

## Report on Research Retreat

### Plenary 1: Is India becoming an illiberal democracy?

**Speaker: Dr. Ashutosh Varshney, Professor of Social Sciences, Brown University**

Dr. Ashutosh Varshney delivered the first plenary lecture at our Research Retreat 2017, elucidating his thoughts on the question, “Is India becoming an illiberal democracy”. He took us through a succinct and crisp talk on the role of democracy in India and the course of changes in India’s democracy through history. His talk featured the famous remark by Mark Twain, who stated that a democratic country could be successful only if it practiced one language and one religion. India was fated to fail as a democracy as it was a mix of various religions, castes, and languages to say the least. The counter argument to that statement, which India has proved time and again, was provided by the Father of our Nation, Mahatma Gandhi, who stressed that it is the uniqueness of a hyphenated India that would cause the nation to succeed as a democracy.

Gandhi’s confidence in the strength of the Indian democracy was so steadfast that he even believed that there was no need for the British to leave India if they embraced her varied culture. The Father of Democracy in India, according to Dr. Varshney, was Pandit Jawaharlal Nehru, who ensured that India moved forward in the field of education and research by establishing many renowned institutions.

Dr. Varshney discussed the basic features of a successful democracy i.e. national integrity, social justice and poverty elimination. He stressed that although India is a country with electoral democracy, there is a failure in between the elections and a serious evident failure in poverty elimination. India, against all odds, with a very low per capita income, when compared to other countries has managed to survive and become a democracy whose battles are half won.



Dr. Varshney speaking at the plenary session

His talk also shed light on the support to minorities by the governments. The unwarranted issues of caste and minorities have in recent times caused strife among the population and given rise to extreme unrest in our country. India is a country of extremes and unfortunately, India has never had a considerable period of calm as there always exists situations of unrest. Individual rights of our citizens have been curbed by various groups of people who feel hurt by the opinions of one citizen. There has been an unjust stance of the government towards these “one versus many” opinions and viewpoints.

In a country like India, the Constitution has proved to be a fixed point without major revamping as observed in many countries today. Although the Indian Constitution has been amended, it still exists in its most basic righteous form as it was when it came into effect in 1950. India, according to Dr. Varshney, is a successful democracy, struggling on the verge of becoming an illiberal democracy as the rights of the people to express themselves freely are being curbed. The basic rights of the citizens are being curtailed, leading to conflict and hence an illiberal democracy. It was indeed “a treat” to listen to someone like Dr. Varshney who highlighted that our country is in a state of democratic flux. The session was chaired by Dr. G K Karanth, ICSSR National fellow, Jain University.

## **Plenary 2: Research and Teaching: Two sides of the same coin**

**Speaker: Dr. P Balaram, former Director, Indian Institute of Science, Bangalore**

We were graced by the eminent scientist Dr. Padmanabhan Balaram, who captivated us through his speech on the understanding that research and teaching go hand-in-hand in the field of academics. His talk was filled with experiences and examples in the different fields of Science, highlighting the positives in conducting research and teaching and vice-versa.

Dr. Balaram introduced us to the primary institute of science established in India by Mahendra Lal Sarkar, the Indian Association for the Cultivation of Science, which was the initiation of combining higher education and scientific knowledge in our country. This institute led to the setup of others, such as IISc and IITs with the focus of utilizing the relationship between research and teaching as the foundation for better knowledge assimilation and dissipation among all those who wish to pursue teaching or research. The development of any country is based on its educators and this can be improved greatly by those in academia.

Dr. Balaram elucidated the importance of being a passionate and determined researcher, by illustrating the examples of Charles Darwin, Marie Curie, Louis Pasteur, Albert Einstein, James Clerk Maxwell and Alexander Fleming, among others, who became successful pioneers in the field of science. It is important to be open minded and ready to learn from all directions as quoted by Pasteur, “Chance favors the prepared mind”. He emphasized the need to accept failures and mistakes as steps towards the betterment of oneself. He used the words of Eugene Garfield, the founder of the Institute for Scientific Information (ISI), “Long live the mediocrities. Without them how could they be geniuses”, to instill the need to keep moving forward! The progress of a scientific individual can only occur if one conducts primary research, hones one’s skills and then imparts the obtained knowledge to others, indicating that research and teaching are indeed two sides of the same coin.

Dr. Balaram explained the need for clarity and transparency in the fields of higher education which paved the way for ideal research and teaching. He utilized the Pasteur quadrant, which shows the relationship between the fundamental understanding of scientific problems and their use in solving problems in society to establish the need for conducting research and employing the results of the research in teaching.

Dr. Balaram elaborated in his words, 'a restructured and transparent (perestroika and glasnost)' view of the interplay between research and teaching through the life of an academician and researcher, with significant and valuable instances from his own experience.

Dr. Sandeep Shastri, Pro VC, Jain University chaired the session.



Dr. Balaram addressing the scholars

### **Plenary 3: Higher Education in India- Prospects and Perspectives**

**Speaker: Mr. S V Ranganath, Vice Chairman, Karnataka State Higher Education Council**

Often, it is difficult to identify problems with the educational eco-system from the outside. The right plight of the state of higher education is best painted by a person of authority from the inside. This is precisely what Mr. Ranganath did: explaining in simple terms, what the shortcomings of education are and how to remedy them.

He identified lack of passion for teaching in teachers and compelling students to abide by an outdated model of the curriculum as the main reasons for a failing system. We, who have been molded by Indian education system, understand best the idea of learning is for the sake of marks and not to understand concepts. Those who have an exceptional memory grasp and scored in the top 80s choose engineering or medicine, for them they were the most popular choices. The remaining split between the sciences and those who were still undecided, choose B.Ed to become teachers. When teachers who get into the field are doing so for all other reasons but the passion for teaching, Mr. Ranganath concluded that the sad state of affairs is but to be expected.

The only remedy, according to him, which we in the audience agreed, was to incentivize teaching. It is human tendency to work on incentives and sadly, teachers are the most neglected. Only the brightest mind can guide students towards success. Most of his ideas, as acknowledged by him, were far-sighted but the nation needs ideas which are creative. His second point is what we agree to as well: a student of biology is blissfully oblivious to the principles of science or economics. Education should not be in splendid isolation but inclusive.

Mr. Ranganath urged that institutions adopt the system of inter-disciplinary teaching and that teachers or an institution cannot restrict a student from learning by drawing a clear boundary between what is included in the set curriculum and what is beyond reach. While there were other hard hitting points in his speech, these two were the highlights. The session ended with him urging teachers and researchers to reignite the passion for learning. Hopefully, there will be winds of change on the horizon. Dr. Mithileshwar Jha, Pro VC, Jain University chaired the session

Day 2 of the Research Retreat began with another set of eight Breakout Sessions conducted by the Doctoral Supervisors and Ph.D. Alumni on a range of themes. The active participation of the doctoral scholars contributed to the success of these sessions.

The second day of the Retreat also had the Faculty Plenary Sessions.

### **Faculty Plenary Sessions**

#### **Sciences**

**Theme: Nanotechnology: Promises and Prospects**

**Speaker: Dr. S. A. Shivashankar, Professor, IISc**

Dr. Shivashankar, an enthusiast of the “Great Explainer” Dr. Richard Feynman, eloquently introduced the audience to the field of nanotechnology. Visibly evident was the passion with which Dr. Shivashankar launched into his presentation, speaking of the inspiration behind the birth of nanotechnology, quoting Feynman’s famous “there’s plenty of room at the bottom”. As part of the faculty at the Center for Nano Science and Engineering (CeNSE), Indian Institute of Science, Bangalore, he described the various nanotech projects underway through a program called INUP (Indian Nanoelectronics Users Program). INUP is a well-received unique initiative that promotes research in nanosciences through projects and workshops. Nanotechnology tries and often succeeds in mimicking the wondrous processes in nature. Dr. Shivashankar explained this point

through a simple example. He asked us to picture a Lotus leaf: its color, its structure, etc. and called attention to the fact that it is water resistant. Astonishingly, he stated that this was the result of natural nanotechnology! Compelling as it is, this is a phenomenon that has been incorporated into fabrics, thus, aiding in the evolution of the fashion and clothing Industry.

The reality of flash drives, pen drives, memory cards, etc. which store billions of bytes of information was elucidated as simply being an important application of nanotechnology. Nanoscience biomimicry, plasmonics, microfluidics, nanoscience in cosmetics etc. were some of the other avenues of nanotechnology that were concentrated on during this session. Presiding over the plenary session was the Dean of Sciences of Jain University, Dr. Jayagopal Uchil, who initiated a brief discussion following the lecture. Dr. Shivashankar was clear and coherent while answering all questions and queries put forth to him by the faculty and research scholars. The plenary session was time well spent learning about the research and future applications of an engaging and intriguing subject.

### **Social Sciences and Languages**

**Theme: Trust in Public Institutions**

**Speaker: Dr. Sudhir Krishnaswamy, Professor, Azim Premji University**

The Plenary Session led by Dr. Sudhir Krishnaswamy began with the problems of constitutional endurance especially in South Asia with similar political, social and economic identities post World War II. He explained the conditions under which five countries of South Asia viz. India, Pakistan, Sri Lanka, Bangladesh and Nepal endured. He stated that the intrinsic features viz. chosen values and extrinsic features viz. constitutional text/content are what make the Constitution of any country endure. He then led us through the literature on Regime Stability on Constitutional Endurance to show that writing about Public Trust in the Regime yields legitimacy.

He then nudged us through the three questions on the meaning of Trust - as a measure of performance, functionality, and the relation between distance and access proving that when the level of trust increases, the chances of pulling down the institution decreases. Basic civil respect is one of the markers that show why institutions have the greater mark of trust. The level of trust determines the survival of the institution. The session ended with expressing the yet unexplored angle of social order stability to attain this trust. Dr. Mythili Rao, Dean of Social Sciences and Languages chaired the session.

## **Commerce and Management**

**Theme: Building Rigor in Applied Research: Some observations**

**Speaker: Dr. Gopal Naik, Professor, IIM, Bangalore**

Dr. Gopal Naik began by highlighting that research is a form of systematic inquiry that seeks to solve practical problems. He explained how Applied Research harbors many aspects of research communities' accumulated theories, knowledge, methods, and techniques to make it relevant to all sections of the audience. His pensive observations regarding the selection of research approaches made research scholars introspect. He started with roots of basic research and showcased various areas of applied research in the real world.

He also explained the essential elements required in the process of building a theory through a conceptual model. He succinctly explained the importance of building causal conjunction to variables, reverse cause effect, triangulation, face validity, content validity, criterion validity and the like. He made a critical analysis of Cronbach's Alpha measures and dimensions of reliability. Using constructive, concise and relevant slides with suitable examples from commodity market, he explained various types of quantitative and qualitative methods. Dr. Naik marked the importance of data type, research questions, sample size, the scale of measurement at the data collection and analysis stage. He connected with the audience with relevant examples and clarified their doubts. Dr. Kanti Kumar, Professor of Management chaired the session.

## **Engineering**

**Theme: R and D, Industry, Society and Customers**

**Speaker: Mr. A.K.Vora, Director, TCS**

An erudite scholar and technocrat Mr. Vora began his talk by defining the role of research and development in the emerging scenario as applied to Indian conditions. While expressing his concern over the reduced R&D that is happening to resolve immediate societal problems, he appreciated the intellectual capital that is available in the educational institutions to take on any kind of research. It was pointed out that despite India being ranked ahead of its peers in terms of market knowledge, technology, and creativity, the country performed poorly when it came to general metrics such as institutional support, human resources, research infrastructure and business sophistication.

He opined that the genesis of the problem lies in the interaction between industry and academia. He felt the urgent need for inclusion of vocation based syllabus in the engineering curriculum so that, students are able to identify the theory they study with what is happening on the field. This paradigm shift in the learning-teaching process will not only help in bridging the existing gap between the industry and academia but also enhances the assimilation capacity of the subject. He suggested that some of the leading organizations come forward and identify the projects concerning the society and fund the research under their CSR Programs. The session turned out to be very interactive with myriad ideas pouring in from the participants. Prof Sridhar Murthy from IIAEM chaired the session.



On both days of the Retreat, there were 25 Concurrent Subject Specific sessions at which doctoral students presented their work in progress and the same was reviewed by a panel of experts.



Doctoral students making presentations

Day 1 of the Research Retreat also saw a Cultural Program presented by the doctoral students in Music and Dance supported by the students of the Post Graduate Department of Dance. In spite of the program being held at the end of a day of hectic academic activities, the participants stayed on for the cultural evening and enjoyed the melody of music and beauty of the dance.



A doctoral student performing at the Cultural Program



The dance troupe with their teacher

The Retreat concluded with a valedictory address by Dr. Baldev Raj, Director of the National Institute of Advanced Study (NIAS). Dr. Raj highlighted the importance of inter-disciplinary research and commended the University for its efforts in that direction. The Chancellor of the University, Dr. C G Krishnadas Nair chaired the valedictory program and expressed his happiness about the way the Retreat was conducted. Dr. Baldev Raj also distributed certificates to those researchers whose presentations were chosen for Best Presentation Award. The Pro Vice Chancellor, Dr. Sandeep Shastri complimented all the Volunteers who had contributed to the success of the Retreat and the leadership provided by Dr. Mythili P Rao, Dean of Languages and Social Sciences and Dr. Reetika Syal, the convenor of the Retreat.





A section of the audience at the Valedictory session



Dr. Baldev Raj delivering the Valedictory Address

## **Feedback on Research**

Thank you very much for all the courtesies extended to me at the Research Retreat. I was also very impressed by the commitment and insights and the excellent work you are doing to make Jain University as an Institution of Excellence. It was indeed a privilege and honor for me to talk to the faculty members and research scholars of the Jain University.

**Mr. S V Ranganath, Vice Chairman, Karnataka State Higher Education Council  
Plenary Keynote Speaker**

All the research presentations of the research scholars, and especially the plenary lectures enriched and inspired me a lot. I love to work in multi-disciplines and as a result enjoyed the plenary sessions which gave me the opportunity to listen to work in fields other than physics.

**Dr. Swati Routh, Assistant Professor of Physics, Jain University**

It was great sharing my thoughts and experience for your research endeavors. You can call on my help and support when you need.

**Mr. AK Vora, Chairman of TATADLT (Pune) Faculty Plenary Speaker**

Indeed the 2017 Research Retreat was packed with fantastic plenary lectures, every moment of which was filled with words of knowledge, wisdom, and experience of the distinguished speakers. Needless to say, it was a unique opportunity for all, especially for the students, to listen to these lectures and also participate in other events.

**Dr. Raju Garudachar, Professor of Electronics Engineering, Jain University**

Every minute of this event seemed precious. All the speakers were par excellence. It was a festival! Do we need to wait another year to experience such an 'August Gathering'? Kindly guide us to inculcate many more events in future.

**Dr. Chandrashekar Shastry, Director, Centre for Virtual Learning and Innovation, Jain University**

It was a pleasure to be back to the institution that has given me an opportunity to pursue my passion. I am glad that I was able to make my contribution to this very innovative concept of research retreat. I as well enjoyed my interaction with the research scholars.

**Dr. Arun Bhardwaj Ph.D. Alumni Breakout Session speaker**

It was, of course, a pleasure to address researchers at Jain University and it will always be. Many thanks for the warm collegiality. I have come to treasure it!

**Dr. Ashuosh Varshney, Professor Brown University, Plenary Keynote Speaker**

It was like being in an academic festival for the last two days, a well-structured and managed one. I really enjoyed interacting with other scholars as part of the breakout session and the research presentations. Looking forward to interacting more often for other research initiatives.

**Dr. M V Mahesh, Professor KEMI, Jain University Breakout Session Speaker**

It is my pleasure to do something for Jain University, both because I did my research there and because of the inspired presence of people. I can never give up any opportunity to come to Jain whenever my assistance is asked for. I had decided when I completed my Ph.D. that I would be associated with this institution in whatever capacity I can.

**Dr. Shireen Nedungadi Ph.D Alumni Breakout Session Speaker**

Thank you for extending the invitation to conduct one of the breakout sessions. It was indeed good to see that during the interactions I was able to address many of the concerns of the researcher scholars who chose to attend the breakout session. In fact, after the Faculty plenary session, I was quite pleasantly surprised to find that research scholars actually located me and reached out to me seeking my views and clarifications on various aspects of their research work.

**Dr. Anupama Ghoshal Ph.D Alumni Breakout Session Speaker**

Congratulations to all for organizing such an amazing event. Kudos for the tremendous amount of effort and passion put into making the Retreat possible. It was a great success.

**Rajeshwari G. Doctoral Scholar in Hindi**

The Retreat was really quite educative and informative for us. It created a long lasting, deep impact on our minds and elevated our confidence. The plenary lectures and breakout sessions were brilliant and thought provoking. The concurrent sessions have contributed a lot to our present stage of research work.

**Kothadia Sarita Nalin Doctoral Scholar in Jain Studies**

This is the third time I have attended the Research Retreat. It has been eventful with lots of takeaways. Year after year the improvement in the quality of the management of the event is visible. Proud to have been part of it.

**Balaji Rao D G, Doctoral Scholar in Management**

It was a wonderful treat for two days. Exposure to a wide range of experiences. Hats off to the great team work.

**Shivashankari, Doctoral Scholar in Music**