% in science and commerce. In other words, it means that about large chunk of students are pursuing the courses like BA, BSc and B.com.

This present status clearly highlights the overhauling of higher education must start at under graduation in general and in particular undergraduate courses by colleges affiliated to state universities. We also need to keep in mind, in fact Prof. Ramachandran, one of the key person has said that we should reach GER of 50% and that can make all the difference. The present discussion, I am sure will address what would happen if we reach the GER 50% in higher education. The role of undergraduate education as a critical element has to be understood in the context of it being stepping stone towards developing professional competence at the same time developing the ability to go with new and emerging knowledge demands. With the present GDP of two plus trillion economy, India is already placed as 6th major economic power, by 2030 the country will likely be 10 trillion economy by nominal GDP terms, thereby, place India as a third major economic power with 8% GDP growth expected. Growth is not impossible

for India to achieve in the coming years, therefore, becoming a third largest economy next only to US and China is certainly realistic assume for planning for the future.

Initially, moving towards 5th and 3rd largest economy managing it, sustaining it and growing into even higher level would call for an extraordinary human enterprise, the like of which we have never felt in the past. This coupled with the continuous fast changing knowledge domain through development in science and technology and related factors makes it imperative for us to examine the adequacy of present models of education and research. With nearly 70% of higher education being in the domain of undergraduate studies, even if we exclude engineering and technology which constitutes 14% the need for major transformation for this segment of education hardly needs further emphasis. At the present juncture, India's higher education faces number of challenges in meeting the need to build expertise that society needs for 21st century. In particular, such a goal needs to address contemporary and future workplace demand flexibility and focusing on generic 21st century competencies that are critical for all kinds of work, further, education should be enterprising.

On the whole, the education system besides creating greater opportunity for employment should also be key to cohesive and cooperative communities, enlighten culture for prosperous nation. On the specific aspects of higher education some of the critical challenges include fragmentation of higher education institutions, lack of teachers, institutions autonomy, as well as inadequate mechanism for attaining outstanding leaderships and performance management. Of course, this will call for examining institutional structure, including the need for restructuring and consolidation on questions like bringing together the multiplicity of educational institutions in particular area to provide an optimality with respects to imparting education in variety of field is the need of hour. I am sure many of the questions related to undergraduate education will be discussed in this seminar. Among the various themes included in this seminar I see, Course structure and Curriculum, Pedagogical practices and innovation, Skill development and Governance all critical to develop appropriate strategies.



At this juncture, I would like to touch upon few specific points which certainly needs attention from this erudite and informed audience. First point is on liberal education, liberal education differs fundamentally from professional education or vocational training as teachings are more general and less obviously useful, liberal education expands capacity to reason and empathize. To foster these qualities the content of curriculum is critical factor, science and mathematics are an essential component of such project because they present to the students the method of enquiry which are indispensable for full development and its powers to reason independently. On the other side the great works of philosophy provide example of how mind liberates itself from prejudices and by the rigorous application of reason to question how we know and how we should act. Now the question one can ask is how relevant are these considerations to prepare ourselves for this new millennium. The future is highly unpredictable, process of undergraduate education with particular emphasis on liberal education would lead to a student to learn how to learn, how to acquire information and thus how to develop skill so we are not straight jacketed into one area, one skill, one vocation but we are prepared to meet the new and emerging areas of knowledge convert them into skill; that is what I meant by learn how to learn, how to acquire information and thus how to develop skill.

Next point I bring forward regarding fundamental research in the undergraduate education for very different reason. The level of investment in basic science are investment for the future, universities rather than government laboratories, non-teaching research institutes or private industries are the primary institute under which government funded research are undertaken. The success of scientific research in a university system which provided virtual free market of ideas is unlikely to be duplicated, in this country we need to bring this. Initiation of research as a matter of culture in university system is critical and to some extent the flavor has to be felt in undergraduate education. But, an equally important dimension is a deliberate decision to locate most fundamental research in universities rather than government laboratories and private institutions, it would enable next generation of scientists and engineers to receive education from nations best scientists and engineers to create an overall quality which is unprecedented. This is now being initiated by IISc, where undergraduate education is a part of overall post-graduate research and professionals

from postgraduate would teach the undergraduate students, which is an extraordinary opportunity to undergraduate students to get exposed to some of the best minds in the country. At the same time, we are also going into liberal arts, liberal education part of it and see how that can be integrated to see create overall enrichment of undergraduate education. These experiments are already in progress not only in IISc but also in several other institutions of the country.

In our case, I think this needs to be taken in a broader and larger context of the number of universities and college we are talking, we have large ground to cover before the renewed UG system is felt across the country. One has to look into restructuring liberal education, it could be one, two, three or four years; there could be a component called liberal education and there could be a component called specialization, with suitable permutation with exit option within UG education where it is not necessary to complete BA degree only after three years. This flexibility has to be build up under UG education it is going to be challenging but we have to address it. It should not be the preserve of exclusive institutions like IISc or IIT's all universities should be capable of bringing liberal education. Third thing is we have to set up higher education institution in many parts of the country, why not in all districts, focus has to be on language, arts, music, etc. Ultimately it is the school education which feed undergraduate education and to assume that UG as isolated system is not appropriate, we need to look at issues in school education that could rejuvenate UG education. The pre-school education, now it is being very important, it really creates the youngsters whose deficiency we perceive today is very natural which can be overcome with proper strategies with the question on brain growth and evolution how do we reflect in pre-school curriculum. Even though it is not directly linked to UG education, we want to make sure strong UG education we need to have brightest students so the inequalities can be corrected scientifically in pre-school, school education has to be structured in a way good student enter UG education. Therefore, connecting pre-school, school education with UG education cannot be overlooked.

On the other side, we need very good UG programs, if we want to do research, university system is a best place undertake, peer research has to be focused in universities this could create knowledge base to society. Strong research base can only be created

through strong undergraduate education programme. UG education is a bridge between early education to schooling as well as late education and research. Unless we have integrated approach to doing this and make sure that critical area of UG education become very crucial in connecting this we cannot have a comprehensive educational policy. I hope present Government seriously looking into these kinds of approaches; will certainly find the thoughts emerging from discussions here useful to plan and execute them in coming years not in 5 to 10 years it could be 30 years also.

**Keynote address by Prof. D.P. Singh, Chairman, University Grants  
Commission**

I am, truly honoured to be part of this National Seminar, where we will discuss about rejuvenation of undergraduate education. It is a good opportunity for me to know and discuss various issues and approaches for instilling life to undergraduate education.

Higher Education plays a pivotal role in bringing prosperity to a nation. It is one of the critical elements to acquire knowledge, skills, values and attitudes needed to promote sustainable development. It is a powerful tool to build knowledge-based society. The constant endeavour, therefore should always be to improve and expand the system of higher education in all sectors, with a view to eliminate disparities in access and lay greater emphasis on the improvement in quality, relevance and excellence of education including teacher's training.

The 17<sup>th</sup> Sustainable Development Goals of UNESCO to transform our world include quality education as one of them. India has a set up target that by 2030 all learners acquire knowledge and skills needed to promote sustainable development and lifestyles, including among others through education, human rights, gender equality, and promotion of peace and non-violence, global citizenship and appreciation of cultural diversity and of culture's contribution.

Indian Higher Education system is second largest in the world with 903 degree awarding institutions; 37,977 affiliated college with a total student enrolment of 3.6 Cr and 12.84 Lakh teachers. If we look into the enrolment of students, majority of students are enrolled for undergraduate education i.e., 79.19%, only 11.23 % at post graduate level, 0.9% pursue M.Phil, 0.44% students enrol in doctorate programme and remaining enrol in Certificate and Diploma Courses (Source: UGC- Higher Education, All India and States Profile, 2017-18). 66% of students enrolled pursue programmes in Arts, Commerce and Science; and rest enrol in professional courses like medicine, law, management etc (Source: Higher Education Statistics, January 2018).

India is placed at a demographically advantageous position, as the average Indian will be only 29 years old in 2020 as compared with 37 years for China and the U.S., 45 years for West Europe and 48 years for Japan. Thus comparatively, India will have productive workforce whereas there would be shortage of young productive workforce globally. To transform this advantage into higher economic growth, we need to strategically plan

interventions in our education system, both at policy level as well as at implementation level. Therefore, there is dire need to rejuvenate undergraduate education.

As Swami Vivekananda Said:

“Education is not the amount of information accumulated in the mind which runs riot undigested all through our lives. Education is a process of life building, man-making and character –forming assimilation of ideas”.

The goals of the university are quest for knowledge, and for researching the truth. At the same time, university needs to focus on the emergent needs of the society, in relation to an area of societal concern. Our Undergraduate education should also focus on achieving these goals. It is the need of the hour that UG Programmes equip youth with analytical and logical abilities, knowledge of the discipline both deep and wide, capability to widen and upscale one’s learning lifelong and play a constructive role as a responsible citizen of the country.

For achieving these, design of the undergraduate programmes should be such that it helps students acquire specific attributes and competencies, which enable them to compete globally and contribute in the national economic growth. The goal of undergraduate education should be to help students develop original thinking abilities so as to equip them with the capabilities to solve real life problems.

In this direction, UGC has taken an initiative to develop learning outcomes based curriculum. The fundamental premise underlying the learning outcomes-based approach to curriculum planning and development is that higher education qualifications such as a Bachelor’s Degree programmes should be awarded based on demonstrated achievement of outcomes (expressed in terms of knowledge, understanding, skills, attitudes and values) and academic standards expected of graduates of a programme of study. Learning Outcomes specify what specify what graduates completing a particular programme of study. They provide general guidance for articulating the essential learning associated with programmes of study and courses within a programme. This will provide Higher Educational Institutions (HEIs) an important point of reference for designing teaching-learning strategies, assessing student learning levels, and periodic review of programmes and academic standards. The curriculum so designed at this level should instil basic specified attributes like disciplinary knowledge, communication skills, analytical skills, scientific reasoning,

multicultural competencies, moral and ethical awareness/reasoning; life-long learning skills among others.

Academic renewal of the curricula regularly as per emerging needs of the changing context nationally as well as globally is necessary. The changes should not be limited to inclusion of new teaching –learning aids but a reformation towards learner-centric approach. In today’s time, information is readily available and accessible at the click of button; the learning process should facilitate learners to learn how to organise such vast information and use it in the present context and work for its enhancement. Experiential learning needs to be stressed upon so that students can actual utilise gained information for developing solutions for real life problems. Undergraduate education need to facilitate youth’s involvement in the social structure of life. We need to educate them in a way that they can take on broader challenges and contribute for sustainable development of the nation. Abilities to create, innovate and readiness for change needs to be inculcated. That is, it should provide enough tools for them to explore the world around them, find their passion, which is rarely done by formal teaching learning process. But if we take an attempt in this direction, undoubtedly students will excel in the field of their choice. This can be done by providing flexibility during learning processes, with appropriate supervision and guidance. Exploration abilities can best be strengthened by providing inter-disciplinary/multidisciplinary/transdisciplinary learning experiences. Choice Based Credit System, is one of such initiatives by UGC. This initiative of UGC would ensure seamless mobility of students across the higher education institutions in the country as well as abroad. The CBCS enables students to take courses of their choice, learn at their own pace, undergo additional courses and develop an interdisciplinary approach to learning.

Another problem glaring in the face of Indian Higher Education System is that of non-availability of enough jobs and at the same time not enough adequately qualified persons are entering the workforce as per requirement of hiring companies. To meet these challenges undergraduate education need to undergo sea change, providing education which could equip youth with skills to deal with challenges of 21<sup>st</sup> century knowledge society. The skills needed include cognitive and non-cognitive aspects of human behaviour. They may be known by several other names like core skills, employability skills, essential skills, key competencies and many others. However, largely by the word, skill it is meant that the capacity and willingness of workers to

remain attractive for the job market, by reacting to and anticipating changes in tasks and work environment. UGC has launched a scheme on skills development-based higher education as part of college/university education, leading to certificate, diploma, advanced diploma, degree and further advanced studies and research. Some of these initiatives include the scheme of community colleges, Bachelors of Vocation (B.Voc) degree programme, Deen Dayal Upadhaya Kaushal Kendra (knowledge up-gradation caters for skilled human action and learning under the national skill qualification framework (NSQF).

To achieve goals of education and nation development, partnership of industry and universities is needed. This kind of linkage provides opportunities for the students for placements in industry besides providing 'hand-on' experience; learn to apply simultaneously in the field, the knowledge acquired in the classroom. We also need to develop an exchange programme between the university and industry/business with teachers spending sometime in the work place and persons in industry/business which are restricted to knowledge and comprehension. Besides revision of curriculum, reformation of pedagogies evaluation system also needs to be modified for improving undergraduate education. A variety of assessment methods that are appropriate to a given disparity /subject area and a programme of study should be used to assess progress towards the courses/ programmes learning outcomes. Priority should be accorded to formative assessment. Progress towards achievement of learning outcomes can be assessed using the following : time -constrained; Closed-book and open- book tests; problem based assignments; practical assignment laboratory reports; observation of practical skills; individual project reports (case-study reports); team project reports; oral presentations, including seminar presentation; viva voce interviews; computerised adaptive testing; peer and self assessments etc and any other pedagogic approaches as per the context.

In addition to improving upon above-mentioned facets of UG education, we need to remember that goal of higher education cannot be merely to respond to employment requirements but also to nurture responsible citizens. What we want is the future of our country to be assured. Whether it is industry, business, agriculture, agro-industry, all aspects of our country must develop and this development requires the basic inputs which only a sound education system can provide, Not only that we are facing economic and social crisis, but we find, today that the country is facing a great value crisis when

we read every day in the newspapers about the great erosion in moral and ethical values that has taken place in our day to day life. Such events must force us to do considerable rethinking in respect of our education system. I am sure that many of the teachers are concerned by what they see around them. We can technically provide skills, and there is no denying a fact that the tremendous increase in the professional human resource, has provided India an adequate substratum to enter into global competition and become self- sufficient. But, if we want to maintain high moral and ethical values in public life, in the professions, in business as well as in the social, economical and cultural development of our country, whether urban or rural, and if we have to prepare our students to enter the world of work as productive and responsible citizens and as parents rearing our future generations, considerable rethinking respect of the education system, has to be done.

The focus should be primarily on holistic development of the personality of the learners and on inculcation of universal core values like truth, righteous conduct, peace, non violence and love. The expectations from the higher educational institutions are to create a culture and environment that facilitate awareness and delivery of value based education for producing graduates, which are value strong and globally competent. The education system should also promote indigenous knowledge and traditional Indian wisdom.

UGC has taken a number of initiatives such as credit course for summer internship in village/rural areas and adoption of villages by the Higher Education Institutions, Celebrations of international yoga day and other days of national importance, starting of yoga courses etc.

In a nutshell, for empowering our youth we need to recognise that knowledge, skills, productivity and values should be instilled through university education. The young population of India can form the backbone of our 'knowledge economy' and the need to implement the reforms in the education system and unleash productive frontiers of our country. As mentioned in the UNESCO report "Learning the treasure within", the process of knowledge should revolve around the four pillars: Learning to know, Learning to do, Learning to live together, and Learning to be.

### **Jai Hind**

**Acknowledgement:** This address has been prepared based on views of experts, reports and input from various print and electronic sources including internal input from UGC which are duly acknowledged.



## **Report on the National Seminar on Rejuvenation of Undergraduate Education in India**

### **Inaugural Session**

The National seminar on Rejuvenation of Undergraduate Education in India was jointly organized by Centre for Education and Social Studies (CESS), National Assessment and Accreditation Council (NAAC), Association of Indian Universities (AIU) and Karnataka State Higher Education Council (KSHEC), was held on 10<sup>th</sup> and 11<sup>th</sup> August, 2018 at the JRD Tata auditorium, National Institute of Advance Studies campus. The seminar was a two-day event and the first day's event started with the inaugural session.

**Dr K. Kasturirangan**, Chairman of committee to draft National Education Policy and also the former chairman of ISRO; **Prof. D.P. Singh**, Chairman of University Grants Commission (UGC); **Prof. Furqan Qamar**, Secretary General, Association of Indian Universities(AIU); **Dr. S. A. Kori**, Executive Director Karnataka State Higher Education Council (KSHEC); and **Prof. M K Sridhar** , President Centre for Educational and Social Studies (CESS) were the honorable chief guests.

The inaugural session started with the invocation song sung by Ms. Sowmya Prakash followed by lighting the lamp by the chief guests of the inaugural session. Dr. Manasa Nagabhushanam, Director of CESS presented the background of the seminar and delivered the welcome address.

**Dr. K. Kasturirangan** addressed the inaugural session and emphasized on the need for introducing liberal education and research at the undergraduate levels. He also said that research at undergraduate levels would teach the students how to learn the learning process and this model should not be limited to few institutions or universities but must be adoptable for the entire education system in India. In addition, he said, school education plays a vital role in setting up the foundation to undergraduate studies and special attention must be given to the schooling process as well.

**Prof. D. P Singh**, chairman of UGC delivered the keynote address. He presented the new quality mandate policy of the UGC; the policy focuses on improving the quality of

students, teachers and universities, overall. He added that separate induction programs should be organized to new students and newly recruited teachers to understand their expectations and also to inform them about what is expected from them. Along with this, refresher course should be organized for current teachers to enhance their knowledge about their subjects.

**Prof. Furqan Qamar** delivered the guest of honor speech. He emphasized on the large gap between the teacher student ratio and the need to expand the capabilities of institutions rather than expanding the number of institutions.

**Dr. S . A. Kori** insisted that either NET or SLET examinations must be made mandatory for private institutions to ensure quality.

Professor M K Sridhar, the key person in organizing the event said that the seminar is designed to rejuvenate on two levels – rejuvenation by letter, which would happen in the seminar, and rejuvenation by spirit, which is supposed to happen post the seminar. He concluded his speech by suggesting that there has to be more contributions than criticisms. The vote of thanks for the inaugural event was delivered by Dr. Govindraju, convener of the seminar.

## **Panel Discussion**

### **Stakeholders' Expectations from Undergraduate Education**

The Inauguration Session was followed by a Panel Discussion on Stakeholder's Expectations from Undergraduate Education, which was moderated by Chetan B. Singai, Deputy Director, Ramaiah Public Policy Center, Bengaluru. Dr. S. Vaidhya Subramaniam, Dhananjay Singh, Venkatesh Murthy and Ashish Chauhan were the panelists for the discussion.

Higher education in India has witnessed unprecedented expansion in terms of enrolment and Under Graduate (UG) education has a major share in it. Such an expansion has opened-up series of challenges and opportunities. While the opportunities are welcome and visible, some of the challenges are implicit and hence invisible. For instance, the overall enrolment is healthy, but there is skewness in overall

enrolment across disciplines. Further, the UG education in the county is limited to teaching and not research-based and hence lacks potential interdisciplinary approach as well. Finally, the policies are not conducive in appreciating the needs of all stakeholders; it lacks evidence-based approach and it is largely driven by expertise and experience.

**Dr. Vaidyasubramaniam** expressed that institutes of higher learning, especially those engaging with the UG programme are spaces that harness 'intellectual fertility' of aspiring minds. He opined that, it is at this level students develop interest in research and further studies thus we need to strengthen the UG education. Despite some constraints from the regulatory authorities, we at our institution are able to ensure best teaching, research and learning process for the students. He added that UG programmes should aim at honing the entrepreneurial skills of the students and student centric planning of curriculum is critical as a way forward.

**Dhanjay Singh** opined that UG education should enable 'behavioural capabilities' among the students. Curriculum and teaching methodologies must be inclusive and updated to seek utmost impact on ensuring employability among the UG students. Students under the UG programme must play an active role in serving the society and pursuing the agenda employability and knowledge economy. In India, we have witnessed the existence of regulators and working along them. For instance, our Saptarishi's have guided and regulated our life to our best interests. We need to consider regulators as facilitators rather than barriers.

**Venkatesh Murthy** gave the perspective of Voluntary Organizations and told that as we expect the society to give us many things, the society in turn expects from us. Students can actively participate and engage with the society to make it a robust and inclusive system. Higher education institutions must promote the culture of volunteerism among young minds. NCC, NSS and other field engagements must not be seen as mere procedures, but as substantial activities of the students and society's life cycle. Engagement with society promotes 'soft skills' among the students. We need to think beyond IQ and harness EQ among students to have social engaged and relevant attitude.

**Ashish Chauhan** expressed concern over the fact that students in UG are regularly attending coaching centers, by being regularly irregular to their colleges/classes. There

is a need to enhance the idea of cluster universities and enhance the role of regional research centers and institutes in building a robust knowledge society. He added the need to revisit the importance of student-led initiatives within universities/colleges. He opined, students need to be considered as brand ambassadors of quality and excellence in building the knowledge ecosystem and society.

### **Plenary Sessions**

The national seminar had organized four plenary sessions and the theme of each of the sessions was conceptualized with the vision of rejuvenating the undergraduate education. The following sections provide a detailed write up on each of the plenary sessions.

#### **Plenary session I: COURSE STRUCTURE, CURRICULUM DEVELOPMENT AND ASSESSMENT**

Prof. H. S. Nagaraj chaired the session and the Key speakers were Prof. K. Ramachandran and Prof. Sanjay Kumar Satyarthi, Prof. Ramachandran spoke about factors hindering rejuvenation of undergraduate Education in India. Quality related deficiencies were highlighted. The percentage of graduates who are employable is very low, as per the study by NASSCOM. Students lack skills required for employment. It is the lacunae in the system of higher education. There is lack of employers' confidence in the qualification & degrees awarded by Institutions. There is mismatch between the skills developed in the Instructions and the skills demanded in the employment market. There is need for meeting the expected objectives in learning outcome of all studies. There is need for structural transformation, curriculum reframe, quality oriented initiatives & honoring the diversity of students. There must be changes in architecture of P G programs like multiple entry / lateral entry & re entry at different levels. Students who complete First year and want to exit must be given the exits. In the second year a diploma must be given, similarly at the third year a degree & at the fourth year Honors degree.

There must be revamping of assessment methods of studies. Priority must be given for formative assessment that is Assessment for learning. Assessment of learning outcomes using the following: time constrained examination, Problem based assessments

Practical assignments, Sports, observations of practical skills, team project reports, Oral presentation computerized adaptive testing peer answer assessment etc.,

Prof. Sanjay Satyarthi laid more emphasis on reviewing, revising, standardizing and updating on par with international level. He said It should incorporate human values rooted in our 'parampara' – Bharat Bodh. Our curriculum should incorporate and teach us about India, its heritage, its values, its social spiritual and physical attainment.

In view of the falling standards of quality in the existing system in terms of language proficiency, skill-orientation, confidence-level and/or character built up he said, there is wide-spread perception that educated people are more corrupt; they unhesitatingly resort to dubious means for petty gains. Moreover, they shun physical work, resulting into physical, mental and social inertia. He opined that this warrants a total overhaul in education system. The curriculum should be reviewed and revised in such a manner that graduates must develop a sense of responsibility towards nation and society, should respect labor and stick to righteous path even in difficult situations.

He recommended that we have to frame a curriculum that incorporates a) dignity of labor b) respect for family system c) respect for all religious faiths d) a strong sense of belongingness to the nation and f) value of social discipline. If required, the duration of undergraduate programs can be extended up to four years. The recent trend in dilution in syllabus must be reversed.

The first generation learners, especially belonging to weaker section resent any change in course of studies and its duration. Even a section of teaching community may resist as they see such responsibility as BURDEN.

General recommendations that the speakers made are To promote multidisciplinary liberal arts education, to integrate vocational & professional education, to provide flexible combination of courses with focus on employability, entrepreneurship development, to promote learning based curriculum frame work etc.,

Both speakers stressed need for holistic approach towards higher education.

## **Plenary Session II: PEDAGOGICAL PRACTICES AND INNOVATION**

Prof. B. Thimmegowda, Vice Chancellor of Karnataka State Rural Development and Panchayat Raj chaired the second plenary session. The Key speaker was Prof. Vasudha Kamat, Former Vice Chancellor of SNDT University Mumbai. There were two presentation on experiments and innovations at Azim Premji University and Centre for Contemporary Studies, Indian Institute of Science Bangalore. The presentations were made by Prof. Venu, Director of Azim Premji Undergraduate Studies and Dr. Bitasta Das, Centre for Contemporary Studies, IISc.

Prof. Vasudha Kamat presented the differences between education and learning. In that, education of student, being destination-focused, has origin in “engage” and end with “mastery” after going through novice, intermediate and expert stages and learning, being continuity-focused, has various iterations through “engage”, “experiment”, “create”, “apply”, “re-frame”, “assess” and “iterate”. Prof Vasudha Kamat presented education cycle model with goals, curriculum, pedagogy and assessment as components. She briefly recounted the historical backdrop with developments under various phases of industrial revolution.

Prof. Vasudha Kamat touched upon the top 10 skills in demand in 2015 and 2020. “Complex problem solving”, “coordination with others”, “people management”, “critical thinking”, “negotiation”, “service orientation”, “judgment and decision making”, “creativity” have found reckoning in both years. “Quality Control” and “Active Listening” which were in the 10 top group in 2015 have exited with the addition of “emotional intelligence” and “cognitive flexibility” in 2020. “Complex problem solving”, being the No.1 in 2015, has retained the same spot in 2020. “Co-coordinating with others” and “people management” which were in the 2<sup>nd</sup> and 3<sup>rd</sup> spot respectively in 2015 have moved down to 5<sup>th</sup> and 4<sup>th</sup> spot in 2020, making way for “critical thinking” and “creativity” to 2<sup>nd</sup> and 3<sup>rd</sup> spot in 2020 respectively, which were at 4<sup>th</sup> and 10<sup>th</sup> spot respectively in 2015.

Prof. Vasudha Kamat required that education should be about making sure that students develop a reliable compass and the navigation skills to find their own way through an increasingly uncertain, volatile and ambiguous world. Prof. Kamat presented the differences between teacher, learner and group determined teaching-learning

pedagogies. Teacher determined pedagogy focused on transmitting information with expectation of remembering information by the students and assessment based on memory which underlined the authoritarian role of teacher. Learner determined pedagogy focused on individualized learning with learner exercising control on learning and assessment based on memory or higher order outcomes. Here teacher performs the role of supervisor. Group determined learning focused on cooperative learning which involved the creation of Learning Communities leading to the empowerment of students. Assessment was based on higher order outcomes and teacher to perform the role of facilitator. Prof VK described about the specific examples of group learning such as flipped learning, Marker space and SOLE. She laid down cooperative learning strategies such as Jigsaw, Fishbowl, One Stray, Four Corners, Brainstorming (Round Robin), Team-Pair-Solo, Six Thinking hats, Three Step Interview, Peer Instruction (PI), Think-Pair-Share (TPS), Predict-Observe-Explain (POE) and Process Oriented Guided Inquiry Learning( POGIL) .

Dr. Bitasta Das, Instructor, Centre for Contemporary Studies, IISc, noted that key problem haunting higher education is facing a very strict separation between the natural and human sciences. She spoke of the initiatives at IISc which involved the introduction of humanities courses for students of science and engineering. There are two types of courses namely Foundational and Advanced. Foundational courses focused on understanding Ways of Knowing, Ways of Seeing and Ways of Doing. . In the Ist Semester, ways of knowing introduced to ethnographic methods, psychological methods, historical analysis and textual analysis. In the II semester, ways of seeing topics are introduced. In the III semester, economics, science and law, people and nature and sustainable development courses are introduced. The Advanced courses, Mapping India with Folk Arts, Journalism for Scientists and Introduction to Governance, are introduced in the IV , V and VI semesters respectively. Sway with Science, Arting Science and various other publications have been brought out by Centre for Contemporary Studies.

Dr. N. Venu , Director, School of Liberal Studies , briefly narrated the statistics of enrolment of students in the Undergraduate courses in India. He cautioned that socio-economic disadvantages are turning out to be educational disadvantages in India. He noted that the innovations in pedagogies should arise in the interaction between,

faculty, and students in the class. He noted that our exams send signals of performance to the “outside” world but lack “feedback” to the students of the class. He suggested that faculty and students should decide pedagogy and course plan in the beginning of the semester/year.

Prof. Thimmegowda noted that certain initiatives such as incidental learning, embodied learning, adaptive teaching and learning, science of learning, argumentation, computational learning needed to be considered by faculty in their daily teaching activities.

### **Plenary Session III: SKILL DEVELOPMENT AND EMPLOYABILITY**

The session was chaired by **Prof. T. D. Kemparaju**, Vice chancellor Bangalore North University. The key speakers of the Session were **Sri. Madan Padaki, CEO, Head Held High** and **Prof. Vishnukanth Chatpalli, Adviser NAAC**.

In his address Prof. T. D. Kemparaju emphasised the need for paradigm shift from “Knowing” to “Performing” among the faculty and the professionalization of general education. He opined that education should be skill focused and emphasized the learning beyond classroom.

Sri. Madan Padaki, in his remarks, cautioned that 60% to 70% of what is being taught today will not be relevant after 10 years and 80% of the current type of jobs will not be existing after 10 years. He underscored the development of entrepreneurial thinking and added that more number of job creators need to be created as they would be the agents of social change. He presented a live case of village cowherd boy who got transformed as one of the motivational speakers through skill development conducted by Head Held High Foundation.

Prof. Vishnukanth Chatpalli brought out developments on skill front such as establishment of skill universities in India, adding that skills should have ethical orientation. He opined that holistic development can take place when skill and value based education are given due importance. He recounted that Job Oriented Courses (JOCs) died a natural death, as there was no social recognition. He narrated the



framework for enhancing skill development and employability which included creation of Student Interest Management System (SIMS), Skill level mapping, augmentation of life skill program, creation of autonomous learners through Self Organizing Learning Environment (SOLE), Blended learning approach, orientation education with focus on self-employment, ecosystem for skilling, scaffolding mechanism-strengthening career & guidance, Technology Aided Teaching Learning Process (TATLP) & strategic shift from knowledge-centric to skill & knowledge-centric. He also narrated about a software VIVECaM (Viable Instrument For Validation of Employability & Career Management) which would assess and monitor the students on various dimensions of employability, keep the track of the progress and prescribe suitable career path.

#### **Plenary Session IV: GOVERNANCE, INSTITUTIONAL MANAGEMENT AND LEADERSHIP**

The session was chaired by Prof. Varadraj Bapat, Professor, IIT Mumbai. The key speakers were Sri. Anurag Behar, Vice Chancellor, Azim Premji University and Prof. M. K. Sridhar, President CESS.

Anurag Behar noted that the concerned people should not have the fear that things may go worse, if any changes are brought out in Governance, Institutional Management and Leadership. He raised the basic question of what is the purpose of education and it is basically being good human beings. He said how an educational institution can develop anything like this if the culture of the institution is not aligned with the purpose of education. He highlighted the fact that purpose of the education should be integrated with the culture shaped by governance and leadership. He raised the third question, why we have hope that if change these things will change. He said change will happen moral and ethical transformation of the leadership is needed for substantial and dramatic changes to be brought about in the governance and institutional management. And such a change can happen with people like any of us. We should have competent leaders is true but what we need most is people with high level of moral and ethical values.

Prof. M K Sridhar said that UG Program colleges are the 3<sup>rd</sup> highest in numbers after the numbers in primary schools and primary health centers respectively. He added that a relook is needed in the governance and structure of educational institutions. He noted that institutions need to have independent thinking as far as running the programs concerned, irrespective of whether institutions are affiliated to university or not. He also required that colleges to undertake stakeholder participation. He also noted that each faculty should design academic plan and methodology at the beginning of the academic year in consultation with students. He also called upon the institutions to explore and implement assessment methods, independent of university pattern, in the internal examinations, monthly tests etc. He also noted the need for the involvement of alumni in the governance and institutional management.

This session was followed by question and answers. The participants raised several questions on the role of faculty in governance, how faculty can be leaders and so on.

Prof. Varadaraj Bapat noted that principals of the educational institutions needed to be benevolent. He highlighted that education should not be restricted to impart knowledge or develop skills but to bring out the divinity in each and every student.

### **Paper Presentations**

The National seminar provided the platform for paper presentations in four different themes i.e. 1) Course structure, Curriculum development and Assessment; 2) Pedagogical Practices and Innovation; 3) Skill Development and Employability and 4) Governance, Institutional Management and Leadership. The presentation was organized into nine parallel track session for two days and the Chairman headed each session.

The presentations outcomes reflected the broad contours of the seminar objective to rejuvenate under-graduate education. The First theme focused on orientation to teachers about continuous and comprehensive evaluation, threw light on dimensions and facets of liberal arts education, dynamic and evolving curriculum focusing on research, restructuring of curriculum to meet the needs of differently-abled students, etc. The second theme was related to Teachers and Innovative Pedagogy. The session focused on reforming the teacher education and teaching practices to meet the changing

economy and society, understanding the psychological background of the teachers in the institutions for an effective orientation, for rejuvenation teacher has to be mindful about the scholarly subjects, human dimensions, attitude and behavior. Pedagogical practices using technology in the forms of PPT's, social media, audios and videos to involve students and make learning process interesting. Innovative teaching and learning methods involving mind map, mnemonics, role playing and scenario analysis-based teaching, visualization, peer instructions, etc.

Presentations on the third theme focused on the importance of skill development in undergraduate education, specifically the value of communication skills using English language for getting a better career opportunity, some presentations were evaluative in nature with respect to skill gaps. The fourth theme on Governance focused on the significance of getting the institutions accredited which would have positive impact on the career opportunities to students, presenters also focused on the different dimensions of governance in the larger and smaller institutions.

### **Interaction with an Author**

An interaction with an author of the book "College: Pathways for Possibility" **Dr. Saikath Majumdar**, Professor in English and Creative writing, Ashoka University was one of the highlights of the seminar. Dr. Jeevan Kumar, former professor in Political Science, Bangalore University and Dr. Manasa Nagabhushanam, Director CESS conducted the interaction session. The Author first provided the outline of the book, in which he mentioned the need for writing the book. He talked about liberal arts education and the way it got transformed during and colonial and post colonial history. He also talked about his journey in getting graduated in Indian and studying in the best institutions of higher learning in the US. According to him, in India, there is consumption of knowledge verifiable through examinations. But what is required is the shift from consumption to production in the form of research. He responded to questions on the clarity of the term liberal arts, where the author talked about the combination of arts and science and gave both a historical and the current perspective of combining arts and science courses. He said Artsience is the right word to replace

liberal arts education. Answering to the question on contra-disciplines, he said this thought triggered when a higher institution of learning in the US offered a computer science course with music. Taking from Howard Gardner's Multiple intelligence theory, Majumdar talks about the soul and structure of each of the disciplines like mathematics which is logical and sports which is bodily-kinesthetic. He says a combination of these courses is the model for the future generations to come. He says artsience is what is needed not for job along but for life. The focus is both on the job and the career at different points of life and hence a contra discipline will help to enable choosing a wide variety of careers.

### **REJUVIDEA CONCLAVE**

The *RejuvIdea Conclave* session provided a platform for the delegates to brainstorm, innovate and represent practicable and scalable ideas for some of the rigid practices that have now emerged as problems of the under graduation education. The entire spirit of RejuvIdea conclave was to come up with solutions that can bring about micro level changes in the Undergraduate education system.

As part of the process, the delegates had to register online in order to participate in the conclave. Five problem statements pertaining to Undergraduate education was given in the online form for which the delegates had to provide their responses/solutions. The five problem statements are *namely the Attendance Myth, Leading the change, learning through Participation, Breaking Silos and the Skills Imperative*. 90 ideas were obtained across the five problem statements. A panel of jury reviewed these ideas and top 10 ideas were shortlisted for presentation on the day of the national seminar.

Top ten Ideas were presented in the session. An opinion poll for best ideas was conducted with the help of ballot papers. The best top two ideas were selected based on the opinions obtained through the audience poll. **The first best idea was awarded to Dr. Vishnu Shinde who presented his idea for "Learning through Participation" and the second best idea was awarded to Ms. A. Jasmine for her idea on the "Attendance Myth".**

## **VALEDICTION**

The seminar was concluded with a valediction by Chief Guests **Sri. S. V. Ranganath**, IAS (rtd), Vice-Chairman, KSHEC, GOK and **Dr. K. R. Venugopal**, Vice-Chancellor, Bangalore University.

Sri S. V. Ranganath gave more insights into the two day seminar by talking about his perspectives on education, its problems and solutions laying special emphasis on critical mass, thought leadership, knowledge dissemination. According to him, the major problem education system faces is the quality of teaching. He says there is a need for increase in passionate, driven and dedicated teachers who are responsible for knowledge creation and facilitating life-long learning.

Further, Dr. K. R. Venugopal, Vice- Chancellor, Bangalore University went on to talk about how to address dichotomy and change the system; raised questions on the quality of higher education. He also mentioned the need for advanced knowledge and require teachers for teachers. He says "Teachers are the backbone of the country".

The chief guests acknowledged the success of the two- day national seminar coming to an end.

Awards under various categories for the best idea and best paper were given towards the end of the seminar to encourage micro level innovation.

Professors, distinguished personalities, the who's who of the education field, Faculty members, research scholars and students participated in the seminar, parting with new perspectives, information to ponder on and lot of food for thought.

### **Major Suggestions emerging from the seminar**

- Introducing Liberal arts education in Undergraduate level.
- Research at undergraduate level to learn the learning process
- Provide for Entry/Exit at different levels. Students who complete First year and want to exit must be given the exits. In the second year a diploma must be given, similarly at the third year a degree & at the fourth year Honors degree.
- To integrate vocational & professional education
- Building employers' confidence in the qualification and degrees awarded by Institutions

- Using Multiple assessment techniques: Time constrained examination, Problem based assessments Practical assignments, Sports, observations of practical skills, team project reports, Oral presentation computerized adaptive testing peer answer assessment etc.,
- Following principles to be integrated in the curriculum: a) dignity of labour b) respect for family system c) respect for all religious faiths d) a strong sense of belongingness to the nation and f) value of social discipline.
- Creation of Student Interest Management System (SIMS),
- Skill level mapping of students
- Creation of autonomous learners through Self Organizing Learning Environment (SOLE),
- Strategic shift from knowledge-centric to skill & knowledge-centric
- Aligning culture of Institution with Purpose of education
- Moral and ethical transformation of leadership
- Institutions should have independent thinking beyond University and affiliation
- Relooking at the entire governance structure
- Introducing Arts Science combinations and contra disciplinary courses
- To use the education model comprising Goals, Curriculum, Pedagogy and Assessment
- Learner determined pedagogy focused on individualized learning with learner exercising control on learning and assessment based on memory or higher order outcomes
- Group determined learning focused on cooperative learning which involved the creation of Learning Communities leading to the empowerment of students.

## **CONCLUDING REMARKS BY DR. GOVINDRAJU, CONVENER OF THE SEMINAR**

As the National seminar on “Rejuvenation of Undergraduate Education in India” is now drawing to end, I would like to thank you all for your outstanding speeches, distinguished presentations, constructive Ideas, interaction Session and plenary sessions, and active participation during the last two days. I hope you all share my view that the whole seminar has been a very stimulating and successful experience. Also, on behalf of all the participants, I would like to take this opportunity to thank and congratulate the seminar organization committee for their excellent job in organizing and hosting national seminar

As you know, the main theme of the Seminar was “Rejuvenation of Undergraduate Education in India”

The scope of the Seminar included, but was not limited to four mainstream topics as they relate to the Rejuvenation of undergraduate education: Course structure, Curriculum development and assessment, Pedagogical practices and Innovation, Skill development and Employability, Institutional Management, Governance, and Leadership.

Throughout the seminar, one keynote speech and 66 papers, which were prepared by more than 101 academicians and industry /NGO practitioners/and 351 delegates participated from 14 different states of the across the country, reflected remarkable and various views and approaches about open and flexible learning. Besides, all these academic endeavors, 10 short listed best ideas were presented during the national seminar and the special interaction session hosted with Dr. Saikath Mazumadar Ashok University was very effective to showcase the current level of the undergraduate education system in India and the success of applications of theory into practice.

Majority of our presenters highlighted the importance of the preparation of teachers for quality undergraduate education enriched environments and how vital it is to accomplish an efficient and productive undergraduate education.

We must work in co operation with the declaration of seminar, which was created based on the philosophy of holistic approach

It is my hope that, based on the face to face relationships established in undergraduate institutions and regulatory bodies through this seminar, in the future we will be able to respond together to issues that we have in common and achieve our common objectives. Thank you all very much for your co operation



## **Appendix**

## Picture Gallery



**Inaugural Address:** Dr. K. Kasturirangan, *Chairman, Committee to draft National Education Policy; Former Chairman, ISRO, GOI*

**Keynote Address:** Prof. D.P.Singh, *Chairman, University Grants Commission (UGC)*

**Guests of Honor:** Prof. Furqan Qamar, *Secretary General, AIU, New Delhi*

Dr. S. A. Kori, *Executive Director, KSHEC, GOK*

Dr. S. C. Sharma, *Director, NAAC*

**President:** Prof. M. K. Sridhar, *President, CESS*



### **Panel Discussion:Stakeholder’s Expectations from Undergraduate Education**

#### **Members:**

Dr. S. Vaidhyasubramaniam, *TCS Chair Professor of Mangagement, SASTRA Deemed University, Thanjavur*

Sri Dhananjay Singh, *Executive Director, National H.R.D Network, New Delhi*

Sri Venkatesh Murthy, *Founder, Youth for Seva*

Sri Ashish Chauhan, *National General Secretary, ABVP*

**Moderator:** Dr. Chetan Singai, *Deputy Director, Ramaiah Public Policy Centre, Bengaluru*

## Report of the National Seminar on Rejuvenation of Undergraduate Education in India, Bengaluru

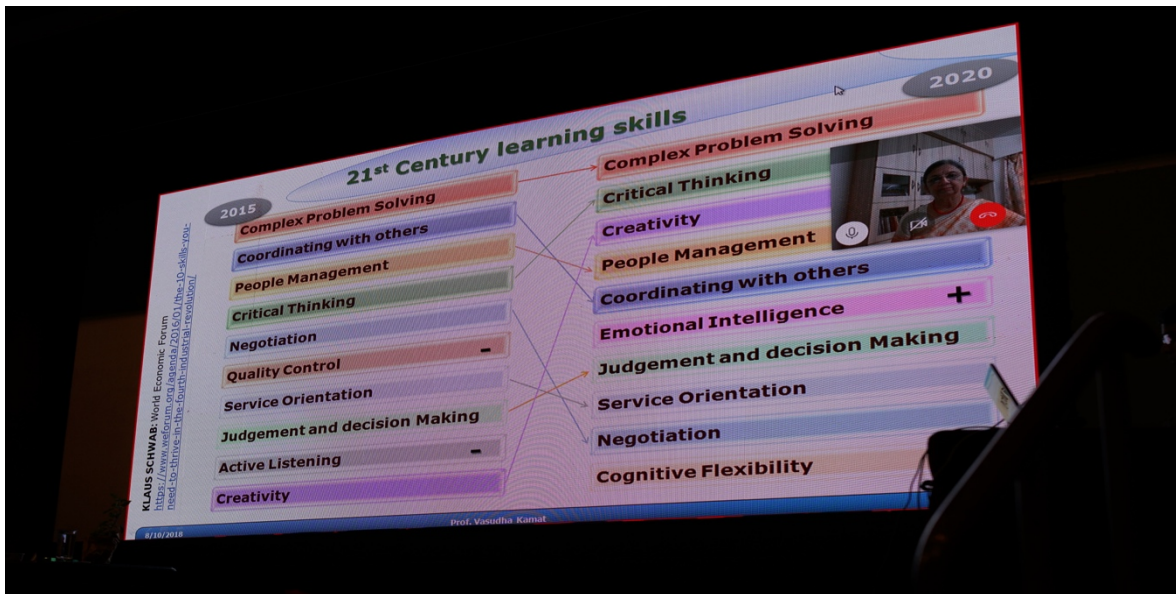


### Plenary Session I: Course Structure, Curriculum Development and Assessment

**Chairman:** Prof. H.S. Nagaraja, *Founder, BASE Educational Services*

**Key Speakers:** Prof. K. Ramachandran, *Professor (rtd), NIEPA, New Delhi*

Prof. Sanjay Kumar Satyarthi, *Head of Department of Economics, Daman College, Daman*



## Plenary Session II : Pedagogical Practices and Innovation

**Chairman:** Prof. B. Thimme Gowda, *Vice-Chancellor, KSRDPR University, Gadag*

**Key Speaker:** Dr. VasudhaKamat, *Former Vice-Chancellor, SNDT Women's University, Mumbai*

**Presentations:** Experiments at Centre for Contemporary Studies, IISc by Dr. Bitasta Das, *Instructor, UG Programme, IISc*

Practice Teaching at Azim Premzi University, by N. Venu, *Director, School of Liberal Studies, Azim Premzi University*



**Plenary Session – 3: Skill Development and Employability**

**Chairman:** Prof. T. D. Kemparaju, *Vice-Chancellor, Bangalore North University*

**Key Speakers:** Sri. Madan Padaki, *Founder CEO, Head Held High & Co-Founder, Meritrac Service Pvt. Ltd*

Dr. VishnukathChatpalli, *Adviser, NAAC, GOI*



**Plenary Session – 4: Governance, Institutional Management and Leadership**

**Chairman:** Dr. Vardraj Bapat

**Speakers:** Prof. M. K. Sridhar, *President, CESS*

Sri. Anurag Behar, *Vice-Chancellor, Azim Premji University*



Interaction with Dr. Saikat Mazumdar, Author of the book *College-Pathways of Possibility (Prof of English and creative writing, Ashoka University, Haryana)* by Dr. Jeevan Kumar and Dr. Manasa Nagabhushanam





**RejuvIdea Conclave:** Mr. Pavan Soni, *Innovation Evangelist* (above)





**Valediction:**

Sri. S. V. Ranganath IAS (rtd), *Vice-Chairman, KSHEC, GOK*

Dr. K. R. Venugopal, *Vice-Chancellor, Bangalore University*

Dr. ManasaNagabhushanam, *Director, CESS*

**Technical Sessions: Paper Presentations**



**Theme 1: Course Structure, Curriculum Development and Assessment**

**Chairman:** Prof. Niranjan Das, *Vijaya Teachers College, Bengaluru* (seated 2<sup>nd</sup> from left)





**Theme 2: Pedagogical Practices and Innovation**

**Chairman:** Dr. Siddegowda, *Vice-Chancellor, Tumkur University*





**Theme 2: Pedagogical Practices and Innovation**

**Chairman:** Dr. M. S. Shymasundar, *Adviser, NAAC, Bengaluru*





## Theme 2: Pedagogical Practices and Innovation

Chairman: Prof. T. K. S. Lakshmi, *Prof (rtd), Banastali Vidyapeetha, Rajasthan*





**Theme 2: Pedagogical Practices and Innovations**

**Chairman:** Dr. T. N. Raju, *Rtd Professor, B.E.S College, Bengaluru*





**Theme 3: Skill Development and Employability**

**Chairman:** Dr. B. S. Madhukar, *Adviser, NAAC, Bengaluru*







**Theme 3: Skill Development and Employability**

**Chairman:** Dr. K. Viswanathan, *Vice-President, NAASCOM, Bengaluru*





**Theme 4: Governance, Institutional Management and Leadership**

**Chairman:** Dr. N. V. Sathyanarayana



Cultural Programme by children of Sparsha Trust

## TESTIMONIALS

➤ **Dhananjay Singh**, *Executive Director, National H.R.D Network*

Our compliments to CESS for organising the National Seminar on the theme 'Rejuvenation of Undergraduate Education in India'. Undergraduate education is one of the most crucial links for leveraging human capital and the unique platform, seminar provided much needed focus for transformation of undergraduate education.

➤ **Dr. Saikat Mazumdar**, *Author of the book 'College-Pathways of Possibility'; Professor of English and Creative Writing, Ashoka University*

I attended the second day of the National Seminar on Rejuvenating Undergraduate Education in India and attended all the plenary sessions and one concurrent panel that day. I found the seminar structured very intelligently on the whole – this was evident from the very description of the two-day event and the list of panels and sessions that were described on the programme. As I attended the sessions, I realized, moreover, that they were planned in a way that they touched on a very diverse set of aspects of UG education, and between them, addressed this subject in its entirety, from curriculum to pedagogy to institutional governance and success and entrepreneurship. I deeply enjoyed the first session of the second day, on personal and career development, especially the story of the boy from the rural, marginalized background and his development into a confident motivational speaker intent on inspiring more people from his background. A particularly important and engaging session was the one on institutional governance.

I especially enjoyed Dr Anurag Beher's stories of inspirational teachers from rural India and Dr. Sreedhar's appeal to faculty members to innovate within the limits of structure imposed by centralized bodies without passively waiting for them to change. I was deeply impressed by the probing and thoughtful questions put to me by my co-panelists on my book *College: Pathways of Possibility*, and the level of engagement shown by the audience during the Q&A period. I went to one of the concurrent panels, the one on pedagogy, and have to admit that I did not find the quality of the presentations very professional or well-prepared, unlike the discussions in the plenary sessions. However, I only heard one speaker at one session and cannot therefore comment on the quality of the concurrent panels on the whole. One of the best features of the seminar was the Rejuve conclave at the end, where the panelists had submitted ideas. I felt that was a wonderful way of getting them to engage with the ideas of the conference. The quality of the ideas themselves was uneven, as perhaps to be expected, ranging from the truly

significant to more banal ones, or some that are difficult to implement. I was struck by the number of times the idea of multidisciplinary liberal art-science education came up in the ideas conclave, as this is an abiding interest of mine. On the whole, I found the seminar deeply well-thought, intelligently structured, and significant enough to generate new ideas and revive classic ones so that it can indeed begin a vibrant and impactful conversation on undergraduate education in India.

➤ **Raghu Venktachalaiah**, *Principal, Silicon City College of Management and Commerce*

I congratulate CESS for conducting this much needed thought generating seminar. I noted that the speakers came out with many heart warming plans for rejuvenation but at times it also appeared romantic. The topics were wisely selected and the speakers also did justice, however a few of them ran short of time. Regarding the general aspects of learning, learned speakers stressed on: Education is not learning but a will to succeed, it needs continuous assessment, social incubators have to be set up and Open Air Universities have to be encouraged. Regarding the specific fields like course structure and curriculum the common ideas shared and appreciated were: The entry must be liberal, assessment rigorous, training centres must for both teachers and students at the institution, need to map learner characteristics, children born and raised during technology boost need techno based learning, communicative skills must be honed, multiple intelligence must be promoted in classrooms, autonomous learning must be encouraged, steps must be taken to minimize regional disparities.

The programme was well conceived and executed. It has to further moved out of CESS to Universities and Colleges. Keeping the same model Universities and Colleges have to conduct similar seminars, as the turn out in the present seminar, though appearing good in number, did not reach all colleges and universities. The paper presentations were held parallel in different auditoriums which made the participants to 'choose' their area of interest. But a few, who were interested equally in all themes were deprived of participating in all. Other stakeholders in education i.e, parents and students had no representation in the seminar. Without their valuable inputs any rejuvenating effort will not be fruitful. I wish this lacuna is covered up in our future attempt.

- **Dr.Venkatesha Murthy. S**, *Associate Professor, S.J.R College of Science, Arts & Commerce*

I must profusely thank you and your team for organizing a wonderful, meaningful and a very knowledge sharing seminar conducted in a highly professional manner. I feel this is a privilege for me to be a part of the seminar by connecting and interacting with the nation's renowned academicians and stalwarts in one platform.

- **Dr.R.Ramachandran**, *Assistant Professor of Commerce, Annamalai University*

It is my duty to tell thousand times "thanks" for your greatness in Organisation of National Seminar. I am fully immersed over your excellence, fantastic and marvelous with meticulous planning the entire schedule of programme. Really my heart beats many many times happy to remind me to say that the globe renowned personalities as Chief Guest and Chairman of the sessions. I fully enjoyed abundantly with Himalayan paramount of enriching my knowledge.

## FEEDBACK COMMENTS FROM DELEGATES

Sl.No	Name of the Delegate	Feedback Comments
1	Sanjay Kumar Satyarthi	Well-Conceived, Well planned, Nicely executed, proper mix of 'experience' and 'ideas'
2	Lokesh Tardalkar	More emphasis on rejuvenation and paper presentations. One of the finest line-ups of eminent academicians ever in National Seminar
3	Melanie P Kumar	Well organised and Catered, More time for Q&A, Some repetition and technical sessions could be of a better standard
4	Boramma H Angadi	Panel Discussions were very thought provoking, Time Management was nice, Totally organisers were very concerned about the seminar
5	ArpanaNagesha	Resourceful and very useful seminars, Participative programmes much like brainstorming, producing innovative ideas, created a broad view in implementing the curriculum individually.
6	Dr.Sumayaa	Meticulously planned and executed, Q&A sessions there was no sufficient time to interact, Overall perception – The theme of seminar is appropriate for the present context.
7	Muneer Basha Sanganakal	Title of the seminar is good and relevant, Need more interactions rather than one-way presentations, guests of the seminar are good and from the reputed Institutions

8	Ramakrishna Murali.N.V	Most of the speakers are expertise in their areas and it was very useful and I personally gained rich knowledge. Warm regards to the organisers.
9	Sumathi.G	Some paper presenters' presentation was good because of the time constraints they could not complete the presentation.
10	Dr. Rekha	The topic is highly relevant for the present day. The selection of sub themes and the presenters were wonderful. In short, the seminar was an eye-opener regarding the changes that can come into change over the years to come.
11	M. Satish Bejjihalli	Seminar was excellent and paper presentations shared to be added with Q and A Sessions. Overall arrangements and process was excellent. RejuvIdea conclave was good but same ideas were presented repeatedly, might have been scrutinized meticulously



## List of Guests and Key Speakers

### Guests in the Inaugural Function:

**Dr. K. Kasturirangan**, Renowned Scientist & Former Chairman, ISRO



Dr. K. Kasturirangan is currently the Chairman, Committee for National Education Policy, Chancellor, Central University of Rajasthan, Chairman, Public Affairs Centre, Bangalore, Chairman, Karnataka Knowledge Commission, Member, Atomic Energy Commission, an Emeritus Professor at the National Institute of Advanced Studies (NIAS), Bangalore, an Honorary Distinguished Scientific Advisor, Indian Space Research Organization (ISRO).

**Prof. D P Singh**, Chairman, University Grants Commission

Prof. Dharendra Pal Singh has about 34 years of professional experience in different aspects of educational planning & administration, institution building, teaching & training, research & development, international cooperation etc. in various capacities in different institutions including Director, National Assessment and Accreditation Council (NAAC) & Vice Chancellor of three universities - Banaras Hindu University (BHU), Varanasi, Dr. Hari Singh Gour University, Sagar and Devi Ahilya University, Indore.



**Prof. M.K. Sridhar, President, CESS**



Dr. M.K. Sridhar is the Member of National Education Policy drafting committee and member of Central Advisory Board of Education (CABE), Ministry of HRD, Government of India. He is also the Member of Project Approval Board (PAB), PMMM National Mission on Teachers and Teaching, MHRD and Member, All India Board of Management Studies, AICTE. He served as Professor and Director of CBSMS and the Dean of Management Studies at Bangalore University. He also served as Member Secretary and Executive Director of Karnataka Knowledge Commission in 2009.

**Prof. Furqan Qamar, Secretary General of the Association of Indian Universities**

Prof. Furqan Qamar, in his present position as the Secretary General of the Association of Indian Universities (AIU), is the principal executive officer of the largest and one of the oldest networks of universities. In his illustrious career, Dr. Qamar has held the position of the Vice Chancellor of the University of Rajasthan and the Central University of Himachal Pradesh. He has also served as Advisor (Education) in the Planning Commission of India.



**Dr. S. A. Kori, Executive Director, KSHEC**



Dr. S. A. Kori is serving as Executive Director of Karnataka State Higher Education Council. He is former Registrar of Visvesvaraya Technological University, Belgaum. He is involved in governance and leadership activities of Higher Education in Karnataka State. He has been awarded by ISTE (Indian Society for Technical Education) New Delhi as “Best Administrator” at National level in 2016.

**Guests in the Valedictory Function:**

**Shri S.V. Ranganath**, IAS (Rtd), Vice Chairman, Karnataka State Higher Education Council

Shri S.V. Ranganath belongs to Indian Administrative Service (Karnataka-75) cadre. He has worked as a Civil Servant in various capacities both in Government of India and Government of Karnataka. He was the Chairman, Indian Coffee Board, Resident Director, Indian Investment Centre, Abu Dhabi, Principal Secretary to various Chief Ministers of Karnataka, Additional Secretary and Financial Advisor in the Department of Space, Member (Finance) to the Space Commission, Atomic Energy Commission and Earth Commission. He retired in Oct. 2013 as Chief Secretary, Government of Karnataka. Currently, he is Vice Chairman, Karnataka State Higher Education Council and Member, Karnataka Knowledge Commission.



**Dr. Venugopal K. R.**, Vice Chancellor of Bangalore University



Dr. Venugopal has been in Bangalore University for the last four decades. Former He has worked as Principal, University Visvesvaraya College of Engineering, Bangalore University, Special Officer, Government of Karnataka, Dean, Faculty of Engineering. Prof. Venugopal is a recipient of over Seventy Five awards, and has been conferred the prestigious IEEE Fellow Award and ACM Distinguished Educator Award from USA.

**Key Speaker in the Interactive Session:**

**Dr. Saikat Majumdar**, Professor of English and Creative Writing, Ashoka University



Saikat Majumdar is a novelist and critic. He was educated in India and in the United States, where he taught for several years, most recently at Stanford University, before returning to India. Saikat is the author of five popular books, including the novel *The Scent of God* (Simon & Schuster, forthcoming 2019), and *College: Pathways of Possibility* (Bloomsbury, 2018). He is the recipient of grants and fellowships from the Andrew W. Mellon Foundation, the Jawaharlal Nehru Institute for Advanced Studies at JNU, The University of Chicago, and the Humanities Center at Stanford University. In 2017, Saikat was named a Fellow at the Suzy Newhouse Center for the Humanities at Wellesley College.

**Panelists in the Panel Discussion on “Stakeholder Expectation from Undergraduate Education”:**

**Dr. S. Vaidhyasubramaniam**, TCS Chair Professor of Management, SASTRA Deemed University

Dr. S. Vaidhyasubramaniam is an alumnus of Harvard Business School with interest in Public Policy & Higher Education Management. He worked in MNCs like Siemens (India), MERALCO (Philippines) and Johnson & Johnson (USA & India). He is the recipient of Young Manager Award from Madras Management Association in 1996. He has been resource person for LKY School of Public Policy, NUS and Asian Development Bank. He is the author of popular book EXPRESS RIGHTings.



**Shri. Dhananjay Singh**, Director General and National Board Member, National HRD Network



He is the Member of Board of Studies for Department of HRM & OB, Central University, Jammu and Board Member, New Delhi Institute of Management (NDIM). He worked with All India Management Association, the National Apex body of Management Profession in India. He is the recipient of GenNext Leader Award, Asia Pacific Leadership Awards 2017, Singapore and Business Excellence and Innovative Practices Academia Award 2018, NDIM, New Delhi.

**Shri. Venkatesh Murthy**, National Organizing Secretary, Youth for Seva

After completing B.Tech (Computer Science) from KREC (now NIT), Suratkal, Venkatesh worked for 15 years in IT industry both in US and in India, last employer being EMC2. Apart from professional engagement, he was actively involved with many voluntary organizations in USA like Seva International and Balagokulam. He took time off for



two years (1997-1999) and volunteered full time in West Indies (Trinidad and Guyana) working with children and youth. Since May 2008, he is volunteering full time with Youth for Seva.

**Shri. Ashish Chauhan**, National General Secretary, ABVP



He has been President of Students' Union of Govt College, Seema, District Convener, University Unit Secretary & President, District Organising Secretary, National Secretary. His efforts for standing for quality of education and student issues in All India Institutes (IITs, IIMs, NLUs etc) in last many years through the platform 'Think India' has been praiseworthy. He has member of Indian Youth Delegation to China under Ministry of Youth Affairs & Sports, Government of India. Also, he has visited US under Department of State's Legislative Fellows program 2016.

### **Speakers of Plenary Session I on “Course Structure, Curriculum Development and Assessment”**

**Dr. H.S. Nagaraj**, Renowned Educationist

He worked in Vijaya College as Professor of Physics before starting BASE in 1991, a vibrant organization focused on educational services known for quality education. Dr. Nagaraj was part of the Department of Education, Karnataka's planning and implementation commission for Electronics in pre-university. He is also a Trustee of Sri Shankara Cancer Foundation and Member of Governing Board of many educational institutions.



**Dr. K. Ramachandran**, Professor (Rtd), NIEPA, New Delhi



Prof. Ramachandran is an eminent educationist presently working as Advisor, India-Africa Institute of Educational Planning and Administration (IAIEPA), National Institute of Educational Planning and Administration (NIEPA), New Delhi. During the period 1990-2008, he worked with UNICEF as Senior Education Specialist and Senior Programme Coordinator. Prior to this, he was a member of faculty of the National Council of Educational Research and Training (NCERT), New Delhi. He has contributed in preparing many reports on state of education in India including “India : Education for All – Towards Quality with Equity”.

**Dr. Sanjay Kumar (Satyarthi)**, Head, Department of Economics, Government College, Daman

Having more than 30 years of experience in teaching, Dr. Sanjay is served many organizing in various capacities. He is the Member of Governing Council, Indian Council of Social Science Research (ICSSR), New Delhi, Member (Visitor’s nominee), Executive Council, MANUU, Hyderabad, Member Syndicate, Veer Narmad South Gujarat University, Surat. He was Sub Editor of Jansatta, Indian Express Group, New Delhi.

**Speakers of Plenary Session II on “Pedagogical Practices and Innovation”:**

**Prof. B. Thimmegowda**, Vice Chancellor, Karnataka State Rural Development and Panchayath Raj University, Gadag



Former Vice Chancellor, Bangalore University, Bengaluru, Former Acting Vice Chancellor of Mangalore University and Former Dean, Faculty of Science and Technology, Former Professor & Chairman, Department of Chemistry at Mangalore University. He has honoured with many awards and fellowships including National Merit Scholarship, CSIR Research Fellowship, National Overseas Fellowship, German Humboldt Research Fellowship, NSF PDF in USA, Japan Tokushima Research Foundation Fellowship, Young Scientist Award, Mysore University

Golden Jubilee Science & Technology Award, Life Time Achievement Award from the Indian Council of Chemists, many more Fellowships and Recognitions.

**Prof. Vasudha Kamat**, Former Vice Chancellor, SNDT Women's University

Prof. Vasudha Kamat is well known for her significant contribution to the field of Educational Technology/Information and Communication Technology for Education. She has conducted several research studies for various National/International organizations such as Indian Space Research Organization, UNDP, World-Bank, UNICEF, MHRD, etc. on various themes. She is a recipient of the Best Teacher Award by Maharashtra State Government (2005-06), Fulbright Senior Research Fellowship (2005-06), Rotary International Fellowship (2004-05). She worked as Senior Fulbright Scholar at Florida State University, USA. Presently she is the Member of Committee to draft National Education Policy, MHRD.



### **Speakers of Plenary Sessio III on "Skill Development and Employability"**

**Prof. T.D. Kemparaju**, Vice Chancellor, Bengaluru North University



Dr. T. D. Kemparaju is having more than 30 years of teaching experience and 25 years of research experience. He was a Professor and Chairman in Department of Library and Information, Bangalore University. He is Former Registrar of Mangalore University and Bangalore University. He has successfully completed major research projects awarded by UGC and DRDO. He was Member of many bodies and committees like Selection committee of Staff Selection Commission, Union Public Service commission, Govt. of India etc.



**Shri. Madan Padaki, Founder & CEO, 1Bridge**

Madan co-founded MeritTrac in 2000 as a pioneering idea in skills assessments and scaled it into one of the leading assessments companies in India. With a vision of transforming rural youth to be entrepreneurs, he founded 1Bridge, a platform that empowers rural entrepreneurs which is present in 40+ districts across South & East. Madan is also a Trustee of Head Held High Foundation, a non-profit that stands for human dignity. He had served as a Senior Advisor to Tata Trusts.



**Prof. Vishnukant S. Chatpalli, Adviser at National Assessment and Accreditation Council**



Dr. Chatpalli is a Post-graduate in Production Management, Doctoral studies in Business Administration and Post Doctorate D.Litt. He was Executive Director of Karnataka Vocational Training & Skill Development Corporation (KVTSDC) and Member of All India Board of Vocational Education, Government of India. He served as Professor, Chairman of Department of Business Administration and Registrar of Rani Channamma University, Belagavi.

**Speakers of Plenary Session IV on “Governance, Institutional Management and Leadership”**

**Dr. Varadraj B. Bapat**

Dr. CA. Varadraj Bapat has consulting and teaching experience for more than 25 years. Holds qualifications in CA, Cost Accountancy, Ph.D. from IIT, Bombay. He has visited Cornell University, U.S.A. on an invitation from Parker Centre for Investment Research, Johnson School of Management, Cornell University, New York, U.S.A. Presented papers at various National and International Conferences, speaker for lectures and interviews on TV channels and various other forums. Dr. Bapat has conducted various corporate training programs and MDPs for



several leading companies/ Government organisations, NGOs. Presently he is faculty in Accounting and Finance at Shailesh J. Mehta School of Management, IIT - Mumbai.

**Anurag Behar, CEO, Azim Premji Foundation**



Anurag has been engaged with efforts to improve education in India for the past fifteen years. He serves as the Vice Chancellor of the Azim Premji University. Anurag has played leadership roles in business. As the CEO of Wipro Infrastructure Engineering, he led the business from being No. 20 in the world to being the No. 1 in 5 years. For the past few years he has also been engaged with environmental and ecological issues. He writes a fortnightly column for the newspaper Mint, on Education and Ecology. He is a member of Wipro's Group Executive Council.

## **Best Paper Awards**

Following are the Abstracts of the papers which were adjudged as Best Papers of the seminar.

### **I. A need for refinement in the Continuous and Comprehensive Assessment of learners at the undergraduate level of studies**

D. Usharani and Raghavendran K.M  
*Department of Physics, MES College of Arts, Commerce and Science  
Malleswaram, Bangalore*

The expected and essential outcome of any teaching-learning process is, to transform the Learner from a novice to an expert, which essentially means a transformation of the Learner, from a student to a scholar. The present day higher education necessitates a significant advancement and refinement in the teaching-learning and Assessment methodologies, to keep pace with the global competitiveness expected to be achieved by learners even at the undergraduate level. Apart from the need for regular need-based revision of the course content, structure and innovations in curriculum development, appropriate and acceptable Assessment of the Learner knowledge acquisition throughout the course, is a vital component of the learning process, especially at the undergraduate level of Tertiary Education. **Continuous and Comprehensive Assessment (CCA)** of Learners – both summative and formative, is expected to facilitate bridging of the learning-gaps and is aimed at integration of knowledge domains. The challenge is in designing assessment tools which intend to test the learners progressive indexing of knowledge. Focus should be on prior and current knowledge level of the Learner at the entry level, and thereafter, on the conceptual understanding and application of concepts to problem-solving during the course of the undergraduate studies, culminating in a higher level of mathematics for content development and interpretation at the culmination of the end Semester. The three categories of assessments lay a pathway to the three knowledge levels, namely - Factual, Conceptual and Procedural.

In this article, the authors enumerate the inadequacies of the present system of CCA under the semester system presently prevalent in the domain of physical sciences, in the Karnataka State, more-specifically related to the undergraduate studies. Through statistical testing measures used in data interpretation, a more reliable assessment framework is proposed, which helps the instructor to identify the misconceptions and/or learning gaps in the students, as also one which initiates a continuous and comprehensive testing all, the three lower-order cognitive skills and the first higher-order cognitive skills as per the revised Bloom's Taxonomy of Anderson and Krathwohl.

**Key words** –Continuous Comprehensive Assessment, cognitive skills, conceptual understanding, statistical analysis.

## **II. The Parameters & Impediments in Skill Development & Employment of Youth**

Dr.Uchit Kapoor

*Associate Professor & Dean MBA, Dev Bhoomi of Technology Dehradun*

The first part of this section comes as integration of skills where in the common knowledge which the students have received as a part of their primary and formal education has to be maneuvered and given a shape which best fits the industry requirements like combining IT with business, giving a philip to the students' innovative and creative tendencies under the concept of vision empowerment due to which the student acquires tendency to think laterally and pragmatically. The second part consists of entrepreneurship development which plainly aims at creating more no. of entrepreneurs in a mixed and fast developing economy mainly for the purpose of increasing the per capita income. In South East Asia, four major forms of entrepreneurships are famous: Franchise, Outlet, Store and Corporation. All these forms differ in their structure and function but have a global common vision and local approach. Now, the next and the third part comes in the form of internships, projects, field works and social orientations which respectively aim at imparting practical knowledge to incumbents, grab the corporate exposure, have an insight into the minds of various stakeholders through field visits and also lead towards creation of more no. of job openings and cast a positive spell on social standards of the areas under their purview which is measured by standard of living. The last part of this section deals with industry and user system interaction which aims at bridging the gap between boardroom and the classroom. This feat can be achieved synergistically by holding increased no. and regular conferences, seminars, workshops, conclaves, executive, management and senior development programs, faculty enrichment and faculty development programs each of which program has a specific target audience which encompasses junior, middle and senior level industry people and academicians.

**Keywords:** skill integration, middle, development, program, faculty, employment

### **III. Effectiveness Of Technology Utilization In Teaching Commerce Under Graduates At The College Level: A Study At Puducherry**

Dr. R.Ramachandran  
*Assistant Professor, Department of Commerce, AnnamalaiUniversity,  
AnnamalaiNagar, Tamil Nadu*

To present study aims to find out the effectiveness of technology utilization in teaching Commerce at the College level, Puducherry. A sample of 150 college teachers selected randomly were studied. Revolution in Information and Communication Technologies have a deep cultural revolution changing all modes and patterns of our lives and hence bound to lead to dramatic changes in education. It is characterized by a powerful impact on all important aspects of our lives and hence our culture, e-class, smart class have come-up virtual learning, online learning and video conferencing has emerged a pivotal role in present education scenario. This revolution is a part of a group of intertwined revolutions that in the past 20 years have been transforming Western culture from a modern into a postmodern culture. The data were collected by using questionnaire as an instrument. Primary data were collected by conducting direct structured interview using questionnaire. All the respondents were asked the same questions in the same fashion and they were informed the purpose of study. Descriptive Statistics, ANOVA, t-test, Correlation and Regression analysis was applied to test the hypotheses. The result concluded that teachers implement have high level of Technology Utilization in Teaching Commerce at the College Level.

**Keywords:** Technology Utilization, Demographic variables, Teaching Commerce and Higher Education

#### **IV. Virtual Classroom: An Effective Tool For Rejuvenation Of Undergraduate Education**

Dhanyashree.P

*Research Scholar, University B.D.T. College of Engineering, Davanagere*

Technology can be a powerful tool for transforming learning. It can help affirm and advance relationship between educators and students, shrink long-standing equity and accessibility gaps and adapt learning experiences to meet the needs of all learners. Schools, colleges, learning centres and universities should be incubators of exploration and invention. Educators should be collaborators in learning, seeking new knowledge and constantly acquiring new skills alongside their students. Education stakeholders should set a vision for creating learning experiences that provide the right tools and supports for all learners to thrive. In order to make education system learner-centric, an efficient and advanced teaching-learning tool, "Virtual Classroom" is to be implemented that provides a comprehensive learning infrastructure for students as well as professional development for educators.

Virtual Classroom is an online learning environment that allows for live interaction between the tutor and the learners as they are participating in learning activities. It brings learners from around the world on-line in highly interactive virtual classes, and provides a learning experience that is similar to a real classroom. It helps all students, ingress to educational opportunities by eliminating barriers that students face based on their race, ethnicity or national origin, gender identity, disability, religion, socioeconomic status or geographical location.

Most of the universities and institutions in India have been adopting virtual classroom education since 1990s to rejuvenate Undergraduate programme by providing technology-enabled learning environment to allow learners access and participate in specialized subject matter and graduating them for global competition. It is extremely necessary to implement this tool in every learning levels of undergraduate education system to benefit the fruitfulness of technology based learning. When carefully designed and thoughtfully applied, virtual classroom has the potential to accelerate, amplify, and expand the impact of powerful principles of learning to create a better graduate.

**Key words:** Virtual classroom, Technology, Learner-centric, Undergraduate

## RejuvIdea conclave- Best Ideas Award

The following are the awards that were voted by the delegates as the best ideas presented during the seminar

1. **Dr. Vishnu Shinde**, Assistant professor, Department of Studies in Education Akkamahadevi women's university Vijayapura

### **Best Idea Award for providing idea on : Learning through Participation**

**Idea Presented:** Conducting Brain storming sessions.

In regular classes teachers at degree college level must use Brain storming method. Before you start any new concept or teaching point in the classroom it is news are that learning readiness must happen. Teachers must select a focal point of present day topic. And write it on Board. And ask students to think about it. Help them to think about given concept. Ask students to react to the topic. List out the opinions, points, remarks and suggestions given by students on Board. Ask a student to be the observer. This method will helps in maximise students participation. Develops thinking skills, critical thinking, collaborative learning among degree college students. The major difficulty in degree students is lack of attention. Diversified classrooms, environmental difficulties and individual differences. To overcome students learning difficulties and to enhance learning experiences Brain storming sessions are suggested as innovative ideology.

2. **A. Jasmine**, Head of Department, T.B.A.K College For Women, Kilakarai

### **Best Idea Award for providing idea on: The Attendance Myth**

**Idea Presented:** Test can be conducted on PowerPoint presentations, group discussion, unannounced quiz, video clips, guest lectures covered in class which could not be found in textbook/reference books suggested for reference. .Uninformed gifts/vouchers/trip can be arranged surprisingly. "New everyday "concept can be introduced. Real learning must take place in classroom teaching. Unannounced quiz /seminar/assignment/competition can be conducted and marks and grades can be fixed accordingly. An image may be created in the beginning of the semester and students must be asked to paste it daily and the picture must be made a complete one at the end . Students who have a real image of it must be awarded. Every student must contribute something in class and grades can be fixed on class room participation. Lectures, discussions, use of class time environment must encourage the student's attendance. What Sapp group should be created and enquiry on health to be done.

## **Profile of Organizers**

### **Centre for Educational and Social Studies (CESS)**

Education is the driving force of human development and significant for nation building. The all-round development of individuals and nations requires building a strong foundation of education in the country. The education system in the country is influenced by the social environment within which it exists. A dynamic environment requires us to review and revive philosophies, policies and action from time to time. To achieve this Centre for Educational and Social Studies (CESS) was established in 2006. In pursuance of its mission CESS is engaged in research, policy advocacy and capacity building and working towards bringing change in the education system and society by influencing policies and empowering stakeholders through research, consultations, publications, policy advocacy, workshops and seminars. In the years to come CESS aims at making significant and positive contributions in Education and society at large.

### **Association of Indian Universities (AIU)**

Association of Indian Universities (AIU) is one of the premier institutions of the Country working for the cause of Higher Education. Established in 1925 as Inter University Board of India and Ceylone, it was rechristened as Association of Indian Universities in 1973. As a representative body of Universities of India, it liaises with the universities and the government (central as well as state) and coordinates among the universities and other apex higher education organizations of the world. The main objective of the AIU is to protect and promote the interest of universities and facilitate their activities especially by way of sharing information and increasing cooperation in the field of culture, sports, and allied areas, and help universities in mutual recognition of degrees. Being a communion of highest academics of the country i.e. the Vice Chancellors, it inevitably assumes the role of a Think Tank and Academic Leader in the country. At present out of 831 universities in the country, 679 are the members of the Association. Apart from Indian Universities, there are 13 foreign universities as associate members of the AIU. AIU is the only national body in the country authorized for granting academic equivalence to the degrees awarded by the accredited foreign universities and institutions for the purpose of admission to higher academic courses and employment.



### **National Assessment and Accrediation Council (NAAC)**

National Assessment and Accrediation Council (NAAC) is an autonomous body established by the university grants Commission (UGC) of India to assess and accredit institutions of higher education in the country. To address the issues of quality, the National Policy on Education (1986) and the Plan of Action (POA-1992) advocated the establishment of an independent national accreditation body. Consequently, the NAAC was established in 1994. NAAC primarily assesses the quality of institutions of higher education that volunteer for the process, through an internationally accepted methodology.

### **Karnataka State Higher Education Council (KSHEC)**

Karnataka State Higher Education Council (KSHEC) was established in 2009 in accordance with the National Education Policy and as per the recommendations of the task force to the State government. As a collective of the Government, Universities, academics and experts, the council forges a synergic relationship among them by occupying an operational space between the Government and the Universities on one hand and between the Universities and apex level regulatory bodies on the other. KSHEC focuses to create an enabling environment for promoting academic input for policy formulation and perspective planning.

### **Advisory committee**

Dr. S. C. Sharma, Director, NAAC  
Prof. Furqan Qamar, Secretary General, Association of Indian Universities  
Prof. H. A. Ranganath, Former Director, NAAC  
Prof. B. Thimmes Gowda, Vice Chancellor, Karnataka State Rural Development and Panchayat Raj University, Gadag  
Prof. M. S. Subhas, *Vice Chancellor*, Vijayanagara Sri Krishnadevaraya University, Bellary  
Dr. M. G. Chandrakanth, Director, Institute for Social and Economic Change  
*Prof. T.D. Kemparaju. Vice Chancellor*, Bengaluru North University  
Dr. B. L. Bhagyalakshmi, Former Director of Collegiate Education, Government of Karnataka  
Prof. H. S. Nagaraj, Founder, BASE Educational Services  
Sri. K. S. Vishvanathan, Vice President, Industry Initiatives, NASSCOM  
Smt. Ashwini Nachappa, Accomplished Indian Athlete  
Prof. Milind Marathe, K. J. Somaiah College of Engineering Mumbai  
Dr. Manasa Nagabhushanam, Director, CESS

### **Organizing Committee**

Prof. Jayappa, President, Bangalore University Principals' Association  
Dr. Parvathi, Principal, VET Frist Grade College  
Sri Chetan B. Singai, Deputy Director, Ramaiah Public Policy Centre  
Dr. Raghu Kumar N. Assistant Professor, BMS College for Women  
Smt. Shobha Rani N. Assistant Professor, Government First Grade College, Bidadi  
Prof. Chandranath R. K. Formerly Professor, Vijaya College  
Gowrisha, Head, New Initiatives, CESS  
Dr. Shyam Prasad Bhat T.S. Chief Co-ordinator, Centre for Culture, Policy and Research Studies  
Venkatesh B. B. Assistant Professor, IFIM College  
Anil Kumar M. Senior Research Associate, CESS  
Ajay Chandra C. Senior Research Associate, CESS

### **Convener of the Seminar:**

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## Centre for Educational and Social Studies

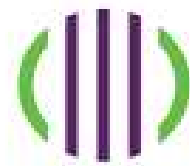
CESS was established in 2006 and is a **Registered Society** that has been working with Indian Education system from inception. CESS engaged in myriad activities in the domain of education for over a decade and positioned itself to meet the current challenges in the society keeping education as a focal point. CESS has actively engaged in various research pursuits and has successfully completed several projects in the area of education, social sciences, culture and Indic studies. CESS is committed to bringing about 'Social Transformation through and with Education' through Research, Policy Advocacy and Capacity Building in the fields of Education, Public Health and Indic Studies.

### Highlights

- Recognized as Research Centre in Management by **Visvesvaraya Technological University** (VTU), Belagavi, Karnataka.
- Entered into **MoU with NAAC** to work in the areas of data analytics, mentoring internal quality assurance cells and capacity building of colleges.
- Entered into **MoU** with Karnataka State Rural Development and Panchayat Raj University, Gadag and Tumkur University to jointly conduct Research, Capacity Building of Faculty, Design and evaluation of new courses and to work jointly in many other mutually interested areas.
- Organised **conferences, seminars, capacity building workshops**, lecture series and panel discussions in collaboration with prestigious Institutions like Association of Indian Universities, Karnataka State Higher Education Council, NAAC, Bangalore University and various other Universities.
- Many **Projects** have been executed in collaboration with Azim Premji Foundation, Government of Karnataka, Karnataka Knowledge Commission, R V Educational Consortium, Institute of Public Health and the Institute of Tropical Medicine, Belgium.
- **Indic Studies** being one of the thrust areas, CESS is investigating philosophies of Sri. Aurobindo, Mahatma Gandhi and Swami Vivekananda. Also the Institute is developing and theorizing Indian Economic Model and Indian Management thought.

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- A Report



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