A Study of Collaborative Learning and Scholastic Achievement of High School Students

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Abstract: This paper comparatively examines the relationship between Collaborative learning and Scholastic Achievement of students to identify the significant difference in the research variables and in their dimensions. For these purpose 205 boys and 195 girls from class IX were selected at Random in Kanchipuram Educational District. Survey method is adopted by administering the tool of five point scale. The study focused on the data collected through Rating Scales and the study measured Collaborative Learning and Scholastic Achievement i.e., marks obtained in the exams were collected from the students mark register as a part of personal data collection. The scores are converted into percentage and analyzed for the study. The data collected from the tools were subjected to various statistical analyses. The results of the analysis were presented in the form of tables and interpreted appropriately to arrive at logical Findings and Conclusions. It is found that the correlation between the dimensions of Collaborative Learning was significant and also seen that the three inter correlation were positive. It is found that the positive correlation between the Overall Collaborative Learning and Overall Scholastic Achievement was negligible. It may be concluded that on the basis of findings, the students have had better Affective and Social aspect in Collaborative Learning. Few demographic variables such as Gender, Syllabus, Medium of Instruction, Father’s Education, Mother’s Education and Management of School brought slight differences in research variables.

Keywords: Collaborative Learning, Scholastic Achievement

1. Introduction

Different teaching and classroom methods have been the subjects of many research studies to find which types are the most beneficial for the students as far as preparing them for a productive and successful life through their education. There is a great deal of literature that a child's cognitive development can be enhanced by collaborating with peers. A collaborative group in school consists of a “reciprocal interaction in which ideas and perspectives are explored and exchanged, solutions are elaborated and justified, and exchanges are supportive and coordinated” While these are the goals for collaborative groups, the effectiveness of these groups depends on the structure of the groups and the respect in the classroom. Classroom collaboration is something extremely important for the complete education of a child, both in the classroom and to prepare them for a life in our society, and the following articles outline research that discusses the benefits and implications of collaborative groups. In that perspective, the implementation of collaborative learning and on it is effect on the Scholastic achievement of 9th grade students of selective schools in Kanchipuram district is being studied in this study. This study is to focus on essentials of collaborative learning and it various implementing methodologies and techniques and how it is expected to give an end result on the Scholastic achievements of the students in detailed approach.

2. Statement of the Problem

A study of Collaborative Learning and Scholastic Achievement of High School Students.

3. Objectives of the Study

1) To study the Collaborative Learning of standard IX students.
2) To study the relationship between Collaborative Learning and Scholastic Achievement.

4. Hypotheses

1) There is no significant difference in the Overall Collaborative Learning and in its dimensions based on
   a) Gender
   b) Management of School
   c) Syllabus
   d) Medium of Instruction
   e) Father’s Education
   f) Mother’s Education
2) There is no significant difference in the Overall Scholastic Achievement of students belonging to different groups based on
   a) Gender
   b) Management of School
   c) Syllabus
   d) Medium of Instruction
   e) Father’s Education
   f) Mother’s Education
3) There is no significant relationship between students’ Collaborative Learning and Scholastic Achievement..

5. Method of Study

In the present study, Survey Method is adopted. The study focused on the data collected through Rating Scales.

6. Tools used in this Study

Tool-1 measures Collaborative Learning used five point scale

Tool-2 measures Scholastic Achievement i.e., marks obtained in the exams were collected from the students mark register as a part of personal data collection. The scores are converted into percentage and analyzed for the study.
7. Sampling size and Sampling Technique

In the present study, the population selections were standard IX students of Kanchipuram educational district. The data were collected 205 boys and 195 girls studying in various management.

8. Limitations of the Study

Geographically, sample area selected was Kanchipuram district of Tamil Nadu State.
1) Due to time limit, the investigator could not survey all the school-going students of Kanchipuram district.
2) The investigator restricted her research study only to standard IX students

9. Statistical Techniques used for Data Analysis

In the present study, the following statistical techniques were used.
- Descriptive Analysis (Mean, Standard Deviation)
- Differential Analysis (t-values, F-ratios)
- Correlation Analysis (r-values)

10. Findings of the Study

10.1 Findings based on Descriptive and Differential analysis of the data related to Overall Collaborative Learning

1) The Mean and Standard Deviation of Overall Collaborative Learning were 95.74 and 8.12 respectively.
2) The Mean Percentage was the highest for Affective and Social Aspect and the same was the lowest for Cognitive Aspect.
3) The Mean score of Overall Collaborative Learning of Girls and Boys were, more or less same.
4) The Mean score of Overall Collaborative Learning of CBSE students was more than Samacheer CEC students.
5) The Mean score of Overall Collaborative Learning of English medium students was more than Tamil medium students.
6) The Mean score of Overall Collaborative Learning of students’ Father’s educational qualification without a basic Degree was more than students’ Father’s educational qualification with a Degree.
7) The Mean score of Overall Collaborative Learning of students’ Mother’s educational qualification without a basic Degree and students’ Mother’s educational qualification with a Degree were more or less same.
8) The Mean score of Overall Collaborative Learning of Private school students was more than other two school students viz., Government and Government Aided.
9) Boys and Girls did not differ significantly in Overall Collaborative Learning and in its three dimensions viz., Cognitive, Affective and Social Aspect.
10) The CBSE group students and the Samacheer CEC group students did not differ significantly in Overall Collaborative Learning but they differed significantly in one of its three dimensions i.e., Affective Aspect.

11) The Tamil medium students and the English medium students did not differ significantly in Overall Collaborative learning. However they differed significantly in its three dimensions.
12) Students’ father’s educational qualification with basic degree and father’s educational qualification without any basic degree differed significantly in the Overall Collaborative Learning where students’ Father’s educational qualification without any degree are better than students’ Father’s educational qualification with a degree. However, they did not differ in any of its three dimensions.
13) Students’ Mother’s educational qualification with basic degree and Mother’s educational qualification without any basic degree did not differ significantly in the Overall Collaborative Learning and in its three dimensions.
14) The students of following Management Schools namely Government, Government Aided and Private differed significantly in Overall Collaborative Learning where Private school students are better than other two management schools also differed significantly in its two of three dimensions.

10.2 Findings based on Descriptive and Differential analysis of the data related to Overall Scholastic Achievement

1) The Mean and Standard Deviation of Overall Scholastic Achievement were 68.15 and 10.46 respectively.
2) The Mean Percentage was 56.79%
3) The Mean score of Overall Scholastic Achievement of Girls was higher than Boys.
4) The Mean score of Overall Scholastic Achievement of CBSE group students was higher than Samacheer CEC students.
5) The Mean score of Overall Scholastic Achievement of English medium students was higher than Tamil medium students.
6) The Mean score of Overall Scholastic Achievement of students’ Father’s educational qualification with a basic Degree was more than students’ Father’s educational qualification without any Degree.
7) The Mean score of Overall Scholastic Achievement of students’ Mother’s educational qualification without a basic Degree was more than students’ Mother’s educational qualification with a Degree.
8) The Mean score of Overall Scholastic Achievement of Government Aided school students was less than other two management schools viz., Government and Private.
9) Boys and Girls differed significantly in Overall Scholastic Achievement where girls are better than boys.
10) The CBSE group students and the Samacheer CEC group students differed significantly in Overall Scholastic Achievement where CBSE students are better than Samacheer CEC students.
11) The Tamil medium students and the English medium students differed significantly in Overall Scholastic Achievement where English medium students are better than Tamil medium students.
12) Students’ Father’s educational qualification with basic degree and Father’s educational qualification without
any basic degree did not differ significantly in the Overall Scholastic Achievement.

13) Students’ Mother’s educational qualification with basic degree and Mother’s educational qualification without any basic degree did not differ significantly in the Overall Scholastic Achievement.

14) The students of following Management Schools namely Government, Government Aided and Private differed significantly in Overall Scholastic Achievement

10.3 Findings based on Correlation Analysis of the data related to Overall Collaborative Learning

It is found that the correlation between the dimensions of Collaborative Learning was significant and also seen that the three inter correlation were positive.

10.4 Findings based on Correlation Analysis of the data related to Overall Scholastic Achievement

It is found that the positive correlation between the Overall Collaborative Learning and Overall Scholastic Achievement was negligible.

11. Conclusion

It may be concluded that on the basis of findings, the students have had better Affective and Social aspect in Collaborative Learning. Gender, Syllabus, Medium of Instruction, Father’s Education, Mother’s Education and Management of School brought slight differences in Collaborative Learning and Scholastic Achievement. Students’ Father’s Educational Qualification without any basic degree also studying in Private School Management have had better Collaborative Learning that too in Affective and Social Aspects whereas Girl students studying in CBSE (English Medium) had significant influence in bringing better Scholastic Achievement. Also it is found that no effective Collaborative Learning involved in bringing better Scholastic Achievement in Kanchipuram educational district.

References


Author Profile

Gayatri G (MCA, MBA., MA (Yoga), MD (Acu), Dip (Montessori), Dip (Play School Management), Dip (Infant and Toddler Management), BEEd., Pursuing MEd) “The author is a proficient teacher, poised with strong educational skills with greater understanding on teaching and passion towards learning. Crafted with deep sense of urge towards creating a variance in teaching methodology and education in accordance with current social need. An admirable Parent-Student counsellor with proven successful and amicable solutions. The author in simple terms believes, Learning can happen - from Anyone, Anytime, Anyway.

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