ABSTRACT

Mathematics required acumen and competence emerging out of readiness to knowledge construction and sharing, content free auxiliary skills, content load skills and fluency in computational skills. While a number of strategies have been adopted for the instructional transaction enable the students to learn Mathematics with the conscious effort and pursue collaborative mode of learning Mathematics for reducing anxiety and enhancing interest in Mathematics. Peer tutoring is an instructional arrangement in which students teach their peer for skill remediation or supplemental instruction and is a valuable resource for facilitating the academic and social growth of students. They create a context for sharing intimate thought for engaging in close collaborative work, questioning the known for attempting the unknown, offer a context for support and discovering towards the development of appropriate pathways by which peer competence in mastering Mathematical arsenal of skills. The present study sought to develop a Peer Tutoring Model in Mathematics and focuses on facilitating thinking and skills augmented with data processing, synthetic and analytical mode of comprehending Mathematical structures. Peer tutoring strategy can enable to secondary school students to integrate the sequence of activities that focus on concrete operational models and ability to resolve symbolic ambiguity and connections across content strands. In order to find out the Mathematical outcomes of tutoring a 5F conceptual model of peer tutoring was prepared, which includes five stages of peer mediated instructions and interventions. Experimental study has been adopted for testing the effectiveness of the model.

The pre-test – post-test –non-equivalent groups design served as the blueprint for the study and the sample comprised of a cross section of selected educational experts, teacher educators and secondary school students. The analysis of the collected data throws light into the fact that Mathematics can be learnt effectively in a relaxed and friendly atmosphere through Peer Tutoring Model. Moreover, it reveals that through this method, students get ample opportunity to develop self concepts, achievement motivation and interest in Mathematics.

The findings of the study show that Peer Tutoring Model is effective in enhancing performance in Mathematics, self-concept, achievement motivation and mathematical interest of the students. This enable the tutors to design appropriate classroom strategies that best exploit the learning opportunities with children negotiate and co-construct by the agenda of their peer encounters. This strategy enables the students to perform independently and mastering the instructional skills. A close analysis of the prevailing curriculum of Mathematics education at secondary level indicates that a considerable proportion of the existing curriculum aspects may not be able to follow the instructional approach through peer tutoring.

The study is expected to establish a firm basis for future studies and contribute significantly to solve difficult tasks, creative learning through deep conceptual insights, lead spontaneously, promote independent work habits, direct students to communicate about strategies and solutions thus challenges in a context of peer assistance and support. Thus to
empower the Mathematics students through peer interactions during task engagement activities in a constructive and compromising form of social discourse especially suited for joint exploration into unknown areas of Mathematical thoughts.