A) General Information: -

1. **Name of the Institute:** DIET, Dilshad Garden

2. **Details of the Investigator(s):**

Name	Designation	Place of posting at the time of project completion	Present place of posting	Contact no	E-mail
1.Dr. Anil kumar Teotia	Sr. Lecturer	DIET, Dilshad Garden	DIET, Dilshad Garden	9891115415	anildietdilshad@gmail.com

3. **Project/ Study Conducted Academic Session:** 2014

4. **Institute where Project/Study submitted:** DIET, Dilshad Garden

5. **Theme of the Project/Study:** Teacher and Teaching

6. **Level of the study:** School

B) Summary of the Conducted Research work/Project/Study: -

1. **Title:** Achievement Level of Students in Mathematics
2. **Introduction:** Mathematics is useful for daily life because it provides a powerful, concise and unambiguous means of communication. As Mathematics is inseparable part of human life and helpful to develop intellectual abilities but some time it is observed that our students studying in middle classes do not show the performance as per their achievement which they attain in earlier classes.This involve efforts for development of logical thinking and reasoning among students. Some of the students develop the conceptual framework for particular type of problem. They find those problem easy and Mathematics for them becomes very interesting subject. However many students are unable to develop the systematic thinking and logical skills by themselves.Sometimes it is observed that the student do not show the performance as per there achievement which they attain in previous classes regarding Mathematics.Therefore the study 'Achievement Level of Students in Mathematics' was an attempt to find out the difference between actual performance and achievement in Mathematics at class V. In this study the term achievement is the level of attainment in any or all Mathematics skills usually estimated by performance on a test.

3. **Research Objectives**: The main objectives of the study were: i) to find out difficult areas for students in Mathematics. ii) to find out the difference between difficult areas in Mathematics for boys and girls students. iii) to study the achievement level of students in class V final exams on the basis of gender. iv) to study the achievement level of students based on tool on the basis of gender. v) to study the difference between achievement level of students based on class V final exam and tool on the basis of gender. vi) to study the difference between achievement level of students based on class V final exam and tool on the basis of type of school. vii) to study the difference between achievement level of students (all sample) based on class V final exam and tool.
4. **Research Design:**
    - **Research method(s): :** Survey method under descriptive research was used in this study
    - **Tools and techniques used:** Achievement test of Mathematics was developed by investigator and it comprises of 40 multiple choice type questions from different areas like Number system, Arithmetic Operation, Geometry, Fraction, Decimal, Time, Mensuration, Measurement etc. Each item carries '1' mark for right answer and '0' for wrong answer.
    - **Statistical techniques:** Percentage, Mean and t-test were used for analyzing the data.
5. **Research findings:** The main findings of study were: **i)** in the fraction area of Mathematics average 24.6% of boys and 20.6% of girl's students could give correct response of these questions, **ii)** regarding decimals of Mathematics it is observed that girls have more difficulty to understand questions of decimal, **iii)** in the area of Mensuration of Mathematics, around 60-65% students, both boys and girls have difficulty in this area of Mathematics, **iv)** regarding 'Multiplication' the data show average 37.5% of boys and 30.6% of girls could able to give correct response of these questions, **v)** there is no significant difference between school marks in Mathematics of boys and girls, **vi)** there is no significant difference between boys and girls regarding achievement based on tool, **vii)** there is no significant difference between school marks and achievement marks for boys and girls in this subject, **viii)** there is significant difference between School marks and Achievement marks on the basis of types of school, **ix)** there is significant difference between score of class V final exam and scores on tool for all sampled students and students showed below average performance on the tool in comparison to average performance in class V final exam.

6. **Educational implications:** Results showed that achievement level of class V students in Mathematics who is studying at present in class VI showed below average performance on the tool in comparison to their average performance in V class final exam, reason behind this may be, at the time of final exam, the student memorized the syllabus, problem solving skill without understanding the concept, change of evaluation techniques and taking on spot test without giving them time for practice. To fill this difference we have to understand the learner and his learning style. We can overcome this differences in achievement level.

    Using following principles

    - Mathematics learning should be meaningful and based on developmental process

- Mathematics learning should be built upon previous knowledge
- Mathematics concept need to be presented in a sequential order
- Children should be actively involved in Mathematics learning
- Participating in activities and games helps in mathematics learning
- Provide learning opportunities to children to allow them to construct their own understanding of Mathematical concepts.
- Children learn from each other and errors are useful.

7. **Scope of the study:** Future research should have more representative numbers of participants. The small number of participants makes it difficult to generalize the findings. In addition, developing a richer understanding of what makes good math education for young children remains a work in progress. Similar study can be conducted for senior class students for analyzing their understanding also study can be conducted in other districts and other subjects