



Connecting Thinkers...

Editors' Message



Dear Thinkers,

Through this newsletter we have, from time to time discussed the various skills that are needed for an effective and successful research journey. One such aspect that we have chosen to write about this time is WRITING. This skill is at the core of research, whether it is a research paper or the final thesis itself. If the proof of the deliciousness of the pudding is in the eating then the proof of the quality of the work done is in the writing!!! While reviewing the research scholar's work, importance is also given to how and what she has written and of course published. For most of us that is one mountain that we would like to postpone climbing even though we know that our journey cannot continue without crossing the mountain. Writing is a skill that helps us in getting our thoughts organised and gives them a concrete shape. As a strong medium of communication, it can reach a much wider audience than just speaking or presenting about it.

For research scholars the importance of writing cannot be emphasized enough. Even before we write our thesis, we need to publish parts of our research. Choosing the right journal is itself a difficult task, which has now been made easy through various publishing houses and portals. Though it is tempting to choose a journal which will readily publish our paper at a 'cost', it is critical to choose the journal which will give us the inputs or comments needed to improve our work. If we want the right people to know what we are doing, then we must take the pains of going to the right journals. Once the journal is chosen, the writing format also becomes clearer, since each journal has its own specifications. Publications in the best of journals takes up to one year, sometimes more from the time of article submission to actual publication.

Apart from the technical aspects and organisation of the paper, the grammar and language play a key role in effectively conveying our message to our readers. Luckily for us, technological tools are available with ease to help us with this too. Though technology helps, at the end it is the creative writing skills of a researcher. It all boils down to putting the pen to the paper (or punching in the right words on the keyboard) and just start writing. There is a proverb in Hindi which says: करत करत अभ्यास के जडमति होत सुजान which very simply means PRACTICE MAKES PEOPLE PERFECT!! Ending the note with some encouraging words by Robert Cornier- "The beautiful part of writing is that you don't have to get it right the first time, unlike, say, a brain surgeon." Happy experimenting with writing!

Inside the Issue

Guide's Column	2
Article by Avani Jigar Pujara	3
Article by Sreemathy V	3
Article by Vasant R Kothari	4
Article by Jonalee Das	4
Article by Dr Akila L K	5
Article by Hemavathi B	5
In Conversation with the Experts	6
Ph.D Comics	7

Achievements By Our Research Guides And Scholars!

Ms. Jyoti Joshi, a doctoral scholar in Management, Jain University and her Guide Dr. V Vijaya presented their research paper titled "Employee Expectations Scale in Psychological Contract" at the 30th International Research Conference on Business, Economics and Social Sciences IRC 2016 at Singapore on 27-28th December won the Best Paper Presentation Award at the Conference.

Thinklet congratulates Ms. Jyoti and Dr. Vijaya for this achievement and wish them success in their future endeavors.

GUIDE'S COLUMN

Cognitive Science

Cognitive science can be called the last frontier in self-realization, since science thus-far has helped us in understanding external observable world. Cognitive Science is making great strides in making us understand our human mind and helping us create artificial intelligence. It is an interdisciplinary research that conducts scientific study of the mind and its processes (aka cognition). Cognitive science is an umbrella term used to refer to interdisciplinary research in areas like linguistics, psychology, artificial intelligence, philosophy, neuroscience, and anthropology. The glue that holds cognitive science together is the topic of mind and, for the most part, the use of scientific methods, not much the individual discipline. The theoretical perspective of cognitive science centers on the idea of computation or information processing. Cognitive scientists view the mind as an information processor, which incorporate some form of mental representation and processes that act on and manipulate that information (aka computer)

The typical analysis of cognitive science spans many levels of organization, from learning and decision making to logic and planning; from neural circuitry to modular brain organization. To make a humble beginning into cognitive research we need to answer - How do we humans think? Which parts of the brain perform what function? How does the brain communicate? And so on. Obviously cognitive science deals with human study at multiple levels be-it - a single neuron, collection of neurons, brain as a whole, human as an individual or society as a group of individuals. All of these impact our cognition process. Both quantitative and qualitative research techniques are used in cognitive science. Ethnography, grounded theory has made its entry into main stream science & technology research from its origin in humanities and social science. Few more questions that need to be answered by Cognitive Science are – what is the impact of language on creating an “intelligent animal”? What is the role of society on our intelligence? And so on.

In the last 10-20 years the technological advancements in computing power, tools & techniques have given a significant impetus to make great strides in understanding natural intelligence. Thus making an equal contribution in developing artificial intelligence be it, IBM's Watson® or Deep Mind® 's algorithm that was able to beat a human professional for the first time at Go (an ancient board game that has long been viewed as one of the greatest challenges for artificial intelligence). Going a step forward, recent progress and debate have revived interest in the existence of an unconscious mind, a mind that seems to exhibit better information processing capability than the conscious mind.

Both in India and globally, funding for Cognitive Science research is increasing. Ex-President Obama's BRAIN (The Brain Research through Advancing Innovative Neuro technologies®) Initiative is supposed to have US\$110million. In India too, many leading universities have set-up centre for excellence on cognitive science. Govt. of India funds research projects under its Cognitive Science Initiative (CSI), under the Dept. of Science & Technology (DST). To quote few research areas under cognitive science :

- Integrating Probabilistic Belief Revision and Planning for Mobile Robot Control
- Neural-network Implementation of Audio-Visual Integration
- A Bayesian Approach to Cortical Information Processing
- Neuro-economics of the financial decisions (i.e. Behavioral economics)
- Neural dynamics of language comprehension and production
- Modeling decision processes and their modulation by supply and demand
- Differences between experts and novices in problem solving

To conclude, Cognitive Science would be highly researched, funded and have impact across multiple disciplines be it healthcare, defense and security, economics, education and more, in the coming years.

Dr Hariprasad S. A
Director, SET, Jain University
Email:harisetjain@gmail.com

Can We Power the World for All Purposes by Combining Wind, Water and Sunlight Based Energy Sources?

Air pollution kills 2.5-3 million people worldwide each year. People are facing problems like cardio-vascular diseases and respiratory system problems like Asthma. Global temperature is rising faster day by day. Increasing pollution and rise in energy demand are responsible for global warming and air pollution. Also, energy prices are increasing overtime. Energy price instability leads to economic, social and political instability.

Nuclear power plant gives 25 times more pollution per KWh than wind. Coal based plant gives 50 times more CO2 emission per kwh than wind and solar. As the no. of wind turbines increases over large geographical region over the world, there is no fundamental barrier to obtain half or more than that of all-purpose 2030 power demand. Electric power demand varies minute by minute and seasonally. Now its high time to look for change in entire infrastructure where we can integrate renewable sources with conventional sources or wherever possible replace the conventional sources by renewable sources of energy to cope up with world energy demand.

“Nuclear power plant gives 25 times more pollution per KWh than wind.”

We need to think in direction of infrastructure change, more technology usage, and time required for planning and operation. The use of wind, geothermal, tidal wave, solar PV and hydro collectively referred as wind water and solar technologies are best methods of addressing various issues like public safety, energy security supply- demand mismatch and global warming.

*Avani Jigar Pujara
Doctoral Scholar in Electrical Engineering, Jain University
Email:avanitanna@gmail.com*

A ‘Smarter’ Approach to English Language Classroom

A dangling modifier or presentation skills, a smart phone can become handy for today’s English language facilitators at the undergraduate level. The ‘how’ of the process requires a systematic research in the relevant context. The approach to language pedagogy is subjected to change at all levels of education when an increasing percentage of people from diverse background are keen to enhance the communication skills in English in a city like Bangalore.

It’s a great challenge for the Educators who have to respond to the transformation of Indian society moving towards technological advancements. A paradigm shift is necessary to provide educational opportunities for a wider audience keeping viral influence of gadgets on student community. The learner centric approach that focuses on the learner’s sensitivity and sensibility is one of the most important pedagogical approaches. The approach not only enables the facilitator to use his creativity but also gives the freedom to customize depending on the student needs.

“A paradigm shift is necessary to provide educational opportunities for a wider audience keeping viral influence of gadgets on student community”

More than a decade of my English teaching experience at the undergraduate level, I have observed that in spite of having a good curriculum and experienced faculty, students face a lot of problems in communication in English. I was also interested to study different student groups so that a learner centric strategy can be adopted in order to make the English language classrooms interesting. In spite of the ample practice in the classroom and the number of language activities focusing the communicative aspects, the majority of the students have problems in written and spoken communication.

A small sociolinguistic survey was conducted using a questionnaire on 100 students from three different colleges in Bangalore and the analysis reveal that interesting teaching materials can facilitate heterogeneous student group with a meaningful English language teaching and learning environment catering learners. It is interesting to note that the students expressed the best way to channelize the smart phone addiction of students use it as an aid to teach English. However, the use of visual media (like movies, songs, soaps etc) as a supplementary material for teaching English was welcomed by 97% of the students. The other mediums like blogs, internet, whatsapp etc were supported by all.

*Sreemathy V
Doctoral Scholar In English , Jain University
Email:vsreemathy@yahoo.com*

My Research Journey

My research journey started when I began my Master's in Philosophy at Jain University. After I graduated from my Master's program, I entered the Ph.D. program and continued to pursue my passion for research. I became more confident in my reading and writing competences and I found that doing research is my passion. In the past four years I have had many unforgettable experiences and I have experienced both good and tough times. I am quite happy that I was working on a research project that will contribute to the existing knowledge and at the same time can make a difference to policy and practice!

I found that the research skills training provided by Jain University was very useful, that I could apply into not only academic context but also general context. I have developed necessary skills important for my research as well as my everyday life. This helped me a lot in balancing my research and personal life. The biggest help for me is my research guide. I think I was very lucky since my guide was very supportive, and she contributed a lot to my research project in different ways. The University staff has always been readily available to help me in any aspect of my research. If the help I need is beyond their reach, they always point me in the right direction to have my question answered. Their kind encouragement and supportive attitude helped me a lot. By attending regular classes, I also developed a good network and research collaboration with my classmates. I discovered that peer-to-peer support is a very powerful asset during one's research journey.

"I have developed necessary skills important for my research as well as my everyday life. This helped me a lot in balancing my research and personal life."

My research journey at Jain University was full of excitement, surprises, challenges, and uncertainties. The process of doing a Ph.D. program is like an emotional roller coaster since you may experience many emotional ups and downs during this process. During research journey what one needs to do is to keep working hard and to be passionate, positive, and to persevere.

Vasant R Kothari

Doctoral Scholar in Management, Jain University

Vasant Kothari has recently completed his viva and is awaiting the formal award of degree

Email: vasantkothari@gmail.com

Reflections of my Research Journey

My research journey at Jain University commenced in the year 2012 when I got selected for my research work under the Department of Management. As I come from fashion education background, it was my innate desire to pursue my Ph.D in the related area. I find myself fortunate to have been selected by Jain University that offers interdisciplinary research work and thus I plunged into the journey of research in the discipline of Management and Public Policy.

Once again, I was extremely privileged to have a mentor whose able guidance made me realize the impeccable impact of a mentor in the process of research. Right from his Research Methodology classes, classes on the specialization papers to the innumerable one to one interactions, every session made me more and more equipped and motivated to take my research work forward.

"My research journey has made me realize the importance of research as an academician"

I would like to place on record the effectiveness of the Skill Development Programme, Research Retreats and the workshop on Quantitative Data Analysis that Jain University conducts for their research scholars from time to time. The idea of conducting the Research Methodology classes under one roof for all the research scholars irrespective of the departments and disciplines provided a broader perspective of the subject.

My research journey at Jain University has triggered my love for research and has made me realize the importance of research as an academician. It is worth mentioning that Jain University meticulously follows the academic calendar and accomplishes every activity in a timely manner. Today, when I look back at those days when I was contemplating about selecting the University for my Research Work, I feel I could not have made a better choice than this.

Jonalee Das

Doctoral Scholar in Management, Jain University

Jonalee Das has submitted her Ph.D thesis in December 2016

Email: jonaleebajpai@rediffmail.com

My Ph.D Journey: Beyond the Degree

Like many other students, when I stepped into Jain University in 2011, I was filled with excitement, with a dream to enrol, embark and entitle doctorate within few years, assuming it was all a cakewalk. However, I was suggested to complete my MPhil before taking up PhD and I wholeheartedly embraced the idea and enrolled myself for MPhil. Though, it took some time to complete my MPhil and undertake PhD, I am glad, it helped me to crystallise my research work, and created avenues to rethink, recapitulate and refine my goals, objectives and purpose.

By developing a long term sense of belongingness with the skilled facilitators in the departments of Visual Arts and Psychology, and with the support of encouraging peers, my PhD endeavours resulted in a precious and memorable journey. However, the importance of justifying our methodology was emphasized at an early stage of my MPhil and that echoed in my ears throughout my research work.

“It helped me to crystallise my research work, and created avenues to rethink, recapitulate and refine my goals, objectives and purpose.”

Review of Literature undertaken during my MPhil was yet another contribution that helped me during my doctoral studies transmitted to my PhD studies. This was crucial as, through the survey I had realised that there was minimal access available to review completed works, literature produced, research reports and books on Art Therapy in India. Further, it also provided me additional time for a more exhaustive review; focus more on behavioural science and psychosocial literature, the disciplines that were entirely new to me.

I thank Jain University for making this toddler a mature contributor, my research guide Dr Choodamani Nandagopal for nourishing me with brass tacks and wisdom, and Dr Sandeep Shastri for the priceless instrument of research methodology.

Prior to my completion of PhD, I had no post-PhD career plans, except for, helping the children and adolescents through the goodness of art and art therapy. Presently with the psychosocial needs of children, accessed through the research perspective, a new desire of developing novel strategies to help them through Art Education, Studio Art setups, and ‘Family and Health grounds’ is increasing. The potential of Art Therapy Assessments and Interventions must be incorporated in schools to help in developmental process of this young generation. I feel, without these original contributions accomplished, doing our research work is mere churning of our brains!

Dr Akila L. K
Doctoral Scholar in Cultural Studies , Jain University
Email: akilamfa@yahoo.com

My M.Phil Journey

The research bug bit me when I was just 6-years old. I was truly inspired by my uncle who was then a Professor at Mysore University. Research seemed like a mere dream, as life had other plans for me; when I got married after my under-graduation and it seemed quite impossible after having a child. But, I had never let the desire die down, as I always knew that when one dreams of something and works towards it, then everything else will fall into place to make it a reality.

“Research, which was my dream, became my passion and the research methodology classes empowered my research aptitude.”

Then in 2014 July, I enrolled for M.Phil at Jain University and after that there was no looking back. Research, which was my dream, became my passion and the research methodology classes empowered my research aptitude. Working in CNMS played a huge part in my growth as a researcher with wonderful faculty members and peers to support me. And now, when I received the gold medal for the M.Phil course, I was ecstatic and overjoyed. It is a euphoric feeling, like a feather on the cap. This is a huge motivation for me to continue my research and it has strengthened my beliefs. It is especially encouraging while I am continuing my research with Ph.D at Jain University. This will help me out do myself each time and inspire me to continue to contribute to the research fraternity.

Hemavathi B
Doctoral Scholar In Chemistry, Jain University
Email: b.hemavathi@jainuniversity.ac.in

In Conversation with the Experts

In this section we bring you an interview with an eminent researcher. This month's expert is Mr. A. K. Vora who is the Director, Tata Consulting Engineers Ltd. Mr. Vora is a qualified Mechanical Engineer from India with a postgraduate specialisation in Industrial Engineering from UK. He has extensive experience in international business development as well as establishing and running joint ventures in many countries like China, Thailand, Malaysia, Saudi Arabia, Africa, etc. He was also on the Boards of all these joint ventures Mr. Vora has been a Director of TCE since May 2003. He is a member of the Audit & Risk Management Committee, Executive Committee of the Board and Chairman of Remuneration & Nomination Committee of the Board and member of the Committee on Mergers & Acquisitions. Mr. Vora is on the academic committee of Jain University.



What are the key strategies for forging an effective research partnership between Academia and Industry?

Partnership means both sides need to benefit / see benefits. This means that Academia must offer to Industry:

1. Competence in relevant subjects.
2. Understanding of what the Industry would desire.
3. Concrete outcomes / support / supplementary efforts mutually agreed upon - which are attractive to Industry

On the other hand Industry needs to appreciate that:

1. Academia is not likely to be able to offer complete finished product/ solution.
2. Academia offers qualified manpower and research facilities that each Industry need not employ.
3. Timelines will be longer; costs will be lower; active interactive participation is necessary.
- 4 Academia needs to be financially supported by Industry Project by Project basis and/ or for special facilities required to be set up at the Institutes.

Before academia can start attempting joint research projects with select industries it should first attempt forging a relationship with the industries. This can be attempted in one or more of the following ways:

- a. Invite senior industry managers / heads to be chief guests at academic or departmental events.
- b. Invite senior managers from industry to give talks and presentations.
- c. Offer a few courses (part courses/ lectures) free to a couple of industry executives e.g. some management lectures to some technical industry executives)
- d. Requesting for senior industry persons to be mentors for specific projects.
- e. Requesting factory / business visit of students.
- f. Instituting awards for individuals / organizations for best industry collaborations

The above can be strategized on long term basis by forming Industry -Academia Board (relevant industries and relevantly equipped academia) on a permanent basis.

What according to you are the hallmarks of innovation in research?

Hall marks of innovative research:

1. Bringing out products / solutions which are extremely useful and at least few steps ahead of what is available in the marketplace or in industry.
2. Bringing out products / solutions for societal problems.

This can be achieved if academia encourages and supports innovative ideas converted into projects and supported by other institutes such as industry, business and government .

How does one create and sustain a vibrant research culture?

Creating and sustaining vibrant research culture needs:

1. Freedom from academic management to go into uncharted areas.
2. Providing / arranging financial support via collaborative relationships.
3. Arranging research mentors from industry, past successful researchers.
4. Arranging visits to pick up innovation ideas and/ or needs for innovations.
5. Exposure to local and global research practices, environments, successes.
6. Recognition systems for innovators both by academia as well as society.
7. Interdisciplinary teamwork.
8. Supportive professors.

What is your advice to doctoral scholars pursuing their Ph.D.?

I would advise them to focus more on applied research or fundamental research targeted at specific applied research leading to innovative products, services, solutions.

I would advise them to actively and proactively interact with outside world, invite challenges from experts, arrange outside evaluations at all stages besides seeking mentors and sponsors.



***“In order to succeed, your desire for success should be greater than your fear of failure.”
-Bill Cosby***

Team Thinklet

Chief Editors: Dr. Mythili Rao and Dr. Reetika Syal
Editorial Team: Sharon Alex Thoppil

Phone: 080 23545246/48

Mail articles to: thinklet@jainuniversity.ac.in

ARTICLES FOR NEXT ISSUE SHOULD BE
SENT BY
**February 20, 2017 WITH NOT MORE
THAN 250 WORDS**
PLEASE INCLUDE YOUR NAME, E-MAIL
ADDRESS AND THE KNOWLEDGE DO-
MAIN OF YOUR INTEREST