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A STUDY OF FORMAL THINKING ABILITY OF HIGHER SECONDARY SCHOOL STUDENTS IN SCIENCE

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Introduction:

The present study was indented to find out the formal thinking ability and also find out the Formal Thinking Ability of sub samples like gender, locality, Type of schools and educational qualification of parents.

Statement of the Problem:

The present study is an attempt to find out the formal thinking ability of higher secondary school students in science and the effect of factors like gender, locality of school, Type of schools and educational qualification of parents on formal thinking ability in science. The study entitled is "A study of formal thinking ability of higher secondary school students in science".

Objectives of the Study:

The following are the objectives of the study.

- To find out the formal thinking ability of higher secondary students in science, with sub-samples.
- To find out whether there is any significant difference between male and female higher secondary students in their formal thinking ability in science.
- To find out whether there is any significant difference between rural and urban higher secondary students in their formal thinking ability in science.
- To find out whether there is any significant difference between government and private higher secondary students in their formal thinking ability in science.
- To find out whether there is any significant difference in the formal thinking ability of higher secondary students in science whose parents vary in their educational qualification.

Method of the Study:

The present study comes under normative survey method as it deals with the present condition of the students. To collect data, the tool was administered to the Higher Secondary students in Keonjhar Districtin Odisha state.

Sample of the Study:

The selection of a proper sample or sampling is an integral part of the research. The sample consists of 300 higher secondary students from 4 schools in Keonjhar District in Odisha state. The random sampling technique is used in the present study for the sample selection.

Tools Used in the Study:

The tool used for this study is "Formal Thinking Ability Test' prepared by Jayasree P (1985).

Statistical Techniques Used in the Study:

Descriptive analysis, Differential analysis

Major Findings:

The following are the main findings of the present investigation

- The mean value (22.71) has led to the conclusion that the Formal Thinking Ability scores of higher secondary students in science is high.
- The mean scores of Formal Thinking Ability of male and female students were compared and the significance was tested. There is a significant difference between male and female students in their Formal Thinking Ability in science.
- Gender influences on Formal Thinking Ability. Female students have high Formal Thinking Ability than male students in science.
- The mean scores of Formal Thinking Ability of Government and private higher secondary school students were compared and the significance was tested. There is a significant difference between Government and Private higher secondary school students in their Formal Thinking Ability scores in science.
- Type of schools influences on Formal Thinking Ability. Private higher secondary school students have high Formal Thinking Ability than Government higher secondary school students in science.
- The mean scores of Formal Thinking Ability of Rural and Urban students were compared and the significance was tested. There is a significant difference between Rural and urban students in their Formal Thinking Ability scores in science.
- Locality influences on Formal Thinking Ability. Urban students have high Formal Thinking Ability than Rural students.

- The mean scores of Formal Thinking Ability of Educational qualification of parents were compared and the significance was tested. There is a significant difference between Educational qualifications of parents.
- Educational qualification of parents influences Formal Thinking Ability of higher secondary students in science.

Conclusions:

The analysis of the scores of Formal Thinking Ability of 300 pupils resulted in the following conclusions

- The study of Formal Thinking Ability in science of 300 pupils studying in higher secondary is commendably high.
- The descriptive analysis of the scores of Formal Thinking Ability of sub groups revealed that their Formal Thinking Ability is high
- The result of differential analysis led to the conclusion that Gender, Locality and type of the school, Educational Qualification of parents etc. Influence Formal Thinking Ability of higher secondary school students in science.

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