CONCEPT FORMATION OF LEARNING DISABLED SECONDARY STUDENTS

Dr. Raj Kumar Nayak
Associate Professor
P.G.Department of Education
Fakir Mohan University,Vyasa Vihar, Balasore
Former Professor,BMCEChoudharyRanbirSingh University,Zind Haryana
Visiting Expert N.C.T.E. (NRC) Inspection Team,
Life Time Member of AIAER ,The Global community, IATE
Editor of “Global Evolution Bi-Annual" (Management& Teacher Education) Research Journal
Editor Of “Pahal Horizon” Bi Annual Journal, ISSN :2456-4842, International Research Journal

Laxmidhar Dey
Ph.D Research Scholar
North Orissa University, Baripada

ABSTRACT

Study of concept formation of learning disabled secondary students is the “Title” of the study. To study the Levels and differences in the concept formation of learning disabled students and normal students are the objectives of the study. The sample of the study consists of 2000 (two thousand) secondary school students. Out of which 1752 are normal students and 248 are Learning disabled students. Check list for identifying learning disabled students, Social Economic Test (.S.E.S. Test), Mental Ability Test were used as Tools of collection of data . (1) 9.13%, 52.51%, 38.36% Normal students and 4.84%, 52.42% and 42.74% learning disabled students posses high, average and low concept formation abilities. (2) The normal students posses high concept formation than the learning disabled students. (3) Male & Female learning disabled students posses equal concept formation. (4) High intellectual students posses higher concept formation than the Low Intelligent student. (5) High & Low socio-Economic status learning disabled students posses same concept formation are the finds of the study.
1.0 Introduction:

Education is the reconstruction of expenses of learner. It helps to develop cognitive, affective, psychomotor qualities of the learner. It attempts to promote reasoning thinking understanding power of judgement, memory, perception, attitude interest and motive of the Learner to become a good affective and creative citizen of nation. It promotes valuable qualities of the learners and make them good noble person in the society. Without education man cannot exists as a human being in the society.

Our government have established number of formal agencies of education for the achievement of qualities of the learners. Number of qualities education programme are organized by the institution for achievement of learners government has also implemented number of valuable and quality education programmes to make the learners efficient and effective for the future development of the country.

According to Gandhiji - “Education is man’s fundamental rights irrespective of caste, creed, race, colour, sex and socio-economic status.

Our constitution of India has granted equality of educational opportunities to the children with special needs. Our great thinkers and administrators have suggested certain special educational provision for the exceptional children.

At present inclusive education set up are recommended for the disabled children.

To make them normal in the educational process. Some studies reveal that, Learning disabled children Lag behind than the normal students due to psychological and emotional problems which effects their learning and motivation in the class room.

They do not profit much in the inclusive setup due to their deficiencies in reading, writing, speaking and Mathematical ability.

The present study has been under taken by the investigator on the learning disabled students.

The investigator wants to know their levels of concept formation.
1.1 Meaning of concept formation:

Concept are formed to be process of categorization. Constantly engaged in grouping in similar stimuli are that requesting a formulation of concept. It is a abstraction represented by the word or other symbol that refers to group of object qualities, action etc. possing certain common characteristics.

A concept is therefore defined as mentally representation of object having common characterization. It refers to class category of all members of which share a particular combination which attributes and critical properties not shared by other class.

This concept formation test developed by Dr. N. Joshi used meant for concept formation of student. Students are asked to select the odd concept with justification of concept formation test which can be defined as this scores obtained by the concept formation test administered over them.

1.2 Objectives of the Study:

The present study is based on the following objectives:

1. To study the levels of concept formation of normal & learning disabled students.
2. To study the concept formation of normal & hearing disabled students.
3. To study the concept formation of learning disabled students with reference to their Sex, IQ and Socio-economic status.

1.3 HYPOTHESES:

The following studies are based on this hypothesis.

1. All the normal & learning disabled children do not belong to different levels of concept formation.
2. There is no significant difference in the Mean concept formation test scores of normal & learning disabled students.
2.1 There is no significant difference in the Mean Concept formation test scores of normal & learning disabled students.

2.2 There is no significant difference in the Mean Concept formation test scores between high & low intelligent learning disabled students.

2.3 There is no significant difference in the mean concept formation test scores of high scores & low socio-economic status learning disabled students.

1.4 SAMPLE:

My using purposive sampling method, the sample of students, was selected. Out of 856 pupils from 13 Govt. high school and 954 pupils from 17 Aided high school of Balasore district. Sample of 2000 pupils of standard IX were selected for the study.

1.5 TOOLS USED FOR THE STUDY

- Check list for identifying the L.D. students.
- S.E.S Test
- Mental Ability Test
- Concept formation Test

ANALYSIS AND INTERPRETATION:

STUDY OF LEVEL OF CONCEPT FORMATION OF NORMAL AND LEARNING DISABLED STUDENTS.

The first objective is to study the levels of concept formation of normal and learning disabled students. The hypothesis states that all the normal and learning disabled students do not belong to different levels of concept
formation. Keeping this hypothesis in mind, the concept formation standard scores were analyzed with the help of percentage. The result are given in the table 4.1

**TABLE No-4.1.0**

**ANALYSIS OF CONCEPT FORMATION OF NORMAL AND LEARNING DISABLED STUDENTS IN PERCENTAGE.**

<table>
<thead>
<tr>
<th>Levels of concept formation among normal students</th>
<th>Levels of concept formation among learning disabled students</th>
</tr>
</thead>
<tbody>
<tr>
<td>Levels</td>
<td>Range of Standard scores</td>
</tr>
<tr>
<td>High concept formation</td>
<td>58 to 79</td>
</tr>
<tr>
<td>Average concept formation</td>
<td>45 to 57</td>
</tr>
<tr>
<td>Low concept formation</td>
<td>20 to 44</td>
</tr>
</tbody>
</table>

From the table 4.1.0 it is observed that there are 1752 normal students. 160 normal students have secured high concept formation standard scores in between 58 to 79. In other words 9.13% students belong to high levels of concept formation. 920 normal students have secured average levels of concept formation standard scores in between range 45 to 57. In other words 52.51% students belong to average level concept formation. 672 normal students have secured lower levels of concept formation standard scores in between range 20 to 44. In other words 38.36% students belong to lower levels of concept formation.

Again it is found that there are 248 Learning Disabled. 12 learning disabled students have secured high concept formation standard scores in between range 57 to 79. In other words 4.84% students belong to high levels of concept formation. 130 learning disabled student have secured average levels of concept formation standard scores in between range 42 to 56. In other words 52.42% learning disabled students belong to average levels of concept formation. 106 learning disabled students have secured lower concept formation standard scores in between range 10 to 41. In other words 42.74% learning disabled students belong to lower levels of concept formation.
So the null hypothesis “All the normal & learning disabled students do not belong to different levels of concept formation” is not rejected. It means 9.13%, 58.5%, 38.36% normal students belong to High average and low levels of Concept formation, and 4.84%, 52.42% and 42.74% learning disabled students belong to High, Average & Low Levels Concept formation respectively.

**FIGURE No. – 4.1.0**

PIA-DIAGRAM INDICATES THE LEVELS OF CONCEPT FORMATION OF NORMAL & LEARNING DISABLED STUDENTS

**DISCUSSION:**

The result of this objectives indicates that, the normal & learning disabled students belong to different categories of concept formation.

A concept is a mental image from the generalization of a particular group of things, which have common characteristics which is called a concept. All concept, are Nouns. All Nouns are naming words. All naming words
are noun like, Table, chair, books, Glass, Trains etc. animals, Tigers, Group of things which have common characteristics is called concept. Every concept posses high elements like names, Examples, attributes, attributes value and definitions.

In the present concept formation Test, some items have been included. Each items is followed by high concept. For concepts are similar in one way. Other concepts is totally different in forms. So concept formation refers to the differentiation from positive concept to Negative Concept. Positive Concept refers what the concept is – and Negative concept refers to what the concept is not.

The first objectives the normal and learning disabled students belong to different categories of concept formation. All the student do not belong to some categories of concept formation because learning is based on learning and achievement is based on the principle of individual difference. All students comes under the principle of individual difference in the process of learning. Learning is generally based on intelligent. It has been observed that, higher the intelligent higher the achievement. So intelligent is an important factors which effects learning. When there is an difference in intelligent form are learner to another learner. There is a process concept development from one learner to another learner like intelligent. From the characteristics of Normal probability curve, it is come under high & low achievement and maximum learner come under low achievement, like wise few learner developed high & low concept formation and maximum learner come under average concept formation. Which follow the principles of Normal probability curve.

4.2.0 - STUDY OF CONCEPT FORMATION OF NORMAL AND LEARNING DISABLED STUDENTS.

The second objective is to study the concept Formation of normal and learning disabled students. The hypothesis states that, there no significant difference in the Mean concept formation Test scores of normal and learning disabled students Keeping this hypothesis in mind the data were analysed with the help of ‘t’ test. The results are given in the following table no.- 4.2.0

TABLE No.-4.2.0
‘t’ test on Mean Concept Formation Test Scores of Normal and Learning disabled students.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>t-ratio</th>
<th>Levels of significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Concept Formation</td>
<td>Normal Children</td>
<td>1752</td>
<td>64.13</td>
<td>13.12</td>
<td>10.36</td>
<td>.01</td>
</tr>
<tr>
<td></td>
<td>Learning Disabled</td>
<td>248</td>
<td>56.15</td>
<td>11.15</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

It is revealed from the Table-4.2.0 that the mean scores of normal and learning disabled students on concept formation test are 64.13 and 56.15 with SD’s 13.12 and 11.15 respectively and t-ratio comes out from above two groups is 10.36, which is significant at .01 level. That means there is significant difference between normal and learning disabled children on concept formation test scores. Further, it is stated that the concept formation test scores of normal children is better than that of the learning disabled children. Thus the null hypothesis-2 “there is no significant difference between normal and learning disabled children on concept formation” is rejected.

The mean concept Formation Scores of normal and learning disabled children’s are presented in Fig. – 4.2.0

**FIGURE No- 4.2.0**
DISCUSSION:

Concept formation Test has been administer over the normal & learning disabled students. The results of second objectives status that, concept formation of normal student is more higher than that of the learning disabled students. The cause may be that, normal students have better understanding on the concept.

A group of things which have common characteristics is called concept – like table, chair, fruits animals etc. Concept learning & formation implies the separation of positive concept to Negative concept. Positive concept implies what the concept –is and Negative concept implies what the concept -is not. Concept learning implies understanding on the concept about the five elements, like man, examples, attributes values and definitions.

The normal students posses normal mental characteristics like good reasoning, thinking, problem solving abilities, attitudes, interests on learning. Whereas learning disabled students face difficulties in reading, writing, speaking & arithmetic’s.

The normal student do not face Emotional problems and they perform satisfactorily in academic subjects. Whereas learning disabled student encounter emotional & psychological problems, which effects their learning & achievement. So the normal students posses high concept formation than the learning disabled students.

4.3.0 STUDY OF DIFFERENCE IN THE CONCEPT FORMATION OF LEARNING DISABLED STUDENTS WITH REFERENCE TO THEIR SEX, SOCIO- ECONOMIC STATUS AND I.Q
This objective contains three sub-objectives. The sub-objectives are given below-

4.3.1- STUDY OF DIFFERENCE IN THE CONCEPT FORMATION OF MALE AND FEMALE LEARNING DISABLED STUDENTS.

The hypothesis states that there is no significant difference in the Mean concept formation test scores between male and female learning disabled students.

Keeping this hypothesis in mind, the datas were analyzed with the help of ‘t’ test. The results are given in the following table no.- 4.3.1

<table>
<thead>
<tr>
<th>Variable</th>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>SEM</th>
<th>t-ratio</th>
<th>Level of significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Concept Formation</td>
<td>Male</td>
<td>120</td>
<td>55.96</td>
<td>11.18</td>
<td>1.42</td>
<td>0.13</td>
<td>N.S</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>128</td>
<td>56.14</td>
<td>11.30</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

It is revealed from the Table-4.3.1 that the mean scores of male and female learning disabled students on concept formation are 55.96 and 56.14 with SD’s 11.18 and 11.30 respectively. The “t”-ratio comes out from above two groups is 0.13, which is not significant at any level.

It indicates that mean scores of male and female students on concept formation test do not differ significantly from each other. So the null hypothesis, there is no significant difference in the Mean Concept formation test scores of secondary school students is not rejected. It means the Concept formation test scores male and females are similar.

FIGURE No - 4.3.1
DISCUSSION:

Study of concept formation of male & female learning disabled students is first sub-objectives of third objectives.

The result indicates that, there is no significant difference in the concept formation of male & female learning disabled students.
Concept formation implies understanding the concept of student of give elements like name, attribute examples, attributes value & definition.

It is the separation of positive concept to negative concept by the earners. The process by which we distinguish positive concept to negative concept is concept formation. Positive concept formation implies what the concept is and negative concept implies what the concept is not.

The above results implies that, both the learning disabled male & female students possess same concept formation abilities. Both have some understanding on the concept.

4.3.2 STUDY OF DIFFERENCE IN THE CONCEPT FORMATION OF HIGH AND LOW INTELLIGENT LEARNING DISABLED STUDENTS.

The hypothesis states that, there is no significant difference in the Mean concept formation test scores of high and low intelligent learning disabled students.

Keeping this hypothesis in mind, the data were analyzed with the help of ‘t’ test. The results are given in the following table no - 4.3.2

<table>
<thead>
<tr>
<th>Variable</th>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>SEM</th>
<th>t-ratio</th>
<th>Levels of significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Concept Formation</td>
<td>High IQ</td>
<td>56</td>
<td>66.14</td>
<td>13.56</td>
<td>2.76</td>
<td>3.51</td>
<td>.01</td>
</tr>
<tr>
<td></td>
<td>Low IQ</td>
<td>34</td>
<td>56.46</td>
<td>12.12</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

It is revealed from the Table-4.3.2 that the mean scores of high and low intelligent of learning disabled students on concept formation are 66.14 and 56.46 with SDs 13.56 and 12.12 respectively and t-ratio comes out from above two groups is 3.51, which is significant at .01 level. It means there is significant difference between high and low intelligent learning disabled children. Further, It is states that the mean concept formation test score of high intelligent learning disabled students is better than that of low intelligent learning disabled students. Thus
the null hypothesis ‘that there is no significant difference in the mean concept formation test score between high and low intelligent learning disabled students is rejected.

The mean scores of high and low intelligent learning disabled children presented in Table 4.3.2

**FIGURE No. -4.3.2**

![Bar chart showing mean concept formation scores for high and low IQ groups.]

**DISCUSSION:**

The reason is that, intelligent is a global capacity of the student, to think rationally, to do effectively & purposefully in a situation and high intelligent students performs more than the low intelligent students. It is the capacity to understand and grasp ideas and apply to different situations. The high intelligent student achieves more than the low intelligent student due to their high thinking & reasoning.

The development of concept depends upon the higher intelligence of learners. So the high intelligent learning disabled students develops more concepts than the low intelligent learning disabled students.
4.3.3- STUDY OF DIFFERENCE IN THE CONCEPT FORMATION OF HIGH AND LOW SOCIO-ECONOMIC STATUS LEARNING DISABLED STUDENTS.

The hypothesis states that, there is no significant difference in the Mean concept formation test scores of high and low socio-economic status learning disabled students.

Keeping this hypothesis in mind, the data were analyzed with the help of ‘t’ test. The results are given in the table no 4.3.3

<table>
<thead>
<tr>
<th>Variable</th>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>SEM</th>
<th>t-ratio</th>
<th>Level of significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Concept</td>
<td>High SES</td>
<td>63</td>
<td>62.86</td>
<td>12.40</td>
<td>2.09</td>
<td>0.18</td>
<td>N.S</td>
</tr>
<tr>
<td>Formation</td>
<td>Low SES</td>
<td>78</td>
<td>62.48</td>
<td>12.32</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

It is revealed from the Table-4.3.3 that the mean scores of high and low socio-economic status learning disabled students on concept formation are 62.86 and 62.48 with SD’s 12.40 and 12.32 respectively. The t-ratio comes out from above two groups is 0.18, which is not significant at level of significance. That means it indicates that mean scores of high and low socio-economic status of learning disabled students on concept Formation do not differ significantly from each other. So the null hypothesis there is no significant difference in the mean concept Formation Test scores of high and low socio-economic status learning disabled students is not rejected. It means the concept formation test scores of high and low socio-economic status learning disabled students are similar.

The mean scores of high and low socio-economic status of learning disabled students on concept formation learning disabled children presented in fig-4.3.3.
DISCUSSION:

The results states that, concept formation of high socio-economical status and low socio-economical status learning disabled students do not differ significantly. The cause may be that, both the high socio-economical status and low socio-economical status learning disabled students develop equal concept formation in learning. Learning & achievement of students is based on concept formation.

Concept formation refers to the understanding the learner. On the whole concept means the elements of concept like stating names, giving examples, telling attributes, attributes values and giving definitions and generalization.
So both these high socio economic status and low socio-economic status students are able to state equally the same elements on a concepts.

So there is no difference concept formation of high & low learning disabled students.

SUGGESTION:

1. The study was conducted on IXth standard students. Similar studies may be carried out in other classes as well.

2. The study was confined to Balasore district, Odisha. Similar study may be conducted in other district and states.

3. The study may be extended to other sub-samples based on local and socio-economic status.

4. The influence of management private school on learning disability of children can be explored.

5. The present study was focused on Learning Disabled Students. It may be extended to other categories of exceptional children such as intellectually, emotionally, physically & socially exceptional.

6. Role of the parents in the remediation of learning disability can be studied.

7. The same study may be conducted on a large sample in the future.

5.9.0 RECOMMENDATIONS:

The study recommends:
1. As the study found that learning disabled students have certain shortcomings in their concept formation. Social maturity and self-concept, which hamper their achievement in learning, these could be remedied through proper and timely intervention.

2. Curriculum planners and teachers should give due importance to learning disability and appropriate instructional strategies must be developed and practiced to enhance the concept formation, social maturity and self-concept of learning disabled students.

3. Identification of learning disability at an early stage is inevitable since remediation may be more effective during early years.

4. The authorities should enact specific laws to include the identification of learning disability of students and special services to learning disabled students as a compulsory and routine affair in the school programme.

5. The authorities should ensure that, there must be at least one full-time teacher in every school who is a specially trained professional with experience in using remedial methods in the areas of reading, writing, speaking and mathematics.

6. Appropriate steps are to be taken to improve the self concept, concept formation and social maturity of learning disabled students.

7. Novel strategies are to be planned and implemented for learning disabled students to create a favourable attitude towards school, teacher’s curricular and co-curricular activities.

8. To uplift the ability of concept formation, self concept, social maturity of learning disabled teaching learning methods are to be practiced.

9. The factors leading to the difference between high and low intelligent learning disabled students in concept formation, social maturity and self-concept, efficiency is to be analyzed.

EDUCATIONAL IMPLICATION:

Study of maximum problems can be solved by following person:

1. **Teacher**:

   Teacher plays a very important role for facilitating the learning cognitive development. Behaviour, comprehension, concentration and interaction and language have different study behavior which contributory the factor for development of proper guidance and study habit.
2. Parents:

Personality of the child depends upon the development and personality of parents. The socio economic status of Maximum parents both rural and urban area is very low-which quite unable to provide adequate support to their children for effective learning experience. The parent should be very much careful. Fulfil with their development despite of socio-economic condition for the study habit of better scholastic achievement of learning disable problem at home parent & children both interact with their children in the respect of learning difficulties.

3. Curriculum designer:

While designing the curriculum, the curriculum designer should take almost care for the development of study habit of the learner by abolishing the learning disability.

The various techniques of teaching learning elements such as attention interest and should be reflected while designing the curriculum. It should be need based and flexible keeping the interest of the learner.

Text Book Writer:

The learning aspect for the text book written should be given more emphasize. The learner of socio economic status principle enable to comprehend the learning concept, terms fact and learning principle.

Administrator / Headmaster

Teaching learning process should be insure the cognical school climate for the learner. It helps into reduce psychological fear and also facilitable to interact with learner and headmaster to overcome the learning difficulty.

CONCLUSION:

The present study aims to find out the difference between formal & learning disability students in the field of concept formation, social maturity & self-concept.

Based on the finding of the study of the conclusion which are drawn concept formation, social maturity & self concept of boys & girls are similar respect.

Existence of positive relationship between concept formation, social maturity & self concept of the student.

Govt of India takes initiated steps to asses free & compulsory education for all citizen.

Many of our students are not able to enjoy this opportunities. Such scenario government should take clear & transparent policy to help the student of learning disable student and teacher. Which make them obliged to make sure that, this policy are well planned and implemented.
REFERENCES:


