Abstract
In the earlier days for successful teaching, only the subject knowledge was considered important. Teacher did not consider about the essential skills of teaching. Now a day different teaching methods, learning methods are developed. Now day students are multichannel. Hence, effective teaching methods must be used. The C.A.M. Model plan is applied to expt. Group. In this correlation is investigated between the C.A.M. and some variables I.Q., Creativity, Interest, A.M.T. The investigator investigated that there is a positive correlation between the variables (I.Q., Creativity, Interest, A.M.T. and achievement of students taught by C.A.M. method.

I. INTRODUCTION
In the earlier days for successful teaching, only the subject knowledge was considered important. Teacher did not consider about the essential skills of teaching. Now a day different teaching methods, learning methods are developed. Nowaday’s students are multichannel. Hence, effective teaching methods must be used. Over the years several instructional strategies have been employed by various teachers in the teaching science. Some of these instructional strategies have been employed by various teachers in the teaching science. Some of these instructional strategies include lecture method, inquiry method, class teaching project method etc. Though these strategies are teacher centred,
which do not care for individual, difference in the learners. Despite all the students assimilate at different rates and some of them are time consuming. The foundation of any good system of education rests upon the quality of its elementary schools. The chief element of quality in science lies in its capacity to develop scientific thinking in children. Hence in order to achieve the goals and expectations of the science educations.

The objective of education has changed from time to time and so has our concept of teaching. What we teach and how we teach? Depends to a great extent on what we want to achieve. Teaching is both an art and science. Able teachers are always finding ways and means to improve their teaching techniques. The improvement of teachers by employing newer methods of teaching is a need of the hour. The ways of knowledge and values are delivered to the learner have a meaning both for a teacher and the student. The most recent concept of teaching is teaching the child how to learn, how to discover, how to think and how to inquire. The emphasis is upon “Know how” rather than “Know what” In modern world knowledge increases at a terrific pace and social change is very rapid. Education can no longer be taken as the preparation of finished product. Due to science and technological advancement, the entire world has been shrunken in its space and time. At present, instructional strategies are being developed for effective science teaching. The modes can create most suitable environment and stimuli for the student to solve problems pertaining to science.

Education is a tri-polar process in which teacher, student and curriculum are the three poles. The process of teaching and learning is complex one. The process of teaching is planned by the teacher for better learning of students. Effective teaching is possible only when the teacher has the knowledge and skill of using proper instructional modes. Teaching of science at this level mostly becomes “telling and testing” process, which causes failure of attainment of appropriate teaching. Learning goals. A very young child will learn principally by the enactive mode and as he grows older, the iconic and the then the symbolic become more important. Prof. Bruner has studied the growth of children from the points of intellectual development. He recommended the use of discovery approach, intrinsic, motivation and providing instructional material.

II. OBJECTIVES OF THE RESEARCH
The following are the main objectives of research.
1) To co-relate certain variables viz Intelligence, Creativity, Content achievement, Interest, achievement motivation with concept attainment.

III. HYPOTHESES OF THE RESEARCH
The hypotheses of the research are given below.
1) There will be a positive co-relation in Intelligence, creativity, content achievement, Interest, achievement motivation with concept attainment.

IV. RESEARCH DESIGN
1) **Sample Selection:** Simple Random method was used. 60 students of VI std semi English students were used from Shri Shahaji High School Akkalkot

2) **Methodology of the study:** The researcher used experimental method taking into considerations the nature, objectives and approach of research.

3) **Research Tools** The research scholar has procured the following tests:
   - Group Test of Intelligence - Dr. (Mrs) Pramila Ahuja.
   - Science Interest Test - Dr. L.N. Dubey & Dr. Archana Dubey.
   - Achievement Motivation Scale (n-Ach) - Prof. Pratibha Deo & Dr. Asha Mohan
   - Verbal Test of scientific creativity - Dr. V.P. Sharma & Dr. J.P. Shukla.
   - Content Achievement Test - Self Prepared

4) **Data Collection Technique & Procedure**
   The following technique and procedure is used for data collection
   1) 60 students of VI standard Semi English students are selected from Maratha Mandir’s Shri Shahaji High School Akkalkot Dist- Solapur Maharashtra
   2) Two equal groups (each 30 students) are made on the basis of pre test
   3) Simple random Sampling method is used to make two different matched equal groups.
   4) First group is treated as experimental group & Second group is treated as controlled group.
   5) 23 lessons plans are prepared according C.A.M. They are taught to experimental group by C.A.M. method. The controlled group is taught by traditional method.
   6) I.Q. test, science Interest test, A.M.T. & SC. Interest tests are administrated to both experimental & controlled group. The answer sheets of test are assessed as per the guidelines of answer keys. The content achievement test is administrated to both groups & assessed as per answers.
   7) 30 students of experimental group students are considered to gather the introspective reactions of C.A.M. A questionnaire is supplied to experimental group to gather introspective reactions of C.A.M. Two Sr. teachers of Science having more than 30 years experience are observed the C.A.M. lessons. There two Sr. science teachers gave the introspective reactions of them about C.A.M. lessons taught to experimental group.
   8) The statistical calculations mean, S.D. ‘t’ value etc. are calculated. The conclusions are drawn on the on the calculation done.

V. **ANALYSIS AND INTERPRETATION OF THE DATA**

**OBJECTIVE 1- To Correlate Certain Variables Viz Intelligence, Creativity, Content Achievement, Interest, Achievement Motivation with Concept Attainment.**

**CORRELATION:** Correlation is the relationship between two or more paired variables or two or more sets of data. The degree of relationship is measured and represented by the coefficient of correlation. This coefficient may be identified by either the letter \( r \), the Greek letter rho (\( \rho \)), or other symbols, depending on the data distributions and the way the coefficient has been calculated.

5.1 **Interpretation of a Correlation Coefficient:**
There are number of ways to interpret a correlation coefficient or adjusted correlation coefficient, depending on the researcher’s purpose and circumstances that may influence the correlation’s magnitude. One method that is frequently presented is to use a crude criterion for evaluating the magnitude of correlations:

<table>
<thead>
<tr>
<th>Coefficient (R)</th>
<th>Relationship</th>
</tr>
</thead>
<tbody>
<tr>
<td>.00 to .20</td>
<td>Negligible</td>
</tr>
<tr>
<td>.20 to .40</td>
<td>Low</td>
</tr>
<tr>
<td>.40 to .60</td>
<td>Moderate</td>
</tr>
<tr>
<td>.60 to .80</td>
<td>Substantial</td>
</tr>
<tr>
<td>.80 to 1.00</td>
<td>High to very high</td>
</tr>
</tbody>
</table>


5.2 Correlation between Science Interest and Achievement of Students Taught By C.A.M.

Table 2: Correlation between Science Interest and Achievement of students taught by C.A.M.

<table>
<thead>
<tr>
<th>Science Interest X</th>
<th>Achievement of Students taught by C.A.M. Y</th>
<th>$x^2$</th>
<th>$y^2$</th>
<th>$xy$</th>
<th>$r$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean = 57.14</td>
<td>Mean = 21.94</td>
<td>377.468</td>
<td>81.867</td>
<td>162.268</td>
<td>+0.9230</td>
</tr>
</tbody>
</table>

Remark = High Positive Correlation

The Table shows that there is a High positive correlation between Science Interest and Achievement of students taught by C.A.M. Method.

B) CORRELATION BETWEEN A.M.T. AND ACHIEVEMENT OF STUDENTS TAUGHT BY C.A.M. METHOD.

Table 3: Correlation between A.M.T. and Achievement of students taught by C.A.M.

<table>
<thead>
<tr>
<th>A.M.T. X</th>
<th>Achievement of Students taught by C.A.M. Y</th>
<th>$x^2$</th>
<th>$y^2$</th>
<th>$xy$</th>
<th>$r$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean = 169.8</td>
<td>Mean = 21.94</td>
<td>5090.80</td>
<td>81.867</td>
<td>198.6</td>
<td>+0.3076</td>
</tr>
</tbody>
</table>

Remark = Low positive Correlation

The Table shows that there is a Low positive correlation between A.M.T. and Achievement of students taught by C.A.M. Method.

C) CORRELATION BETWEEN I.Q. AND ACHIEVEMENT OF STUDENTS TAUGHT BY C.A.M. METHOD.

Table 4: Correlation between I.Q. and Achievement of students taught by C.A.M.

<table>
<thead>
<tr>
<th>I.Q. X</th>
<th>Achievement of Students taught by C.A.M. Y</th>
<th>$x^2$</th>
<th>$y^2$</th>
<th>$xy$</th>
<th>$r$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean = 81.13</td>
<td>Mean = 21.94</td>
<td>3489.467</td>
<td>81.867</td>
<td>156.2361</td>
<td>+0.2923</td>
</tr>
</tbody>
</table>

Remark = Low positive Correlation

The Table shows that there is a Low positive correlation between I.Q. and Achievement of students taught by C.A.M. Method.
D) CORRELATION BETWEEN SCIENCE CREATIVITY AND ACHIEVEMENT OF STUDENTS TAUGHT BY C.A.M. METHOD.

Table 4: Correlation between Science Creativity and Achievement of students taught by C.A.M.

<table>
<thead>
<tr>
<th>Science Creativity X</th>
<th>Achievement of Students taught by C.A.M. Y</th>
<th>x^2</th>
<th>y^2</th>
<th>xy</th>
<th>r</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean = 599.4</td>
<td>Mean = 21.94</td>
<td>257135.2</td>
<td>81.867</td>
<td>3023.915</td>
<td>+0.6590</td>
</tr>
</tbody>
</table>

Remark = Substantial positive Correlation

The Table shows that there is a Substantial positive correlation between Science Creativity and Achievement of students taught by C.A.M. Method.

VI. FINDINGS

1) There is a high positive correlation between science Interest and Achievement of students taught by C.A.M. method.

2) There is a low positive correlation between A.M.T. and Achievement of student taught by C.A.M. method.

3) There is a low positive correlation between I.Q. and Achievement of student taught by C.A.M. method.

4) There is a substantial positive correlation between science creativity and Achievement of student taught by C.A.M. method.

VII. REFERENCES


To Cite This Article