

**Linguistic Competencies As Correlates Of Academic Achievement In
Science And Social Studies Of Secondary School Students**

Rabindra Kumar Mishra

M.A. (Edu. & Eng.), M.Ed., M.Phil.

UGC-NET, PG MCJ, PG DDE

Abstract

Most of the types of learning require Language in each subject; language plays a major role to form concepts. Language covers four skills: Listening, speaking, reading and writing. Language is linked to our thinking, understanding, knowledge, skill etc. It is a learning tool. The present study focuses on finding relationship between linguistic competencies and academic achievement in science and social studies of secondary school students of four districts of Odisha. It highlights the role of Language and its skills. Mastery over linguistic skills can enhance achievement in some other subjects. Mindset of teachers and parents on this regard needs to be changed basing on the research activities on this field.

Introduction: “Language plays a central role in learning. No matter what the subject area, students assimilate new concepts largely through language that is when they listen to and talk, read and write about what they are learning and relate this to what they already know. Through speaking and writing, language, is linked to the thinking process and is a manifestation of thinking that is taking place” (Ontario Ministry of Education, 1984; quoted in Corson 1990, 75)

Vygotsky places more emphasis on the role of language in cognitive development. Cognitive development results from an internalization of language. Thought and language work co-operatively. Language helps us to either assimilate new information or accommodate the conflicting information. It is a tool for conceptualizing and linking information. Language is the base of thinking process. It is our greatest learning tool.

Cumins (1979) views that schooling improves our language. Effects of school are strong enough to extend the basic knowledge. Language is not only used as a means of communication but also it works as a major tool in the process of social transformation.

Most of the teachers globally feel that language learning is the basic responsibility of language teachers only but it is not a fact. All subject teachers have responsibility to integrate language in the learning of the content. It is observed that children whose performance is not up-to -mark is not due to lack of subject knowledge but due to language comprehension. Without understanding a language, Content learning of any subject is not possible.

In late 70s and early 80s of last century, Language Across the Curriculum (LAC) was originated and developed in Great Britain where the idea of linking LAC with school language policies as a whole received formal recognition in Bullock Report: A Language for Life. Each school should have an organized policy for LAC, establishing every teacher's responsibility in involvement in language and reading development through the years of schooling. A child can learn a language by listening speaking, reading and writing.

People like James Britton, Nancy Martin and Douglas Barnes derived the concept from Bullock Report and they find three central principles like:-

1. Language is more than the surface structure.
2. Entire school has an environmental influence on language development of students.
3. Language plays a key role in all school learning.

Every learning is language learning and every teaching is language teaching. Every subject teacher is also a language specialist. Basically teachers lack awareness of the fact that content of any subject can be learnt only when they understand the language. They should try to improve holistically the skills like-listening, speaking, reading and writing.

Indian schools and teachers do not utilize language diversity as a resource. The basic problem of students is inability to connect teacher's language with language that of home. All subjects are interrelated. All teachers irrespective of their subject should own the responsibility of student's learning language in all classes.

NEED OF THE STUDY

In secondary school curriculum, various subjects are taught such as Science, Mathematics, Social studies, Languages etc. Out of them, science and social studies are the two important school subject of the school curriculum. In science subject, physical science and Biological science are the two components. Science as a subject has multifarious value to the individual as well as to society. It includes values like intellectual, utilitarian, vocational cultural, moral and aesthetic values in the mind of students.

Similarly, social studies as a subject include teaching of History, Civics Geography and Economics. It inculcates various abilities like historical investigation, narrative skill, civic sense, citizenship training, protection of environment etc.

To develop subject knowledge in both science and social studies, children must have language comprehension as well as content knowledge. Contents of any subject can be learnt only when children understand the language. In this context, it is essential that all the teachers have responsibility of training the child to acquire appropriate language skills with technical terminology and see that it is used in the appropriate manner with correct communication of meaning. All teachers need to encourage students to listen, speak, read carefully and give writing practice by providing good samples of written documents.

It has been found that teachers never try to give enough practice or insists on using correct language in their respective subject areas in order to improve holistically the ability to speak, read and write and listen to various language patterns to enhance the comprehension and learning.

It is very essential that all teachers irrespective of their subjects should own the responsibility of students learning a language in every classroom with all subject teaching. Hence in the present study the investigator has taken keen interest to find out relationship between language and other subject knowledge learning in science and social studies of secondary school students of Odisha.

RESEARCH QUESTIONS

On the basis of above needs, the following research questions are asked:-

1. Whether linguistic competencies have any relationship with academic achievement in science?
2. Whether linguistic competencies have any relationship with academic achievement in social studies?
3. Whether linguistic achievement has any relation with academic achievement in science?
4. Whether linguistic achievement has any relation with academic achievement in social studies?

STATEMENT OF THE PROBLEM

The present research problem is stated as-

Linguistic competencies as correlates of academic achievement in science and social studies of secondary school students.

OPERATIONAL DEFINITIONS OF THE TERMS USED-

Terms used in the research problem are defined below-

Linguistic Competency- It refers to important skill or ability connected to language, study of language or belonging to a language.

Correlates- It is used as noun meaning related or complementary thing or phenomenon that accomplishes another phenomenon, is usually parallel to it and is related in some way or other.

Academic Achievement:- According to Cambridge dictionary it is a result gained by effort, skill connecting to school, college and university.

Science:- It means a branch of knowledge or study dealing with a body of facts or truth systematically arranged and showing the operation of general laws, systematic knowledge of the physical and material world gained through observation and experimentation.

Social studies- It refers to a part of school or college curriculum Concerned with the study of social relationships, functioning of society and usually made of courses in History, Economics, Civics, Geography,

Secondary School Student- Student studying in schools or pre-university colleges, just after primary education and before college or university education are known as secondary school students. It ranges from class IX to XII in context to Indian situation.

Objectives of the study

The objectives of the present study are stated as follows-

- ❖ To study Linguistic competency (Reading comprehension and writing skill) of boys and girls students of class X.
- ❖ To study academic achievement of class x student in science and social studies
- ❖ To study the relationship between linguistic competency and academic achievement in science of class x students.
- ❖ To study the relationship between Linguistic competency and academic achievement in social studies of class x students.

Hypothesis- The hypothesis of the present study has been formulated as below.

- ❖ There exists no significant difference in language competency (Reading comprehension and writing skill) of boys and girls in science and social study in class X.
- ❖ There exists no significant relation between language competency (reading comprehension) and academic achievement in science.
- ❖ There exists no significant relation between language competency (Writing skill) and achievement in science.
- ❖ There exists no significant relation between language competency (reading comprehension) and achievement in social science.
- ❖ There exists no significant relation between language competency (writing skill) and achievement in social science.

Delimitation of study-

The present study has been delimited in following manner:

- ❖ The study is limited to four districts like-Balasore, Sambalpur, Ganjam and Koraput of Odisha.
- ❖ Secondary school students is limited to class X Odia medium govt school students only.
- ❖ Linguistic competency consists of four skills i.e. listening, speaking, reading and writing but present study delimits to reading comprehension and writing skill only.

Research Design

The research design of the present study includes following aspects-

Method

Survey method was used for the purpose of present study.

Population

All the students studying in class X under the Board of Secondary Education, Odisha formed the population of the present study.

Sample

400 students studying in class-X constitute the sample selected by random sampling technique from identified districts. 10 schools from each district were taken as sample.

Tools and techniques used

The following tools and techniques were used for the present study-

- 1) Academic achievement in science and social studies of class-X students of Board of Secondary Education Examination, Odisha as the achievement test.
- 2) Development of language competence test by the investigator.

Analysis and interpretation of Data

The collected data was analyzed and interpreted by using descriptive statistics, inferential statistics and product moment correlation.

SUMMING –UP

The present study focused on studying linguistic competency (Reading comprehension and writing skill) of boys and girl's students studying in class X. It wanted to study the academic achievement of class X students in science and social studies. Again it dealt with the relation between linguistic competencies and academic achievements in science and social studies.

Bibliography

Adubakar, B (2005) psycho-social-linguistic factors that facilitate high achievement in senior school certificate English language. Journals of Educational Research and Development, 1 (i) 67-76

Bunch, G.C. (2013) pedagogical language knowledge preparing main stream teachers for English for English learners in New standards Era. Review of Research in Education, 37,298-341.

Corson, D. (2007) Language across the curriculum (LAC) in corson, David (ed.) Language policy Across the curriculum. Cleveon : multilingual matters. 72-140.

Cummins, J. (1981). The role of primary language development in promoting educational success for language minority students in California state department of education (Ed.) ,pp-3-49.

Dijhed, A (2013), Investigating the reading difficulties of Algerian EST students with regards to their general English knowledge, Arab World English Journals, 4(1)

Garcia-Vazquez, E. Vazquez, L.A. Lopez, I.C. Ward, (1997), language proficiency and academic success: relationship between proficiency in two languages and achievement among Maxican American students. Bio lingual Research Journal, 21 (4)395-408

Jadie, k.,Sonya, P, laura, S., Natasa, W. (2012) connecting English language learning and academic performance: A predictive study. American Educational Research Association Vancouver, British Columbia, Canada, 1-17.

Nuttal, Catherine (1987), Teaching reading skill in a foreign language London: Heinemann Educational Books Ltd.

Vygotsky, L.S. (1962) Thought and language, Cambridge MA: MIT press.

.....