CHAPTER I
INTRODUCTION

1.1. INTRODUCTION

Place of Sanskrit language and education in contemporary Indian Education is hardly been overemphasized. As a language of cultural heritage, Sanskrit has a wide scientific literature and it is considered as an instrument of national integration. So teaching of Sanskrit is necessary for the cultural unity of the country. It is also a language of Philosophy, Sociology, Economic, Politics, Linguistics, Criticism, Mathematics, Astronomy and Medicine.

The very name "Sanskrit" means, "language brought to formal perfection". There has recently been an astounding discovery made at the NASA research centre. The following quote is from an article that appeared in Artificial Intelligence Magazine (1):

"In the past twenty years, much time, effort, and money has been expended on designing an unambiguous representation of natural languages to make them accessible to computer processing. These efforts have centered on creating schemata designed to parallel logical relations with relations expressed by the syntax and semantics of natural languages, which are clearly cumbersome and ambiguous in their function as vehicles for the transmission of logical data. Understandably, there is a widespread belief in natural languages as suitable for the transmission of many ideas that artificial languages are intrinsically precise and mathematical rigor.

But these methods served as a premise underlying much work in the areas of natural and artificial intelligence, is a false one. There is at least one language, Sanskrit, which for the duration of almost 1000 years was a living spoken language with a considerable literature of its own. Besides works of literary value, there was a long philosophical and grammatical tradition that has continued to exist with undiminished vigour until the present century. Accomplishments of the ancient grammarians can be reckoned a method for paraphrasing Sanskrit in a manner that is identical not only in essence but in form with current work in Artificial Intelligence."
This article demonstrates that a natural language can serve as an artificial language also, and that much work in AI has been reinventing a wheel millennia old.

It is a fact that a language, which has been spoken for thousands of years, that appears to be in every respect a perfect language designed for enlightened communication. It is also important to note that the most advanced technological research centre in the world has identified that Sanskrit language is the only unambiguous spoken language on the Earth.

The linguistic perfection of Sanskrit offers only a partial explanation for its sustained presence in the world for at least 3000 years. At the same time contemporary mainstream thinking suggests that Sanskrit is a dead or communal language and the Sanskrit education is declining in Colleges and universities throughout the country. The paradox of increasing importance of the language and its declining educational standards is worth studying in academic terms.

The calls for re-engineering Sanskrit education have been rising around for a few years. The motivating factors for this reform are poor student achievement, as evidenced by national tests, and the relatively low numbers of minorities successfully involved in Sanskrit courses in the colleges of Kerala. Another argument requiring reform is the change in the population of Sanskrit classes. These setbacks are mainly attributed to the teaching methodology adopting in higher education. Teaching methodology in itself contains several constructs like teaching process, use of teaching aids and technology, syllabus, quality of instruction and general learning atmosphere. This calls for a change in teaching methods to accommodate all learning type. Interactively there has not been any scientific study to address the need for such reforms.

Teaching is concerned with purposeful human manipulation with maximum use of natural faculties. Successful teaching is both a natural gift and an acquired skill.

The report of the Secondary Commission (1) 1952-54 said, “We are, however, convinced that the most important factor in the contemplated educational reconstruction is the teacher, his personal qualities, his educational qualifications, his professional training and the place he occupies in the school as well as the country.” It is necessary for the growth and
existence of any society to preserve, renew and transmit its culture to the young and growing generation.

The education news from all part of the world says that the international educational communities feel a growing need for teaching methods. This is also evident from the increasing number of teaching method courses coming up in Western countries. Science subjects are far ahead in filling this gap with the advent of technological revolution, while languages are lagging behind. This is especially true with classical languages like Sanskrit. Taking a stock of the present status of Sanskrit education in Kerala and analysis of constructs involved with the proposition of a Language learning plan, hence, become the mainstream of this research.

1.2. NEED AND SIGNIFICANCE OF THE STUDY

Most of the commissions have stressed the urgent need of imparting the quality of education. In order to make teaching exciting, motivating and challenging, a well prepared suitable module is necessary taking all the steps seriously.

As in other languages, many of the problems tasking Sanskrit educator today is particularly with regard the need for teaching methods that stimulate interest in Sanskrit language and its scientific wisdom. This should answer a few other questions like:

How Sanskrit teachers teach the various subjects at present? What are the methods they use? Are they using any definite methods? Are their classes motivating the students? How they can attract the attention of the students? Do they feel any difficult. prose? What are the steps to be followed in teaching Sanskrit prose and poetry in the same way? What are the differences to teach for degree and P.G classes? Is there a difference in the approach if teaching Sanskrit prose, poetry and vyakaranas to M.in and subsidiary students? What are the steps to be followed in teaching vyakaranas? Do the teachers allot equal importance to knowledge, understanding, appreciation and application in teaching prose and poetry? What are the preparations that should be followed in teaching Sanskrit prose, poetry and vyakaranas? Is there any alternative ways for
teaching the same portions? How the classes can be integrated with better practises, tools and technology?

These and many such questions can be answered only through a scientific and systematic study. So the investigator has selected the present problem in this background.

1.2.1. **Statement of the Problem.**

Understanding the methods adopted in collegiate level Sanskrit education in Kerala and hence the need for the preparation and testing of related constructs in Sanskrit teaching was identified as the present problem.

The title of the study is “PREPARATION AND TESTING OF CERTAIN CONSTRUCTS IN TEACHING SANSKRIT IN HIGHER EDUCATION”

1.2.2. **Definition of terms**

The following are the operational definitions of key terms used in the present study.

**Preparation:** (\textit{") In this study the word ‘preparation’ is used to mean ‘making ready for use’.**

**Testing:** Testing means critically experimenting to arrive at a judgement.

**Construct:** (\textit{") Something synthesised or constructed from simple elements; especially, a concept constructed by the mind to form part of a theory. Here the word construct is used as a transitive verb means ‘to put together, fit together, especially in the methodological aspect of language teaching. Constructs means the components used in the formation of methodologies and strategies; and its interrelationships and combinations. The term constructs also connote a field of study encompassing instructional design, teaching aids, learning processes, teaching strategies, techniques and preparation of modules. Constructs have a large number of interrelated concepts and applications in the domain of education.

**Higher Education:** In the present perspective, higher education means the Sanskrit courses conducted either by Universities or by Department of Collegiate Education in Kerala.
In Graduate level, Sanskrit can be learned either as an optional subject or Sanskrit Special. There is an opportunity to learn Sanskrit as the second language too. The student of Sanskrit special can opt any one among Sahitya, Vyakarana, Vendanta, Nyaya, and Jyotisha.

In Post-graduate level, there is Sanskrit General, Sanskrit Special, Credit & Semester system and Sanskrit Subsidiary. The student of Sanskrit special can opt any one among Sahitya, Vyakarana, Vendanta, and Nyaya.

Teacher: Teacher means teachers of colleges viz Lectures, Readers, and Professors and such educators.

1.3. OBJECTIVES OF THE STUDY

Major objective
The major objective of the study is to prepare and test certain constructs in teaching of Sanskrit in Higher Education in Kerala.

Specific objectives
The major objectives given above incorporate the following specific objectives.

1. To make an assessment on the present state of Sanskrit Education in Kerala at the Collegiate level.
2. To identify the instructional strategies followed by teachers in Teaching Sanskrit with special reference to:
   a) Sanskrit prose (Gadyam)
   b) Sanskrit Poetry (Padyam)
   c) Sanskrit Grammar (Vyakarana) and
   d) Sanskrit Sastra.
3. To identify the technological innovations, if any, adopted in teaching Sanskrit at Collegiate level.
4. To develop and experiment certain constructs in teaching
   a) Sanskrit prose (Gadyam)
   b) Sanskrit Poetry (Padyam)
   c) Sanskrit Grammar (Vyakarana) and
   d) Sanskrit Sastra.
5. To understand the constraints and problems faced by teachers in teaching Sanskrit.
6. To suggest measures for improving the teaching of Sanskrit in higher education.

1.4. SCOPE OF THE STUDY

This study will be valuable in getting a clear understanding of the Sanskrit teaching and learning programmes to be adopted in future. This would enrich the standard of the Sanskrit learning in higher education and would give useful suggestions in selecting curricular materials. It is expected that the preparations and testing of various methods and useful modules would upgrade the quality of teachers and will make learning-teaching process more effective and efficient.

1.5. LIMITATIONS OF THE STUDY

This study is limited to the teachings of Sanskrit at Degree and PG levels which form the major part of Higher Education. Geographical area of the study is meaningfully limited to the state of Kerala. The study was carried out during the period from February 1999 to August 2003. Distance education of Sanskrit does not come under the purview of the study. The present study does not include the role of curricular materials in Sanskrit education.

However care has been taken to eliminate or alleviate the effect of above limitations of the study with timely expert consultation and review.

1.6. PROCEDURE OF THE STUDY

The first phase of the study (survey and interview) followed descriptive method. The target communities were Sanskrit teachers and Students of Sanskrit courses in the Colleges and Universities in Kerala. The second phase of the study tested the effectiveness of the module of an integrated methodology. Five Sanskrit study centres were selected for testing
the module developed and experimental mode of research was adopted in this phase of study.

The procedure followed for the study can be summarised as under:

1. **Finalising the theoretical framework of the study.**
   This includes deciding the objectives, methodology and the preparation of the Research Design. After the preliminary analysis an expert panel was constituted.

2. **Preparing the research tools.**
   Survey, Interview, Experiment, Expert-consultation and study of Documents were identified as relevant research tools suitable for the study. Observation through an observation panel was also used within the experiment.

3. **Administration of the Questionnaire to teachers.**
   A pre-test of questionnaire was carried out with 20 teachers. Necessary modifications were made in the Questionnaire before final administration.

4. **Conducting interviews**
   Interviews were conducted with teachers to probe further into the problem. This was done based on a structured interview schedule.

5. **Expert Consultation.**
   Expert Consultation was a concurrent process throughout the research programme, especially during the preparation of the module and experimentation.

6. **Analysis and interpretation of Data.**
   Data collected through the survey and interviews were analysed with software assistance. Appropriate statistical tools were applied.

7. **Preparing Experimental Plan.**
   This involves decisions relating to the following aspects. Details of these decisions and steps are given in Chapter IV, Methodology.
   b. Assessment plan.
   c. Observation panel.
   d. Finalising Colleges/centres and teachers
   e. Deciding experimental and control groups.
   f. Time scheduling for experimentation.
8. Actual Experimentation

Four subject areas were selected for experimentation in Graduate level and Postgraduate level. One control group and one experimental group were constituted for each subject area. Hence eight groups are there for one set of experiment. Two sets of experimental groups form sixteen groups. This is repeated in Post graduate level. Hence there are thirty two groups in total. Details of these decisions and steps are given in Chapter IV, Methodology.

Steps followed in actual experimentation are:

a. Teaching without the module in sixteen control groups.
b. Teaching with module in sixteen experimental groups.
c. Assessing all students in both sets of groups.

9. Analysis of Experiment.

Scores of each student was collected and total scores were consolidated. Analysis was done regarding the performance of each groups based on the assessment figures. Observations of the panel were also noted down.

10. Findings, Suggestions and Conclusions.

In the final stage of the study, gaps were filled after retrospection followed by drawing conclusions and corresponding suggestions leading to writing the report.

1.7. TOOLS USED FOR THE STUDY

1. Questionnaire for College/University teachers.
2. Interview Schedule to collect data from College teachers
3. Interview with experts- (Unstructured)
4. Achievement test for students- (Experimentation)
5. Study of Documents

1.8. ORGANIZATION OF THE RESEARCH REPORT

This report of the study is divided into seven chapters.

First chapter is the introduction. It deals with the need and significance of the study and defines the problem. The chapter also depicts objectives, procedure, tools, scope and limitations of the study.
Second chapter provides a short history of Sanskrit education with various traditional methods for teaching Sanskrit.

Third chapter, the review of related literature, briefly describes various studies carried out in the field of different language constructs including methodology, teaching technology and process. Studies are categorised as, studies abroad, studies in India and studies in Kerala.

Fourth chapter gives the methodology of research. Sampling procedure of the survey, procedure of experiment, tools and techniques applied and the related factors are given.

Fifth chapter is the analysis and interpretation of data using apt statistical techniques. The first part of this chapter analyses data collected through questionnaire from teachers. The second part analyses data collected through the interview schedule.

Sixth Chapter provides details of experimentation and is divided into three parts. The first part describes the steps followed in the experimentation, formation of student groups, details on observation and plan of assessment.

The second part of this chapter is the modules of the Sanskrit-learning plan and begins with a general introduction to the modules. Modules for poetry, prose, grammar and sastra are given for both graduate and post-graduate levels.

Third part of the sixth chapter is computation of assessment scores, compilation of observation results and their analysis.

Seventh Chapter has two parts viz. findings and suggestions followed by a conclusion. The findings are presented issue-wise. Suggestions are set forth on the basis of the insight gained from the study.
References


