Analysis of Learning Achievement of Students At Middle School Stage

Pooja Podmaja Priyadarshini¹, Dr. Ajay Kumar Swain²

¹Research Scholar
²OES-I (CB), Assistant Professor in Teacher Education, NKC CTE, Angul

Abstract
This study was conducted to analyze the learning achievement of middle school students in mother tongue (Odia) and social science (History, Political Science, Geography and Economics). Here, two objectives were taken as: (i) To study the status of learning achievement in mother tongue (Odia) of class VII learners and (ii) To study the status of earning Achievement in social science (History, Political Science, Geography and Economics) of class VII learners. The study revealed that the academic achievement mean score of the students of class viii in language Odia and Social Science differ significantly. It was ascertained that there exist no significant difference between the academic achievement of boys and girls in language Odia and Social Science at class viii in relation to baseline study and end line study. The study also revealed that the mean score of boys were found to be more than that of the girls in relation to baseline and end line study.

Keywords: Analysis, Achievement, Middle School

Introduction:
Achievement covers learning within curricular and co-curricular areas. It includes achievement in the life of the school and outside the school. Family, school and environment influence learning achievement in the Social Science and Language (Odia). National Achievement Survey (NAS) 2017 reported that, overall achievement of students in Social Science and Language (Odia) in class VIII in Odisha is trailing behind the National average. The said survey observed that students from groups, comprising Scheduled Castes, Scheduled Tribes and General categories score significantly lower in Social Science and Language (Odia) than students at National level. Sun. J.C. Y and Wu, Y.T. (2016) the interaction in the flipped classroom had a positive effect on students’ learning achievement. This model allows for adequate teacher-student interaction. Teachers can provide guidance and assistance to students frequently. Further, it is found from the regression analysis that locality of schools and social category contributes significantly to learning achievement in social science & mother tongue. Here are some related studies which have been studied by the researchers to conduct the present study. Azhar, F (2015) the study revealed that higher knowledge on alternative assessment and components of testing, the lecturers were encouraged to vary their types of assessment, increase the frequency of the implementation of testing components, and elaborate the factors of supplementary assessment. Dash M & Nanda, G.C. (2021). The study revealed that locality of schools influences learning achievement in science significantly along with social category. The data revealed that (i) rural students perform better than their urban counterpart does. (ii) General students demonstrate better learning achievement with a
mean score of 31.12 as compared with SEBC, SC and ST students with mean scores of learning achievements 30.12, 18.09 and 11.87 respectively. Sreekanth, Y (2016) Students Educational Achievement at School Level: An Analysis across Social Categories, NCERT. The study reveals that higher socio-economic status has a positive influence on students mean achievement and the performance of SC and ST students is lower than that of OBC and General category students in general across the cycles. Dev, Meenu (2016) Factors Affecting the Academic Achievement: A Study of Elementary School Students of NCR Delhi, India, Journal of Education and Practice, Vol. 7, No. 4. The study reveals that General Mental Ability, home environment, interest and academic achievement are significantly and positively correlated. Whereas the high score of girls indicates that they are superior to boys. Azim Premji Foundation (2004), Status of Learning Achievements in India . The study reveals that performance of learners not only depends upon school inputs but also influenced by many other socio-economic contextual factors. Saroh, T (2015) A Study on Academic Achievement of Elementary School Students in East Siang District of Arunachal Pradesh, International Journal of Humanities & Social Science Studies (IJHSSS), Vol. II, Issue: III. The study reveals that the students’ poor academic achievements in different subjects in the selected district of Arunachal Pradesh. The findings also revealed the very low academic achievement of both male and female students in mathematics subject respectively. Sarmah, D & Borah, J (2019). A study on the Academic Achievement of 8th Grade Students in English Language at Likabali Circle of Lower Siang District of Arunachal Pradesh. Vol. 7, Issue 3. The study reveals that performance of 8th grade students of Likabali Circle of Lower Siang District of Arunachal Pradesh in English language is poor. The average performance of the students is below 50% in English language.

Rational of the Study:
The cited studies reveal that analysis of result helps for improving the learning achievement of the learners. After reopening of schools, a base line test was conducted to know the position of learners in the subject like, Mother tongue (Odia), and Social Science. The result of base line test in the subjects in Chilika block was analyzed to know the status of the block. But it is noticed that performance of students in class VII of Chilika block in the subject like Social Science and Language (Odia) is poor in comparison to the students of all other blocks in Khordha district. Hence, it is decided to conduct the study entitled as “Analysis of Learning Achievement of Students at Middle School Stage”

Operational Definition:
- **Analysis:** Careful examination of different parts of or details of something. The result or learning achievement of learners was examined in different areas related to their strength & weakness.
- **Learning Achievement:** Learning achievement can be meant the result achieved by students in learning process. In this study, the learning achievement refers to the students’ achievement in the subjects like Social Science and Language (Odia).

Research Question:
- What is the status of Learning Achievement of students of class VII?

Objectives of the Study:
- To study the status of Learning Achievement in mother tongue (Odia) of class VII learners.
• To study the status of Learning Achievement in social science (History, Political Science, Geography and Economics) of class VII learners.

Hypotheses:
• There is no significant difference between boys and girls in their achievement in language Odia in the base line study.
• There is no significant difference between boys and girls in their achievement in Social Science in the base line study.
• There is no significant difference between boys and girls in their achievement in language Odia in the end line (after 6 months) study.
• There is no significant difference between boys and girls in their achievement in Social Science in the end line (after 6 months) study.
• There is no significant difference between the result of baseline study and the result of end line (after 6 months) study in language Odia.
• There is no significant difference between the result of baseline study and the result of end line (after 6 months) study in Social Science.

Delimitation:
• The present study was delimited to the govt. schools having class vii of Chilika block in Khordha district.
• The present study was delimited to the Learning Achievement of two subjects like Social Science (History, Political Science, Geography and Economics) and Language (Odia).

Methodology:
The survey method was followed to conduct the present study.

a) Population: All the students studying in class VII of government schools in Chilika block is the population of the present study.

b) Sample: 60 nos. of students of class VII of 06 nos. of government schools of Chilika block were selected randomly as sample of the study.

c) Tools:
• Achievement tests based on the Learning Outcomes in the subjects of Social Science ((History, Political Science, Geography and Economics) and Language (Odia) of class VII was developed and used.
• Base line result of Social Science (History, Political Science, Geography and Economics) and Language (Odia) of sample was collected and recorded for analysis purposes.

Procedure of Data Collection:
The base line result in the subjects Social Science (History, Political Science, Geography and Economics) and Language (Odia) of sample was collected from govt. schools. Achievement tests based on the Learning Outcomes in the subjects of Social Science (History, Political Science, Geography and Economics) and Language (Odia) of class VII was administered on the sample with due permission from BEO, Chilika.
Data Analysis and Interpretation:
After collection of relevant data from base line test and administering achievement test in the subjects of Social Science and Language (Odia) of class VII, quantitative analysis was done to find out the result.

**Table: 01** Difference between boys and girls in their achievement in Language Odia

<table>
<thead>
<tr>
<th>Sl. No</th>
<th>Groups</th>
<th>N</th>
<th>Mean</th>
<th>S. D</th>
<th>‘t’ Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>01</td>
<td>Boys</td>
<td>30</td>
<td>9.3</td>
<td>4.51</td>
<td>0.596</td>
</tr>
<tr>
<td>02</td>
<td>Girls</td>
<td>30</td>
<td>10</td>
<td>4.58</td>
<td></td>
</tr>
</tbody>
</table>

* Not significant at 0.01 and 0.05 levels.

The table no. 01 shows that the obtained ‘t’ value is 0.596 which does not exceed from the value 1.96 at 0.05 level and 2.58 at 0.01 level. So, it is inferred that, there is no significant difference between boys and girls in their achievement in language Odia in respect of base line study. Hence, the hypothesis “There is no significant difference between boys and girls in their achievement in language Odia in the base line study” is retained.

**Table: 02** Difference between boys and girls in their achievement in Social Science

<table>
<thead>
<tr>
<th>Sl. No</th>
<th>Groups</th>
<th>N</th>
<th>Mean</th>
<th>S. D</th>
<th>‘t’ Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>01</td>
<td>Boys</td>
<td>30</td>
<td>8.9</td>
<td>5.565</td>
<td>0.599</td>
</tr>
<tr>
<td>02</td>
<td>Girls</td>
<td>30</td>
<td>8.166</td>
<td>3.755</td>
<td></td>
</tr>
</tbody>
</table>

* Not significant at 0.01 and 0.05 levels.

The table no. 2 shows that the obtained ‘t’ value is 0.599 which does not exceed from the value 1.96 at 0.05 level and 2.58 at 0.01 level. So it is inferred that, there is no significant difference between boys and girls in their achievement in Social Science in respect of base line study. Hence, the hypothesis “There is no significant difference between boys and girls in their achievement in Social Science in the base line study” is retained.

**Table: 03** Difference between boys and girls in their achievement in Language Odia

<table>
<thead>
<tr>
<th>Sl. No</th>
<th>Groups</th>
<th>N</th>
<th>Mean</th>
<th>S. D</th>
<th>‘t’ Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>01</td>
<td>Boys</td>
<td>30</td>
<td>12.5</td>
<td>1.5</td>
<td>0.251</td>
</tr>
<tr>
<td>02</td>
<td>Girls</td>
<td>30</td>
<td>12.667</td>
<td>1.24</td>
<td></td>
</tr>
</tbody>
</table>

* Not significant at 0.01 and 0.05 levels.

The table no. 3 shows that the obtained ‘t’ value is 0.251 which does not exceed from the value 1.96 at 0.05 level and 2.58 at 0.01 level. So, it is inferred that, there is no significant difference between boys and girls in their achievement in language Odia in respect of end line study. Hence, the hypothesis “There is no significant difference between boys and girls in their achievement in language Odia in the end line (after 6 months) study” is retained.

**Table: 04** Difference between boys and girls in their achievement in Social Science

<table>
<thead>
<tr>
<th>Sl. No</th>
<th>Groups</th>
<th>N</th>
<th>Mean</th>
<th>S. D</th>
<th>‘t’ Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>01</td>
<td>Boys</td>
<td>30</td>
<td>11.336</td>
<td>2.975</td>
<td>0.75</td>
</tr>
<tr>
<td>02</td>
<td>Girls</td>
<td>30</td>
<td>11.834</td>
<td>2.105</td>
<td></td>
</tr>
</tbody>
</table>

* Not significant at 0.01 and 0.05 levels.
The table no. 04 shows that the obtained ‘t’ value is 0.75 which does not exceed from the value 1.96 at 0.05 level and 2.58 at 0.01 level. So, it is inferred that, there is no significant difference between boys and girls in their achievement in Social Science in respect of end line study. Hence, the hypothesis “There is no significant difference between boys and girls in their achievement in Social Science in the end line (after 6 months) study” is retained.

Table: 05 Result of Baseline Study and End line Study in Odia

<table>
<thead>
<tr>
<th>Sl. No</th>
<th>Result</th>
<th>N</th>
<th>Mean</th>
<th>S. D</th>
<th>‘t’ Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>01</td>
<td>Baseline</td>
<td>60</td>
<td>10</td>
<td>4.58</td>
<td>4.194</td>
</tr>
<tr>
<td>02</td>
<td>End line</td>
<td>60</td>
<td>12.584</td>
<td>1.375</td>
<td></td>
</tr>
</tbody>
</table>

* Significant at 0.01 and 0.05 levels.

The table no. 05 reveals that the obtained ‘t’ value is 4.194 which exceed from the value 1.96 at 0.05 level and 2.58 at 0.01 level. So, it is inferred that, there is significant difference between baseline and end line results in their achievement in language Odia. Hence, the hypothesis “There is no significant difference between the result of baseline study and the result of end line (after 6 months) study in language Odia” is rejected.

Table: 06 Result of Baseline Study and End line Study in Social Science

<table>
<thead>
<tr>
<th>Sl. No</th>
<th>Result</th>
<th>N</th>
<th>Mean</th>
<th>S. D</th>
<th>‘t’ Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>01</td>
<td>Baseline</td>
<td>60</td>
<td>9.083</td>
<td>5.07</td>
<td>3.416</td>
</tr>
<tr>
<td>02</td>
<td>End line</td>
<td>60</td>
<td>11.584</td>
<td>2.59</td>
<td></td>
</tr>
</tbody>
</table>

* Significant at 0.01 and 0.05 levels.

The table no. 06 reveals that the obtained ‘t’ value is 3.416 which exceed from the value 1.96 at 0.05 level and 2.58 at 0.01 level. So, it is inferred that, there is significant difference between baseline and end line results in their achievement in Social Science. Hence, the hypothesis “There is no significant difference between the result of baseline study and the result of end line (after 6 months) study in Social Science” is rejected.

Findings of the Study:
The findings of the study are stated below.
1. Boys and Girls are not different in their achievement in language Odia in the base line study as p < 0.05 & 0.01.
2. Boys and Girls are not different in their achievement in Social Science in the base line study as p < 0.05 & 0.01.
3. Boys and Girls are not different in their achievement in language Odia in the end line (after 6 months) study as p < 0.05 & 0.01.
4. Boys and Girls are not different in their achievement in Social Science in the end line (after 6 months) study as p < 0.05 & 0.01.
5. Result of baseline study and the result of end line (after 6 months) study in language Odia differ significantly as P> 0.05 and 0.01.
6. Result of baseline study and the result of end line (after 6 months) study in Social Science differ significantly as P> 0.05 and 0.01.
7. Achievement of Girls in respect of the result of baseline study and the result of end line (after 6
months) study in Social Science differ significantly as P> 0.05 and 0.01.

**Conclusion:**
Present study revealed that the academic achievement mean score of the students of class vii in language Odia and Social Science differ significantly. It was ascertained that there exist no significant difference between the academic achievement of boys and girls in language Odia and Social Science at class viii in relation to baseline study and end line study. The study also revealed that the mean score of boys were found to be more than that of the girls in relation to baseline and end line study. The in-service training programmes, workshops of teachers & CRCCs, various exposure and academic support facilitate the teachers for transaction of learning materials in language Odia and Social Science in an effective manner which reflected in the end line test.

**References:**