Report of the 7 Day National Workshop on Research Methodology organized by the Research Innovation and Publication Cell and IQAC, Shillong College Date: 7^{th} - 13^{th} June 2017

The 7 Day National Workshop on Research Methodology was organized by the Research Innovation and Publication Cell and IQAC, Shillong College from 7th -13th June, 2017. The Workshop was sponsored by sponsored by ICSSR (NERC), NEHU, SCSTE & Chief Minister's VAF Fund.

The Inaugural programme of the Workshop was held on 7th June, 2017. Dr B.D.R Tiwari, IAS, Secretary Planning, Government of Meghalaya graced the occasion as the Chief Guest and Shri A. Suting, Officer on Special Duty SCSTE, Government of Meghalaya, as the Guest of Honor. Prof L.S Gassah, Honorary Director, ICSSR (NERC), North Eastern Hill University (NEHU), Shillong delivered the keynote address. The programme was attended by a host of dignitaries, invitees, resource persons, participants from within and outside the State besides faculties and students from the college.

The inaugural function commenced with the felicitation of the Chief Guest followed by the welcome address from the Principal Shillong College, Dr K.D Ramsiej. While warmly welcoming the gathering he highlighted on importance of research in enhancement of quality education. He then pointed that the present day educational system is full of many changes and challenges thereby necessitating the importance of organizing such a Workshop to develop awareness and inculcate scientific temper on the teaching fraternity to enable them to equip the young minds thereby indirectly contributing towards the development of the nation.

This was followed by an introductory speech on the Workshop from Dr (Mrs.) S. Khyriemmujat, Convener, Research Innovation and Publication Cell, Shillong College. In her introductory speech she emphasized that research and development are the catalyst for creativity and innovations and they play a crucial role in the context of higher education. Recognizing these challenges she informed the gathering that Shillong College established the Research Innovation and Publication on 3rd July 2009 under the leadership of the former Principal Dr.(Mrs.) MPR Lyngdoh and the main objective of setting the Cell is to motivate the teachers and learners with critical thinking and use of techniques to enrich their analytical skills. Keeping in mind the dynamic change of society and the significance of Research and Innovation as important parameters for quality and academic excellence, the Cell organized this workshop to expose the participants to the fundamentals of scientific research methodologies and Techniques and to inculcate scientific temper on all participants.

Prof L.S. Gassah Honorary Director ICSSR(NERC) NEHU in his key note address emphasized on the importance of inculcating the skills of empirical observations and the analytical capabilities of the participants. Shri A. Suting Officer on Special Duty SCSTE Government of Meghalaya corroborated that action based research should be under taken in consultation with the community so as to ensure productivity of the research. He also suggested that such innovative action based research is the need of the hour.

This was followed by the inaugural address from the Chief Guest, Dr. B.D.R Tiwari, IAS, Government of Meghalaya. The inaugural address set the ball rolling by making some well pointed thoughts on field based research which is the need of the hour. Further he noted that though a huge quantum of research work has been carried out in the country, its quantity is negligible when compared to that of developed countries. In his speech he emphasized that the State and all stakeholders should take up the challenges of initiating such field based projects especially in the rural areas. While expressing his happiness and pride over the role played by Shillong College in imparting education to the society, he also highlighted that the college has played a vital role in uplifting the welfare of students from all backgrounds. He also pointed out that the college ensures that there are equal opportunities for both the girls and boys students in all activities besides encouraging students' project and research to ignite their creativity thinking. He further congratulated the Research Innovation and Publication Cell and IQAC of Shillong College for organizing the programme.

The programme ended with the vote of thanks delivered by Dr S. Khongwir, Joint Convener Research Innovation and Publication Cell, Shillong College.

The Business Sessions: A brief summary of the business sessions of the 7 Day National Workshop on Research Methodology are as follows:

Day 1: 7th June 2017

Business Session I: Sub Theme entitled Characteristic of Scientific Method

The Business Session 1 started at 11.30 AM on the Sub Theme entitled *Characteristic of Scientific Method* and Prof Nikhlesh Kumar, Former Head Department of Sociology NEHU was the resource person.

The resource person noted that modern scientific method is based upon the tenets of positivism. The discussion touched on how positivist philosophy paved a new understanding on the nature of reality and Social Science claimed for themselves on a parallel plane with the natural science as branch of knowledge by following the levels of positivism.

Further, the discussion had touched on the very solid reasons for the obsessive concern with methodology in the social sciences. In natural science there is a clear separation between the researcher and the object of research whereas in the social science there is hardly any such separation. But however, according to Max Weber, "scientific knowledge can never reach its end and is ever evolving and man cannot claim to have reached the final stage of knowledge about reality. Thus scientific research becomes an ever ongoing activity."

Business Session 2: Sub Theme -- Hypothesis.

The Business Session 2 started at 1.30 PM on the Sub Theme entitled *Hypothesis* and Prof S.M Sungoh, Dean School of Education, NEHU was the resource person. She elaborated on the different components involved in hypothesis formulation. She stressed on the importance and nature of a hypothesis. Hypothesis is the pivot of scientific research. It is a tool of quantitative studies which must include three key components which are the variables, the population and the relationship between two or more variables. The functions of a hypothesis were elaborated upon as to delimit the field of investigation, to sensitize the researcher to have a realistic approach to the problem and to offer a simple means to collect evidence for verification. Through the course of the session, emphasis was laid on the aims of research which included finding truth, hypothesis testing, theory building and providing a scientific basis for planning, decision making; to name a few. The session concluded with the generalization that a well- crafted hypothesis is the most powerful tool that suggests the best way to perform the research and provides clues to research design.

Day 2: 8th June 2017

Business Session I: Sub-theme: Concepts and Conceptualization

On Day 2 the first Session started at 9.30 AM on the sub-theme: Concepts and Conceptualization. The resource person Prof Nikhlesh Kumar, Former Head Department of Sociology, NEHU deliberated on the theme and emphasised that concepts are basic elements of theories and we develop them through a process of definition and theories basically connect concepts to one another in a logical manner. Further he noted that concepts are abstractions that are not made randomly but by a recording of structural properties rigorously selected from the visible traits exhibited by the phenomenon under study.

He further debated that proposition in all sciences are always open to scrutiny and continued research in a scientific manner means that we keep testing earlier statements for their validity.

Thus science claims to be a never ending process. This session saw the interaction and involvement of all the participants.

Business Session 2 : Sub-theme: Subjectivity/Objectivity

The second business session started at 11.30 AM on the sub-theme: Subjectivity/Objectivity and the resource person was Dr S.R Joshi Department of Biotechnology, NEHU. The resource person opened the session by bringing out the differences between subjectivity and objectivity in research. He defined Subjectivity as interpretation based on personal opinions or feelings rather than on external facts and evidences. Objectivity however is the ability to perceive or describe something without being influenced by personal emotions or prejudices. Professor Joshi also introduced the concept of value freedom and value relevance. Value freedom is the idea that all biasness should be eliminated from research while value relevance comes into the picture when values are complex and can affect what a researcher chooses to study. He reiterated though that objectivity in Research can be difficult to achieve as values can enter the research process at different stages. The session was a lively one with a lot of interaction amongst the participants and the resource person.

Business Session 3: Sub-theme: Research Design

This was the last session of the second day and commenced at 1.30 PM. Prof A.K Nongkynrih, Head, Department of Sociology, NEHU shared his knowledge on formulation of research design and participants were acquainted with the total sum of techniques of data collection, tool or methods of analyzing data and theoretical or orientation that govern research and the logic of enquiry. He further encouraged the participants to pursue research and projects and for doing so they can identify their own college as their area of study and the students' community can infact provide important data for their work.

Day 3: 9th June 2017

Business Session I: Sub-theme: Review of Literature

This session started at 9.30 AM with Dr S.R Joshi Department of Biotechnology, NEHU as the resource person. He pointed out that literature review is an integral part of the entire research process that makes valuable contribution to each research step. Amongst others, literature review helps the researcher to gain clarity and focus, to improve methodology and to broaden ones knowledge base. In addition, a proper literature survey helps us gather much

needed information on the topic concerned. It gives future research context by illustrating the background on what has been done so far.

Business Session 2(11.30-12.30pm) Prof A. K. Nongkynrih

Sub-theme: Preparing Research Proposal

The Session started at 11.30 AM and the resource person was Prof A.K Nongkynrih. He focussed on the various prospects of preparing Research Proposal highlighting on the introduction, the background, review of literature and Methodology taking note of the objectives, the techniques to be used for collection of data, and the conclusion and budget. During the deliberations the participants interacted during the entire technical session and evoked enthusiastic responses amongst all the participants. Taking note of the varied suggestions and recommendations that were given by all the resource persons, it is heartening to note that all the participants have benefitted a lot from the Programme.

Business Session 3: Sub-theme: Construction of Questionnaire/Schedule

The last business session of the day which started at 1.30 pm was on the topic Construction of Questionnaire and Prof S.M Sungoh, Dean School of Education was the Resource Person. In her participant centric presentation she highlighted on the details of constructing a questionnaire for the use of any research work. In her presentation she further highlighted on the significance of a good questionnaire and its types. This session which was activity based saw the interaction and involvement of all the participants.

Day 4: 10th June 2017

Business Session 1: Sub-theme: Logical and scientific enquiry of research

The first session of the day started at 9.30 AM and Prof P.K Gupta, Head, Department of Education, NEHU was the Resource persons. He introduced the participants briefly on the impact and significance of historical thought. He noted that the ethics of enquiring in research has been a concern in the 19th century, when facts are collected in the hope that Government would use them. Concerns with development and the participation of the citizens are the main drives of the new methodologies of social research in the 21st century. Further he discussed on how social research can be understood against the backdrop of history of evolution of human thought. The Resource Person further enlightened the participants on deductive methods of reasoning and the new Scientific method of inductive method and explained how

Aristotle gave privacy to the faculty of reasoning of the human mind above what is handed down to us by tradition and custom.

Business Session 2: Sub-themes-Qualitative and Quantitative Data

In the following session which started at 11.30 AM, Prof P.K Gupta continued his lecture where he thoroughly dwelt on the importance of qualitative and quantitative data and the challenges faced by researches and scholars in the field while collecting such types of data. In his very informative lecture the Resource persons enlightened the participants on the difference between qualitative and quantitative data. Qualitative research and techniques deals mainly with field methods which he pointed to the participants would help the researcher to obtain new ethnographic material. On the bases of these material the researcher built theories and test their conceptual ideas to comprehend the social world. On the other hand he pointed that Quantitative data usually involves large samples that generate numerical data and conclusions are based on statistical analysis.

Business Session 3: Sub-theme-Sampling Techniques

The last business session of the day started at 1.30 pm and Dr B.Bazely, from the Department of Education, NEHU gave a detailed presentation on Sampling techniques. In her deliberation she provided the participants with the relevant information on different methods of sampling. Further she enlightened all on the skills of calculating the sample size. In her deliberation she emphasized about sampling theory in statisticand informed all, that sampling theory "devotes itself to providing numerical estimates of the livelihood that the population values be within some defined range of that established from the sample-provided that the sample has been chosen in such a way as to meet the mathematical conditions to justify the computation of the probabilities concerned"This session saw the interaction and involvement of all the participants.

Day 5: 12th June 2017: Business Session 1 Sub-themes-Statistical Analysis

Transforming one's data gathered from different sources into research findings to be presented in a written form is a major task of a research process. Prof T.K Chakrabarty from the department of Statistic, NEHU delivered a detailed presentation on how to analyse and present the research findings which have have greatly benefitted all the participants.

Business Session 2: Sub-Themes-Bibliography/References

The second session of the day started at 11.30 and the resource person, Dr B.Panda, from the Department of Sociology, NEHU delivered a very informative presentation on Bibliography/Reference. He highlighted the participants on the efficacies of writing bibliography and references from different journals, books and e-journals etc. Taking note of the varied suggestions and tools that were given it is heartening to note that all the participants have benefitted a lot from the Programme.

Business Session 3: Sub-themes: Challenges of Research of Research in NER

The third technical session started at 1.30 PM and the resource persons was Prof L.S Gassah, Honorary Director, ICSSR(NERC)NEHU. The challenges of research in the context of North Eastern region was dwelt upon with a focus on the importance of theoretical and conceptual framework in research. He also highlighted how challenges can become opportunities especially in the North East context which has scope for much more new research in various fields. In his very informative lecture the Resource Person shared his experiences, problems that he encountered in his career as a student, teacher and researcher. He exhorted the participants to always keep in mind about whatever choices they make, not to be...but to ever seek knowledge and to always be ready to face challenges in their career as teachers.

Day 6: 13th June 2017

Business Session 1 &2 : Sub-Themes: SPSS

The Business Session on SPSS started at 9.30 AM and continued till 1.00 PM and was conducted in the computer laboratory of the College. This session which was activity based saw the interaction and involvement of all the participants. Prof Amit Chowdhury, Head Department of Statistic, Gauhati University in his participant centric presentation introduce the participants how to make use of presentation of text, tables and charts using SPSS statistical procedures in our report which is very important. He enlightened the participants on the significance of how to make one report more readable, analytical, and communicable to the reader/audience using the tools of SPSS. The session was very active and all participants were engaged with hands-on-training on the computer and every oneparticipated enthusiastically exercising their creativity on how to create number of different types of charts. The Resource Persons with his experience and expertise delivered and shared his knowledge on SPSS making most of the command of SPSS simple and interactive amongst all participants.

Valedictory Function: 13th June, 2017

The workshop on Research Methodology which was attended by 39 participants from within and outside the State besides other prominent dignitaries, experts and resource persons ended with a valedictory function on the 13th June 2017 at 1:30 PM.

The valedictory function was graced by Shri Ram Singh, IAS, Director, DHTE, Government of Meghalaya as the Chief Guest besides a host of other dignitaries and invitees. The programme started with felicitation of the dignitaries followed by a welcome address from Dr. (Mrs) S. Khyriemmujat, the Convener, Research Innovation and Publication Cell. While welcoming everyone to the function she briefly highlighted about the proceedings of the Seven-Day Workshop. She also encouraged all the participants to share their knowledge at their respective institutions and department and to empower and equipped young minds to face the challenging realities of the competitive world.

Then the IQAC, Coordinator, Dr (Mrs.) E. Kharkongor address the gathering. In her speech she focused on the challenges to conduct Quality Research that would develop creativity and innovation especially in higher educational Institution in India which is one of the largest in the World.

This was followed by feedback from the participants and all of them stressed that the conduct of these programmes is very important in the present day and encouraged the College to organise such workshops in the future for a longer duration to be able to incorporate other themes.

Then the Principal of the College, Dr K.D Ramsiej address the gathering. He emphasized that research is an important tool of education that can bring significant changes in the society especially in the rural areas. While lauding the initiatives of the Research Innovation and Publication Cell and IQAC of the College to organize such workshop, Dr K.D Ramsiej urged all the participants to take advantage of local situations and conduct quality research that would result in innovations and publications.

This was followed by the valedictory address from the Hon'ble Chief Guest, Shri Ram Singh, IAS, Director DHTE, Government of Meghalaya. In his valedictory address the Hon'ble Chief Guest stressed that there is a need to revamp the education system of the country and to

move away from convention which is crucial in the age of technology. Further he stressed that research activities should not be confined to teachers. He pitched for hands-on learning for the growth of students' mind and their development of personality. In his speech he also noted that technological advancements has advanced in great pace that there is a need for replacement by smart class. Therefore, teachers must put more effort to meet the demands of the new era. He pointed out that vocational education is the need of the hour as it ensures livelihood. While congratulating the college on its Diamond Jubilee celebration he urged upon the management and the teaching fraternity for more innovative practices that would contribute to the society.

After the valedictory address there was distribution of certificates to all participants by the Chief Guest and Principal.

The programme then ended with a vote of thanks from Dr H. Iangrai, Member, Research Innovation and Publication Cell, Shillong College, Shillong followed by light refreshment.

List of Participants attending the National Workshop on "Research Methodology" organised by Research Innovation and Publication Cell and IQAC, Shillong College held on 7-13 June, 2017 at the Conference Hall, Shillong College.

Sl. No.	Name of participant	Designation	Department	Institution
1	Smt Aiom Mitri	Asst. Professor	Department of Computer Science	Shillong College
2	Shri Ransley Hoojon	Lecturer	Department of Computer Science	Shillong College
3	Shri Donald Jefferson Thabah	Lecturer	Department of Computer Science	Shillong College
4	Smt Omega Syiemlieh	Asst. Professor	Department of History	Shillong College
5	Smt V.C. Sharon Dkhar	Asst. Professor	Department of History	Shillong College
6	Smt Kyntiewnam Lartang	Asst. Professor	Department of Philosophy	Shillong College
7	Smt Extra Kurkalang	Asst. Professor	Department of Philosophy	Shillong College
8	Smt Amina Marbaniang	Asst. Professor	Department of Political Science	Shillong College
9	Smt Kareen Sohtun	Lecturer	Department of Sociology	Shillong College
10	Smt Susan Khongwar	Lecturer	Department of Sociology	Shillong College
11	Shri Longkhraw Khongiang	Asst. Professor	Department of Physics	Shillong College
12	Shri Aibor Dkhar	Asst. Professor	Department of Physics	Shillong College
13	Smt Dalari Lyngdoh	Asst. Professor	Department of Botany	Shillong College
14	Smt B. Lyngdoh	Librarian	Department of Library and Information	Shillong College
15	Shri Mardor W Synrem	Asst. Professor	Department of Mathematics	Shillong College
16	Shri Barometer Nongbri	Asst. Professor	Department of Mathematics	Shillong College
17	Shri Hector Marwein	Associate Professor	Department of Khasi	Shillong College
18	Shri Sujol Kharrymba	Asst. Professor	Department of Khasi	Shillong College
19	Smt Mary Diengdoh	Lecturer	Department of Microbiology	Shillong College
20	Shri Balawan Joshua Mawrie	Lecturer	Department of Environmental Science	Shillong College
21	Smt Baia Syiem	Lecturer	Department of Statistics	Shillong College
22	Smt Ibalucky Khyriem	Lecturer	Department of Statistics	Shillong College
23	Smt P Khonglah		Department of Commerce	Shillong College
24	Smt Camellia Kharsyntiew	Asst. Professor	Department of Commerce	Shillong College
25	Dr. Barisha Wahlang	Asst. Professor	Department of Chemistry	Shillong College
26	Smt Bahun M Wanswett	Asst. Professor	Department of Education	Shillong College
27	Smt Lorinda Marak	Asst. Professor	Department of Garo	Shillong College
- 28	Smt Amanda Basaiawmoit	Asst. Professor	Department of English	Shillong College
29	Smt Shembhalin Kharumnuid	Asst. Professor	Department of Economics	Shillong College

30	Shri S. O . Lyngskor	Asst. Professor	Department of Economics	Shillong College		
31	Shri P Shabong	Asst. Professor	Department of Khasi	Shillong College		
32	Smt laiphyrnai Mitri	Lecturer	Department of English	Sohra Govt. College		
33	Smt Donna Ruth Ranee	Lecturer		Sohra Govt. College		
34	Smt Ribynta Marbaniang	Lecturer		Mairang Presbyterian Science College		
35	Smt Balalumlangshisha Ranee	Lecturer	r.	Mairang Presbyterian Science College		
36	Shri Pynshailang Warjri	Lecturer		Sngap Syiem College, Mawkyrwat		
37	Shri Wankupar Wahlang	Asst. Professor		Sngap Syiem College, Mawkyrwat		
38	Smt R. Merika Nongtdu	Asst. Professor		Jaintia Eastern College, Khliehriat		
39	Shri Firsterborn Dkhar	Asst. Professor		Jaintia Eastern College, Khliehriat		
Members						
1	Dr. Sharalyne Knyriemmujat	Asst. Professor	Department of Sociology	Shillong College		
2	Dr. B. Laloo	Asst. Professor	Department of Chemistry	Shillong College		
3	Dr. S. Khongwir	Asst. Professor	Department of Zoology	Shillong College		
4	Dr. R. Dkhar	Asso. Professor	Department of Education	Shillong College		
5	Dr. H. langrai	Asso. Professor	Department of Education	Shillong College		
- 6	Dr. H. Diengdoh	Asso. Professor	Department of Education	Shillong College		
7	Dr. S. Sarma	Asso. Professor	Department of Commerce	Shillong College		
8	Dr. B. P. Tripathi	Asso. Professor	Department of Philosophy	Shillong College		
9	Smt. D. Kharshandy	Asso. Professor	Department of Botany	Shillong College		
10	Dr. C. Marsharing	Asst. Professor	Department of Chemistry	Shillong College		
11	Dr. L. M. Jyrwa	Asst. Professor	Department of Zoology	Shillong College		
12	Dr. M. B. Lynser	Asst. Professor	Department of Environmental Science	Shillong College		
13	Smt. P. Kharkrang	Asst. Professor	Department of Microbiology	Shillong College		
14		Asst. Professor	Department of Microbiology	Shillong College		

PHOTO GALLERY



Prof T. K Chakrabarty, Department of Statistic, NEHU delivering a speech on the 7 Day National Workshop on Research Methodology, 7th - 13th June 2017



7 Day National Workshop on Research Methodology organized by the Research Innovation and Publication Cell and IQAC, Shillong College held on 7th - 13th June 2017

Dr. (Mrs) S. Khyriemmujat,

Convener Research Innovation and Publication Cell Shillong College.