Chapter 1 at a glance

To apply brain-based principles in Indian context

To find out if it is successful?

Objectives

To develop brain-based oral communication program

To study the effectiveness of the program

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To develop brain-based oral communication program

To study the effectiveness of the program

Why application of brain-based program?

W hy deprived students?

Problems in education due to socio-economic situation

Due to conditions in schools

Due to illiteracy and lack of time of parents

No enriched experiences about communication

Why deprived students?

Problems in education due to socio-economic situation

Due to conditions in schools

Due to illiteracy and lack of time of parents

No enriched experiences about communication

Why development of problem?

W hy emphasis on oral communication?

W hy first standard students?

Significant age group as per brain research

More possibilities for neural connections

Foundation of formal education

Windows of opportunity

Dealing with language skills in education as well as life

Listening skills

Reading skills

Writing skills

Major communication skills

Importance of language skills in education as well as life

Oral communication skills
1.0 Introductory

Oral communication is an essential part of everyone’s life. To share with someone is our basic need. Practically, it is the base of all types of learning. But, in our education system, less importance is given to oral communication as compared to written communication.

It is observed that, socio-economic deprivation affects development of oral communication skills, leading to low progress in all aspects of education and life in general. Present study intended to develop oral communication skills of deprived students.

As per brain researches, 6 years is a significant age for language learning. The brain research has given some important principles about learning. Present study was planned to apply the findings of these researches in the Indian context, especially for developing oral communication skills of deprived students.

Present chapter elaborates the importance of oral communication of first standard deprived students and the need of brain-based learning. It includes objectives, hypotheses, and operational definitions of the important terms in study. It also provides scope and limitations of the study.

1.1 Education of deprived students
‘Education for all’ is a policy of India. The children between 6 to 14 years have got right to free and compulsory education.

“Every child who has attained the age of 6 years shall have the right to participate in full time elementary education and to complete it, and towards that end shall have the right, subject to the provisions of this Act.”

(Right to education bill, 2005, p-11)

The goal of ‘Sarva shiksha abhiyan’ is as follows,

“The sarva shiksha abhiyan is to provide useful and relevant elementary education for all children in the six to fourteen age groups, by 2010. There is also another goal to bridge social, regional and gender gaps, with the active participation of the community in the management of schools.”

(Sarva shiksha abhiyan, 2006, p-1)

But all Indian children do not get education, till date. Those children, who have successfully brought to the schools, have not rooted in the classrooms. Indian Government had appointed various commissions to investigate the problems and to suggest remedies. Kothari commission report (1964, p-151), Prof. Yashpal report (1993, p-5 and 6), and National knowledge commission (2007, p-21), have showed us the real condition of our education system.

Actually, a developing country like India has to face problems of several types of deprivation in education. There is socio-economic deprivation, health deprivation and disabilities, educational or cultural deprivation, as well as deprivation due to remote habitats. The present study focuses on socio-economic deprivation of students. All the educational reports express the concern that deprived children have to face social inequality. To decrease inequalities in our society, one solution is education – equal opportunities of education, Education for all.
There is definitely a wide gap between the education of socially deprived class and non-deprived class. For the children between ages of 3 to 6, Government scheme like Anganwadi is implemented. But it is especially for nutritious diet. It is not an educational centre. Government pre-primary schools exist in some areas; but are not spread in all over Maharashtra.

Because of economic deprivation, the families send their children to Governmental school for free education after the age of six. In comparison to the children from non-deprived class, the deprived children get limited opportunities for overall progress. Besides that, their families stay at slum areas. The atmosphere of slum areas is not education-friendly; not even child-friendly. Students have to face many obstacles to concentrate on their studies. The drop out rate of the slum area students is always high. Very few students become successful in their school education. Mostly, the talents of these children remain hidden. It is an ongoing process for generations so far.

The status of the language development of socio-economic deprived students has been described in many reports and books.

"It is generally agreed that children reared in homes reflecting a favorable socio-economic status are superior in language ability to children who come from homes of lower status. Some psychologists claim that there may be as much as eight months' difference in the rate of development. It also has been observed that schoolentrants who come from 'better homes' seem to have developed by that time a better speech pattern, a larger vocabulary, and greater loquacity than have children who are the products of 'poorer' homes or of institutions."

(Crow & Crow, 2007, p-48)

Eight months difference in schoolentrants affects on language skills of 1st standard students.
Present study intended to work on language development of socio-economic deprived students in general and communication in specific.

1.2 Importance of communication skills

Communication is the process of transferring information from one source to another. Communication is a two-way process of exchange of thoughts. There are major three types of communication.

I) Verbal communication
II) Non-verbal communication
III) Visual communication

In the present study, the focus is on verbal communication. The process is represented in the figure 1.1.

![Figure 1.1 Verbal Communication](https://www.effectiveoralcommunicationskills.blogspot.com)

Verbal communication occurs between small groups of people. There must be a sender and a receiver or receivers. Someone gives message and receiver replies with
feedback. When it is successful, better communication is generated; the process looks something like the above figure.

Oral communication is social interaction where at least two interacting persons share a common set of signs and a common set of linguistic rules. The babies are born with the physical ability to make sound, but must learn to speak and communicate effectively. Speaking, listening and our ability to understand verbal and nonverbal meanings are skills we develop in various ways. We learn basic communication skills, by observing other people, and modeling our behaviors based on what we see.

It is necessary to learn oral communication skills. It is an important part for formal education and social interactions.

1.3 Importance of oral communication in first standard

Language is a tool of thinking. It's a tool of learning and expressing thoughts, ideas and feelings. Natural sequence of development of language skills is oral communication through listening, speaking informally and then step-by-step development of reading and writing skills through school education.

Children acquire language through imitation. They learn every word from the conversation in their families and surroundings.

"Conversations with interested adults are essential to children’s linguistic, emotional, social and cognitive welfare.”

(Whitehead, 2002, p-15)

They use words and store them in their personal dictionary, in the brain. By repeating the process, several words are used and stored in brain by children. Without any official curriculum, without learning grammar, child is able to talk. A child acquires his/her own language. In this way, the vocabulary of the child increases daily by listening and using new words. Child uses listened words in the sentences. If the sentence is approved by parents, child uses the new word more and more times. If it is not approved,
child comes to know that there is a mistake, and it tries to avoid it. In this way, the child assimilates his/her other tongue.

At the age of six, formal education starts and the child is admitted to first standard. The students are introduced to formal language in the formal atmosphere through the textbooks. The standard language in school is new for them. Sometimes just like a foreign language, because children speak in different dialects in their homes. They use different vocabulary, though they are from Marathi speaking families. For this reason, they can not grasp the teaching in formal standard Marathi in school. Sometimes their pronunciations are far different from standard language. For this reason, the inferiority complex arises in their minds. There are no special efforts taken in schools to make the language familiar taking into consideration the special language needs of every child.

At this stage children need to play with language. They need opportunity to use their vocabulary in various situations. Their brain wants to observe everything, wants to think over it, and wants to express it. But in schools, rigid timetable, heavy demand on written work and discipline do not give them permission to talk freely.

Even The National curriculum framwork (Yash pal, 2005, p-18) has given stress on the same issue as given below.

"Learning takes place through interactions with the environment around, nature, things and people, both through actions and through language. The physical activity of moving, exploring and doing things, on one’s own, with one’s peers or in the company of adults, and using language— to read, to express or ask, to listen and to interact—are the key processes through which learning occurs. The context in which learning takes place is thus of direct cognitive significance."

It underlines the need to change language teaching policies for all students, especially, for deprived children. They need to listen to the teacher, need to communicate with teacher who can empathies with them, encourages them for oral expressions.
First standard is an official beginning of school years and hence the foundation of formal education. Pre-primary education is necessary for language development. Pre-primary education provides the opportunities of listening stories, singing songs, playing with various language games with friends and teachers. But pre-primary education is not compulsory yet. It has not spread all over Maharashtra and India. Therefore, most children, especially socially deprived do not get early education.

For such children, first standard is the beginning of formal oral communication, in standard Marathi, other than relatives or neighbors. Children from deprived section may have different language or dialects spoken in the home. Children find it difficult to cope with and lose confidence and interest in communication and learning. Quality learning experiences catering to special individual needs, regarding language development are essential in 1st standard.

That is why; the present study has focused on oral communication of first standard. Brain development and language development are closely associated. Hence, it was thought appropriate to take base of brain researches for efforts to be done for development of oral communication skills of deprived students.

1.4 Brain based researches related to language acquisition

The brain is one of the most complex systems. Due to advance technology, we literally can look inside a brain and see which areas are most active while the person is engaged in various mental activities. X-ray is the first brain imaging technique. Several techniques are available for brain research. Electroencephalography (EEG) technique has provided valuable information for researchers and educators regarding language learning.

Because of new experience of any new activity, like listening to a new word, singing a song, playing games or doing sums, some anatomical changes take place in the brain. It is explained in detail in the chapter 2, point no. 2.3.5.
Learning is a process of building neural network. The synapse is the junction between two neurons. Communication among neurons is an electrical-chemical transmission through axon. Dendritic spines grow, change shape or shrink as we experience the world. Growth and multiple branching of the dendrites and axons is the brain’s response to rich sensory input from an enriched environment.

The findings of the researches show that language construction is a combine activity of related parts. Major three findings related to language development are mentioned below.

(I) Areas related to language development:

The most frontal region is named Broca’s area. Speech depends on this part of the frontal lobe. It is involved in the production of spoken language. Wernicke’s area is in the temporal lobe. It is involved in the decoding of language. Both the areas are connected by a bundle of nerve fibers. Before any speech can be uttered, its form and the appropriate words are assembled in Wernicke’s area. They are relayed to Broca’s area for translating it to proper sound. Other parts of the brain help in processing language.

The angular gyrus in the parietal lobe is involved in the association of spoken and seen words. The visual word form area lies at the base of the left temporal lobe and is involved in processing the spelling, sound and meaning of words.

II) Windows of opportunity:

According to brain research, first ten years are very much important for acquiring education - especially language education. The theory of Windows of opportunity by David Hubel and Torston Wiesel mentions that, “Windows of opportunity are times when a child can best learn or refine abilities. After that time it becomes much more difficult to learn. For some skills, missing the window does not mean that the skill can not be learned. It just means it will take more efforts and practice.” (M ayes, 2006, P-1) Therefore, this particular age is most important for giving various educational experiences.
III) Coordination of two hemispheres:

The brain is constructed with two halves; the left brain and the right brain. The functions of two halves are different.

A) Left brain involves in positive thinking, speaking, mathematics, etc.
B) The right brain functions are art, imagination, emotion etc.

Need to put more emphasis on teaching to both halves of the brain, since they work together all the time. Content (the text in which the left hemisphere excels) is important but text without context (the specialty of the right hemisphere) is often meaningless. Taken this into consideration, the activities should be given to both hemispheres, such as language with music, thinking with pictures etc.

IV) Contribution of experiences:

The stimulation of an enriched environment results in significant physiological change in the brain, compared to brains in sterile, boring environment. As deprived students lack rich experiences regarding language acquisition, it is essential to provide them same through systematic efforts based on findings of brain research right from the beginning of formal education, that is from first standard.

V) Multiple intelligences:

American scientist and educationist Dr. Howard Gardner elaborated the 'Theory of Multiple Intelligences'. As per this theory he stated that every person has a special and unique brain, with the set of intelligences. He explored ten intelligences. As, 1) Verbal intelligence 2) Mathematical/logical intelligence 3) Intrapersonal intelligence 4) Interpersonal intelligence 5) Musical intelligence 6) Kinesthetic intelligence 7) Visual/spatial intelligence 8) Naturalistic intelligence 9) Existential 10) Spiritual.
Considering the age group of students of 1st std. and the activities involved in oral communication first eight intelligences are taken into consideration while developing and implementing the program. It is explained in detail in the chapter 2, point no. 2.3.6.

All these brain based principles are helpful to enrich the oral communication of first standard students. Considering these facts, the activities were planned.

1.5 Need of the study

Oral communication is the basic need of language development and language is a foundation of education. In our education system, there are no special efforts taken in schools to enrich the oral communication skills. Actually, oral communication is a major linguistic skill. But it is not given prime importance in the schools. Though evaluation pattern has been changed and is supposed to become more child-centered, enrichment of oral communication is not prominent, especially in the schools for deprived students. It is often seen, that the students have no voice in the class rooms. There is no scope for interactions with teachers and peers. No opportunity for their thinking and opinions, as well as their emotions. Deprieved children have much capacity to do better studies and make progress, but lack of communication skills and lack of opportunity to express own thoughts, their intelligence remains hidden. This study intended to make efforts to enrich their communication skills. This study underlines the need of students' expression of thinking and oral communication.

The present study aimed to give various opportunities to listening and speaking. The age of six years is significant for this purpose. According to brain research, first ten years are very much important for acquiring language education. Because of rich sensory inputs dendrites grow, change shapes; which is useful for overall education.

The researches were reviewed to find whether there are researches on enrichment of oral communication of 1st standard deprived students. The study of Sujakoshy (2008) was to enhance the reading skills of advantaged and disadvantaged children of standard 1.
Her study supported for the use of children’s literature for enhancing language skills in advantaged and disadvantaged children.

The researches by Devi (2001), Reddy (1988) highlighted the clear relation between socio-economic deprivation of children and its effect on their language development. They found that children from less advantaged homes talk less as compared to children from advantaged homes.

These researches underlined that socio-economic deprivation played a significant role in language development of children. After considering these factors, researcher decided to apply brain based principals for enriching the language ability of deprived students.

Prof. Duman (2006) studied the effect of brain-based instruction to improve 6th grade students’ academic achievement in social studies instruction. His study was effective and showed significant difference in the achievement of experimental group as compared to those of control group by using brain based principles. The teacher – student talk in active learning class was studied by M artlew; Joan; Ellis; Sue; Stephen; Christine; and Ellis; Jeniffer. The conclusions of the study showed that active learning increased the amount of talk in children of less advantaged homes. The study of Abdullah M ahmud M ohammad syed concluded that, by using multiple intelligences based training program, the first year students’ English oral communication skills were more developed.

These studies brought out the conclusions that,

1. Deprived students have difficulties in oral communication skills.
2. Their vocabulary is not sufficient for formal education
3. There is no brain based program for socio-economic deprived students to enrich their oral communication skills.
Considering the conclusions need was felt to find answers to some questions such as, can brain based learning be effectively used to develop communication skills of deprived students? Is it possible to develop communication skills of 1st standard students through systematic inputs? In order to find answers to these questions through systematically obtained empirical evidence present study was undertaken.

1.6 Significance of the study

The present study intended to develop the program to enrich the oral communication of 1st standard deprived students. It is based on findings of brain researches. The study will prove useful to the teacher educators, teachers, researchers and curriculum planners. The oral communication test and program will help teachers and parents also. It will also be helpful for teachers, administrators and persons related to the field of education. The conclusions will be useful for the scholars of linguistics, educational planners and trainers of communication programs for children.

1.6.1 Brain based language learning theories are the basic support for present study. Till now, these studies and researches are held in western countries. It needs to apply in our Indian context and study the effectiveness. Present study has done such attempt and hence will be useful for further researches.

1.6.2 The brain based principles are included in the syllabus of teacher education courses only in some universities. The present study will be useful for the pre-service teachers as well as in service teachers, to get more insight into application of principles derived from brain research into day to day transaction of curriculum.

1.6.3 Systematic implementation of a special program based on findings of brain research for enrichment of oral communication skills of deprived will be useful for all rural, tribal and urban children in Maharashtra, as well as in India.

1.6.4 The program will serve as a guideline for developing oral communication of 1st std. students of other languages.
The brain-based program of oral communication is helpful for students in grasping and expressing themselves in education and also in real life. Therefore, such studies for enriching oral communication might be useful for their personality as a student and as a person, too.

The oral communication test and program will be useful for parents to enrich the oral communication skills of their children.

While developing the curriculum of mother tongue the program of this study will be useful for enrichment of oral communication.

1.7 Title of the study

Development of brain-based program for enrichment of oral communication of 1st standard deprived student.

1.8 Objectives of the study

1. To develop brain-based oral communication program.
2. To study the effectiveness of the program.

1.9 Operational definitions

- Brain based program: A program of providing learning experiences, developed by researcher based on findings of brain researches regarding language learning in general and oral communication in particular.

- Enrichment of oral communication skills: Enrichment of semantic and syntactic structures of oral communication through providing opportunities of listening and speaking, and through direct interactions as well as support program considering the individual needs of the students.
Deprived students: Students deprived from educationally conducive environment due to poor economical, social and cultural background. (In the present study students has been included from corporation school, which includes mostly such deprived students.)

Effectiveness: Increase in scores of 1st standard deprived students on test of oral communication (testing semantic and syntactic structures used) prepared by the researcher.

1.10 Assumption
The socially- economically deprived students have some difficulties in oral communication skills. Brain based principles can be systematically applied in imparting communication skills. Oral communication skills can be developed through training.

1.11 Hypotheses
1. There will be significant difference between the mean scores on pretest and posttest of students from experimental group on oral communication test prepared by researcher.

2. There will be significant difference between the posttest mean scores of experimental group as compared to control group on oral communication test prepared by researcher.

1.12 Scope
i) The researcher prepared the brain based program for enrichment of oral communication in Marathi for 1st standard deprived students.

ii) Present program was implemented on first standard students of Marathi medium.
iii) The study involved 82 girl students of 1st std Marathi medium from two corporation schools located in Pune city.

iv) The program was implemented for 116 hours through direct interactions between researcher and students. Besides this, support programs such as, games, cards, study material of group work etc. were provided.

1.1.3 Limitations

i) The sample was incidental.

ii) The classes in corporation schools selected included only girl students, though it was not in plan of research.

iii) There was no standardized test available, for measurement of oral communication skills of first standard. Therefore, the test prepared by researcher was used, which was not standardized test.

Considering these limitations the findings of study will be limited to sample under consideration. For wider generalization more replica studies on representative samples are essential.