The Gentleman who Taught Infinity

Date: 1 December 2016 Venue: India International Centre (IIC), 40, Max Mueller Marg Lodhi Estate, New Delhi – 110003

Organised

by Deshkal Society, Delhi

This report provides a brief summary of the talk on The Gentleman who Taught Infinity organized by Deshkal Society on 1 December 2016 from 5.30 to 8.00 pm in India International Centre, Delhi. The talk brought together academician, research scholars, and practitioners. The talk was delivered by Mr. Sheshagiri Madhusudhan, Education Specialist, UNICEF, Chhattisgarh.

The moderator, Dr. Shushmita Dutt, Educationist and Consultant invited Mr Sanjay Kumar, Secretary, Deshkal Society to talk on the agenda of the talk. He shared that the talk is a part of Deshkal program on social diversity, equality, and education in India which has been going on through research and advocacy for one and half decades. He highlighted significant salient features of the proposed theme of the talk; qualitative research focus on narratives, contextualize in a deeper level to issue and questions as well as present a solution, most important to present method of teaching and learning. Needless to mention, the context, issues, and questions have been taken in the forthcoming book will be very relevant in the current debate of poor learning of the children particularly those come from the marginalized communities. Dr Peggy Mohan, Educationist and Linguist, New Delhi and Dr Monica Gupta, Assistant Professor, Delhi University were part of the panel of this talk.

Dr Dutt invited Mr Sheshagiri to present his talk. He commenced his presentation with narrative construction as the forthcoming book 'The gentleman who taught infinity' offers a view of the narrative case study in a form of narrative inquiry that captures personal and human dimensions of experience over time, and takes account of the relationship between individual experience and social reproduction context.

He accounted that in the year of 2012, nearly 30 years after they have parted ways, a student suddenly remembers his math teacher from school days. While he starts recalling his childhood memories and writing about him, he is surprised to discover how much he remembers the math he was taught many, many years ago. Gradually, as everything comes back, he ends up writing a full narrative. He has narrated the physical appearance of his mathematics teacher by enunciating that he was partly bald head and be spectacled face and his immaculate suit, he looked quite the archetypal mathematician and also ensured that 'there was always some distance between us and him'. Subsequently, his presentation proceeds towards the main strand of the book, firstly the book is all about the Channakeshava, a great teacher; secondly, it is all about the methodology of teaching mathematics and reproduces the subject as an object; and thirdly, it is about what subject called mathematics. At the heart of this narrative is Channakeshava, the gentle teacher who took his students in the adventurous world of mathematics. Classical math teachers believe in traditional and an effective instructional tool in the teaching of mathematics. But Channakeshava departed himself beyond the school syllabus, sterile textbooks and breaking the school system, he wanted that student can go up on his shoulder and in a way they could have to get expose to a powerful strategy of learning.

While Mr Madhusudhan extending his presentation he illustrates mathematics with an example: 142857 X1? the answer was easy but when he was moving to 142857 X 2, 142857 X3, 142857 X4, 142857 X5, 142857 X6, usually everybody was busy with the multiplication but he showed this is called 'cyclic permutation'. Channa introduced to his students the beauty of mathematics through the works of great mathematicians like Euclid, Gauss, Bhaskaracharya, Cantor and Euler in the process of storytelling. The teacher has gone beyond the routine ways of looking at the subject of mathematics and he was not distressed with the curriculum, pedagogy as mathematics is not a mechanical problem.

Beside this, the presenter further discussed that the teacher asked to Measure 180° and in this process student went about proving the elementary theorem and learnt along the way that the word 'theorem' is nothing but a statement claiming such and such a thing, which has a proof that is generated using deductive reasoning. Therefore, subjective meanings and sense of self and identity are negotiated as the stories unfold and storytelling in the mathematics classroom to achieve an environment of imagination, emotion, and thinking and creates more

vivid, powerful and memorable images in student's mind and also help them understand concepts and ideas. As many have argued that mathematics is the perfect science of patterns but the great teacher, Channa showed that mathematics is not only teaching but also the about of storytelling. During the joyful journey of learning mathematics, we voyage with Channa and cross the Seven Bridges of Konigsberg, play with the intriguing Barber's Paradox, and encountered why mathematicians took nearly 350 years to solve Fermat's Last Theorem in a fantastic storytelling action. Although it is not an easy task to capture the student's attention in Gauss' story and then transfer that attention to a different exercise of infinity in the subject. The teacher was exercised to communicate a subject effectively and comprehensively and adopted such type of teaching methodology. It seems that he is having an in-depth understanding of content knowledge in the subject and also to questioning the fundamental way in which we consumerists live. From his narratives, it represents that it is the time to see joy/adventures, meaningful and fulfilling in everything including Math. The teaching process inquires, answers questions and kindle your interest in Mathematics (even if you're not much fond of the subject). As the narrative unfolds, teacher and taught, subject and craft all get intertwined and result in a fascinating story.

At the moment of his presentation completed, Dr Dutt shared that throughout his presentation she was recalling her childhood memories and mathematics is a set of (rigid) rules operations and formulae as she learned in her schooling days. All through his presentation of the book it looks like that using stories to teach mathematics had a positive impact on the quality of teaching and learning mathematics. Using the stories prompted a positive change in teacher's and student's attitudes and feelings towards mathematics; a greater understanding of key mathematical ideas; and an appreciation of the value and uses of mathematics in everyday life as students have a seemingly natural disposition towards patterns and patterning activity. During the epoch of discussion, Dr Peggy Mohan believed that the teaching of any subject, not only mathematics, should be 'practical' – it should be closely linked to, and based on real life examples. The child must enable understanding of concepts, encouraging self-learning and exploration. Dr Jyoti Raina enquired about the validation and proof, but a proof isn't just about knowing what's true, but also about knowing why it's true, and what new truths might follow. Regarding the pedagogy and syllabus, Dr Monica Gupta observed that teachers are too much centric and rigid towards the prescribed textbooks and syllabus and always they having authoritative nature. Especially Mathematics teachers believe in memorization of rules and procedures. She rightly pointed out that education should involve an exchange of knowledge between the learners and educators, through which learners can enhance knowledge. She also highlighted the importance of providing appropriate training for preservice school educators and the pivotal role that using stories as pedagogical practice can play in ensuring high quality mathematics teaching and learning. In addition to above discussion Dr Dutt further emphasized on teaching methodology by saying that teacher should teach through different methods for creating interest, should encourage children and help remove the fear of mathematics in children.

The session was ended to doing hope that the book title – 'The Gentleman who taught me infinity', is about mathematics by stressing on the methodology used by the teacher Channa would be able to throw light in education custom and practice and holds a promise of unraveling something the reader has never imagined.



Photo Gallery



