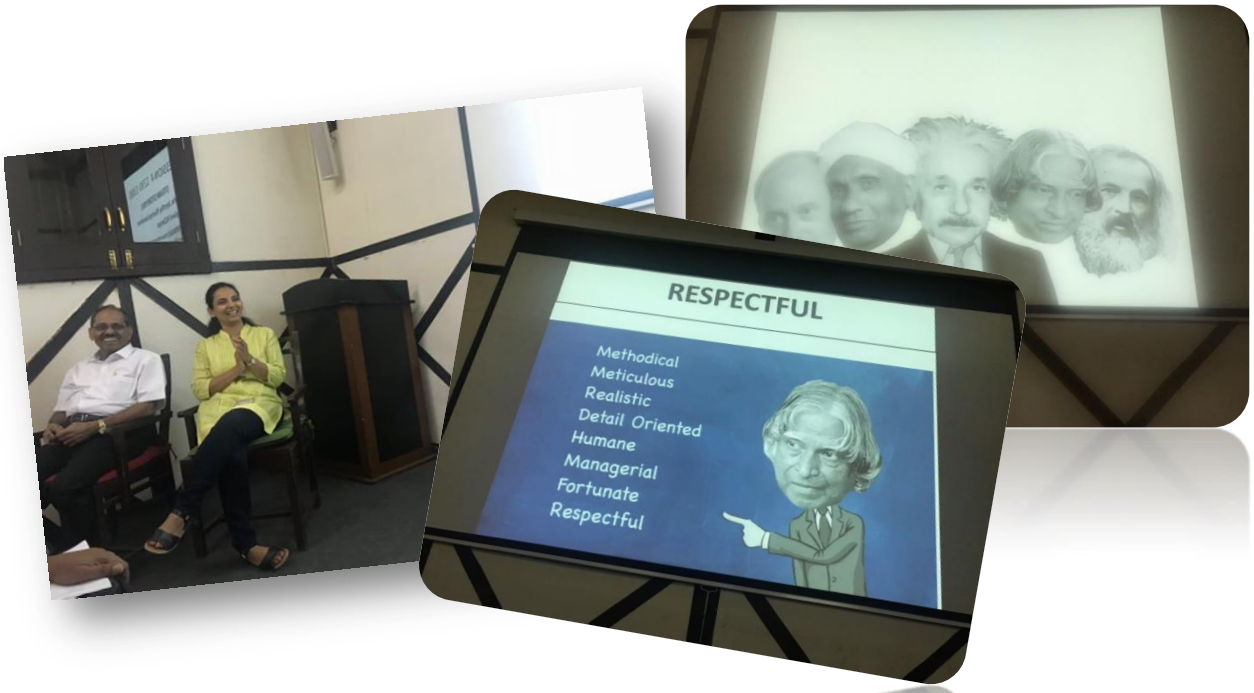
SCIENCE CLUB
Academic Year 2017-18

VISIT TO THE DR. BHAU DAJI LAD MUSEUM

The Science and History Pedagogy students, along with Ms. Kalpana Chavan visited the Education centre at the Dr. Bhau Daji Lad Mumbai City Museum in Byculla on 16th March 2018 to attend a workshop on 'Be a Scientific Teacher and SciStory Person'. The workshop was conducted in collaboration with the Academy of STEAM Stories (Science, Technology, Engineering, Arts and Mathematics). The workshop was open to all school teachers at middle school level (8th/9th/10th grade) teaching science and related subjects as well as B.Ed Science student teachers.

The workshop was a teacher-training session, aimed to introduce teachers and educators to STEAM stories and encourage them to create science stories, which they can use as value additions to science teaching in classrooms. There was a narration of STEAM stories covering the subjects Physics, Chemistry, Biology and Mathematics. The workshop was divided into 6 sessions of 30 minutes each, with worksheets and reading material provided.

The workshop was conducted by Dr. A.P. Jayaraman, a renowned nuclear scientist and Vice-Chairman of the National Centre for Science Communicators. Dr. Jayaraman has 50 years of experience in scientific research, engineering processes, technology missions and teaching



management sciences. He is the President of the Academy of STEAM stories and specializes in creative science literature for children. A story scripted by him was used in this workshop.

The workshop was indeed a very enriching and enlightening experience about the innovative teaching strategies that could be implemented in today's classrooms, for better student engagement and participation.

CROSS-FACULTY TEACHING SESSION

Two cross-faculty teaching sessions were conducted on 17th and 19th March 2018 by faculty members - Dr. Bijoy Thomas and Ms. Kalpana Chavan for the History and Science Pedagogy students on the sub-unit 'Characteristics of a good Science/History Textbook' from the syllabus.

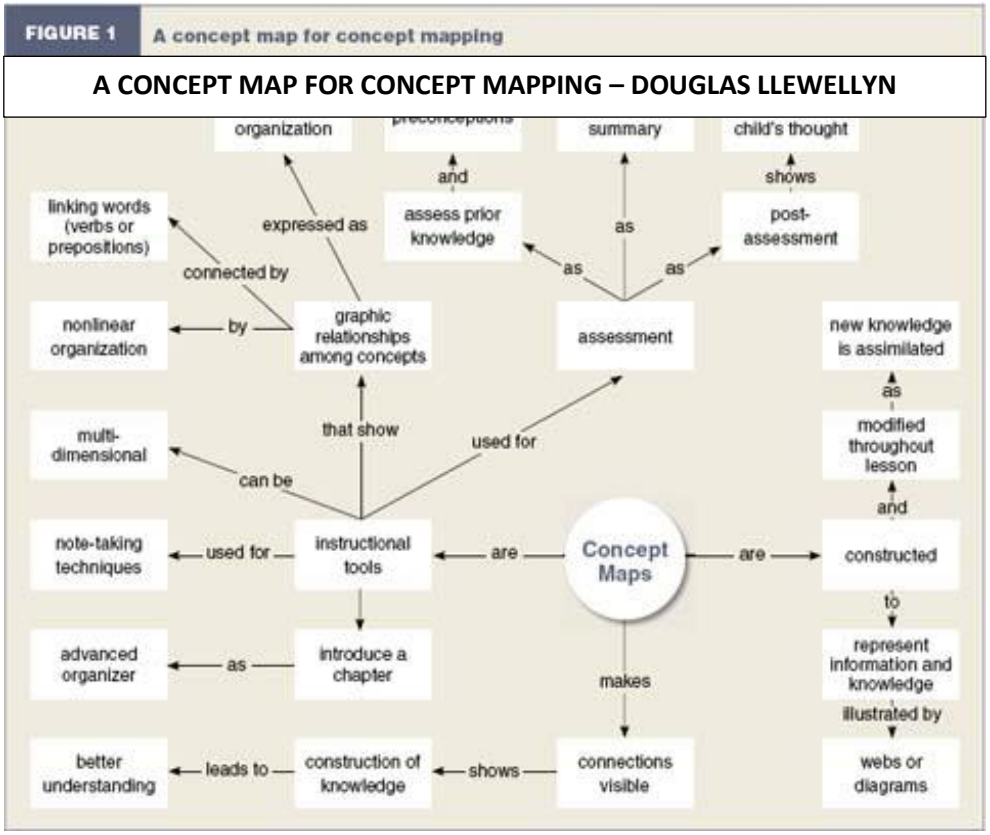
The students were initially asked to draw an illustration of their interpretation of a textbook. Using the illustrations, various phrases of what defines a textbook were elucidated and Ms. Kalpana Chavan made a mind map of the same. The next part of the sessions was to understand what constituted a 'good' textbook for teachers as well as students and was presented by Dr. Bijoy Thomas. A step by step critical analysis and debate on the current school text books was facilitated by the faculty members and students were encouraged to present their points of view.

The faculty members emphasised that a good textbook as a learning resource must be a symbol of egalitarianism, with accurate and authentic content material and should provide a platform for creative, reflective and critical thinking for its end users (mostly students).

CONCEPT MAP WORKSHOP

Dr. Bijoy Thomas, as part of a Science Club initiative asked the Science Pedagogy students to draw a 'Concept Map' on the topic of 'Concept Mapping', after conducting an input session on 2nd and 3rd April 2018.

Dr. Bijoy stressed the importance of the use of concept maps as an essential instructional tool for middle school science teachers, especially those with a constructivist point of view.



According to Douglas Llewellyn, as students gain mastery of concept maps, they develop an understanding of relationships among elements of a concept, ultimately making incremental gains in moving from novice to expert-level learners. Students are able to enhance a meta-cognitive approach to learning by negotiating their ideas, taking control of their own learning, and monitoring their progress.

After each student of the Science pedagogy class submitted their concept maps, Dr. Bijoy conducted a review session on their understanding of what a concept map entails and reinforced the basic ideas and systems behind the constructing of a concept map.

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