Language teaching in itself is an art and thus it needs to be handled more artistically by the material developers, language instructors as well as the language students. But when it comes to second language teaching it is much more complicated and needs the sophisticated and more artistically trained hands of the material producers and the language instructors. Unless there is one to one correspondence and co-ordination between the material producer, instructional materials, teaching methodology coupled with simultaneous motivation of the language students and their learning strategies, the language teaching techniques and materials can never achieve the goal of fulfilling the task of the teacher.

In the traditional second language teaching situation all the above teaching components can be controlled more effectively because we often know the target audience and the nature of heterogeneity of the target group such as the heterogeneity on education, age, nature of expectation, languages known, mother tongues of the target group and the language distance of the learner and his/her choice of the language to be learnt. Above all the numerical strength of the language learners in the language class always have a significant contribution to the language teaching methods. In addition to that it is a well known fact that in the traditional language teaching/learning environment direct student teacher contact could be established at fixed time for clarification and constant evaluation and monitoring which are very important for language learning.

All the above language teaching/learning environment which is conducive for effective learning/teaching could not be found while we are engaged in teaching language through net. But it is a known fact that the tentacles of language teaching have spread to different modes of teaching such as:

- Traditional class room teaching which has facility to have direct contact with
  - the teacher
  - the text books
  - the evaluation schemes and,
the various teaching aids.

Distant mode of education which has the characteristics of:

- teaching through learning packages
- evaluation through schedules
- establishing direct contact with the teachers
- during certain contact programme only

**Using advanced technology**

- computer assisted language learning mainly through multimedia CD-ROMs, laserdisc which has the characteristics of teaching for the need-based courses as perceived by the CD developers
- no contact with the teachers unless the CD has a restricted usage.
- without teacher monitored evaluation tool. Rather the evaluation tool provided is often computer-monitored one
- assisted with self-contained programmed applications Viz tutorials, drills, institutional games etc. These generally do not have any scope for individualized need-based manipulations.
- yet another mode of language teaching in the hierarchy is the network-based language teaching NBLT which represents a new side of CALL. This language teaching method has the characteristics of
  - language teaching by computer connecting to local networks.
  - Comparatively controlled target learning group
  - establishing human to human communication between the language learning.
  - potentially communicate with the other learners of the same language.

**Highly advanced language teaching/learning mode—Internet**

which has the characteristics of

- having access to net
- reaching every nook and corner of the globe
- potentially communicate with the native speakers
- contact with many to many
- contact with one to one
- uninterrupted access and contact

When the above features are open to the language teaching/ language learning one can ask the following pertinent questions:

- Who can be the target group? And the nature of heterogeneity?
How the materials need to be developed?
How the evaluation strategies will be adopted?
How the materials need to be presented?
What will be the technology involved while the language teaching materials are presented?

Extent of heterogeneity and objectives of the target group

The heterogeneity of the language learners through net need to be looked into while material is developed. Unlike the traditional language teaching environment, in this situation one can expect language learners to log in with various learning objectives and coming from several backgrounds. Though the present paper is dealing with the materials which cater to the need of the second language learner, the following heterogeneity could be identified within this target group.

- Age
- Language distance between the learners mother tongue and the target language (Tamil)
- Differential language learning motivations

Objective of the learners:

- Potentially communicate with the native speakers
- Potentially communicate with the other learners of the same language
- Visit to the target language speaking area (Tamil Nadu)
- To undertake a comparative study of the Tamil with other language/languages
- To know the culture
- To undertake a higher order research
- Translation
- To know about the topography and people of the Tamil land.

In order to fulfill the needs of the learners mentioned above, it is desirable that the Net-based materials need to have at least the following facilities.

Learner oriented teaching components:

Learner oriented teaching components mean the material with simple functional, natural conversations which can be used by the learner in the actual language speaking area. The Scripts of Tamil need to be introduced by grouping the Tamil scripts which have the similarity in shape. This will enable the learner to start practicing the learnt script by coining words in Tamil. This kind of simultaneous learning cum practicing of the learnt portions will make the process of learning more useful and interesting. The facility for the students to see the complete script system whenever they want in a single screen should be made available. This will enable the learners to identify the already learnt script among the total number of Tamil scripts displayed and the position of these scripts in the script system. Similarly the user shall be given facility to
exit at any point of time as desired by the learner from the learning component he is in and also the facility to learn any specific component as per the wish of the learner.

While introducing the Tamil script system the problematics in pronunciation of Tamil sounds should be dealt with carefully. In other words, orthographic correlation between sound and script has some variations in Tamil pronunciation especially in intervocalic position and when a sound comes after its homorganic nasals. Exact pronunciation of the Tamil sounds in their isolated occurrences should be shown contrasting with their variation in pronunciation when these sounds come in the phonological sequences with their conditioning factors spelled out clearly.

For instance, the sound of \textit{ka} changes to \textit{ha} when it comes between two vowels, but represented by one symbol. Similarly the sound \textit{pa}, \textit{ka}, \textit{ca}, \textit{ta} and \textit{Ta} becomes \textit{ba}, \textit{ga}, \textit{ja}, \textit{da} and \textit{Da} after the homoorganic nasals, \textit{m}, \textit{n}, \textit{ñ}, \textit{na} and \textit{Na}. These are the pronunciation specificities of Tamil which need to be practiced by giving more examples and exercises. Most of the second language learners of Tamil have difficulty in comprehension of Tamil sounds and the word meaning when the teaching material fail to take care of this area of pronunciation systematically. This is one of the areas where the potentiality of the multimedia can be exploited to the maximum.

Another area which needs proper attention is the diglossic character of Tamil. The changes being attested while shifting the HIGH variety (written Tamil) to the LOW variety (spoken Tamil) the phonological merger and the formation of consonant clusters phonological deletion, nasalization of certain word final vowels, spreading of ‘U’ phonic vowel when it occurs at the word final position etc, should be highlighted by given appropriate rules. This need to be placed in the separate section in the material so that the learner can go to that exclusive section and identify the specific rules involved while shifting from the HIGH variety Tamil to the LOW variety Tamil.

At least bilingual approach is suggested for teaching Tamil where the medium of instruction can be English. As far as possible the complete learning packages must be auto instructional and highly interactive. Interactive in the sense, there should be a provision given for the language learners to attend to lot of exercises and simultaneously given facility to check their answers with the already worked out answers. In addition to that, typing facility by using the displayed Tamil keyboard on the screen. In the event of committing any mistakes, the learners should be informed automatically the particular area of grammar which can help them to rectify their erroneous answer.

\textbf{Structure lessons}

The section on Structure lessons should be graded in such a way that the learners are introduced from the basic simple verbless structures to the compound and complex sentence 4 types. At the end of each structure lesson, there should be a list of specific grammatical categories introduced in that lesson with brief descriptions. There need to be another main section in the multimedia package where there should be a facility to see the complete referential grammar of Tamil at a glance in a graded manner. The general experience in second language teaching is that often the piece meal introduction of the learning components, make the learners to lose track of the introduced language information. Hence as mentioned above in connection with the script, the section on grammar too should have the complete grammatical structure in one place for the benefit of the learner to look into the Tamil grammar in its full form. This arrangement will also help the researchers who would like to use this information for any comparative study or for the purpose of translation etc. The section on referential grammar may have the following format of presentation.
• past tense markers in Tamil
• classification of verb stems
• conjugation of verbs on the basic of their classification
• the grammatical structure of the verbs when it is conjugated to several grammatical categories such as conditional, concessive, negatives etc.
• case system in Tamil
• the patterns of simple, compound and complex sentences in Tamil
• aspects and moods etc.

Sandhi
Sandhi is yet another area which needs separate treatment in the material. This section can give the various Sandhi changes involving different Tamil sounds when it combines with another sound. These can be put in simple rules with appropriate functional examples used in modern Tamil.

Lexicon
The format for the electronic dictionary should be pedagogically oriented with two kinds of vocabularies namely functional and cultural. The functional vocabularies will be presented by giving a clue in the main entry so that the learner can easily decline or conjugate the word without any difficulty. For instance, while presenting the verbs in Tamil it may be indicated whether it is a weak verb or a strong verbs. Also, the past tense marker the verb takes along with the indication whether the verb is a transitive form of the verb or the intransitive form of the verb. These basic information will enable the learner to conjugate the verb to his/her desired grammatical category of the verb.

In order to have a more user friendly dictionary we have to think of the following modes of presentations.

Entry
• entry of the words in Roman script
• entry of the words in Tamil alphabet.

Facility for the Dictionary user
• Tamil alphabetical search
• Roman alphabetical search
• search by typing the Tamil alphabet.
• search by typing the Roman script of the Tamil word.
• Search by typing the English word for which the learner wants to know the Tamil equivalent.
• Questions and Answers

It goes without saying that during the process of learning a language learner may encounter innumerable doubts which need immediate clarifications without which it may be difficult for the
learner to move ahead in the process of learning or the learner may need an explanation regarding the technical terms used in the package as simple as Noun, Pronoun etc. Such kind of doubt may hinder the comprehension of the learner. In view of the heterogeneity of the learners as discussed above, such kinds of doubts are more common and natural. The material producer as a language teacher needs to cater to this need of the learner by giving explanation to the possible grammatical and other technical usages. These may be listed in a separate section under the title Frequently Asked Questions (FAQ). It is needless to say that this section can never be exhaustive because it may be difficult to predict the nature of doubts the students may get. However, the experience in second language teaching can make the material producer identify to a greater extent the nature of doubts the language learner can encounter and their proper explanations in simple terms with examples may be written under this section.

Online tutoring

No technology and no teaching methodology whatever advanced it may be, can substitute a teacher. No doubt the material for the net as discussed when put in the above format may have incorporated all the components the multimedia can handle such as audio, video, evaluation etc. But still it is definitely beneficial if there is a possibility for online tutoring. Provision may be given to have this additional teaching component. This need to be worked out separately by keeping in view the distance and the time differences in various countries from which the potential learners log in.

Language games

Section on language games is a potential area through which the learner can be motivated to a greater extent. Several games starting with vocabulary development, picture identification, identification of sounds, and identification of words by way of listening to the specific sounds and words, sandhi changes, sentence building, word ordering etc. can be thought of.
Evaluation and testing

The component of evaluation is very important for language teaching programme because only through this the material producer can measure the credentials of the material, methods of presentation and the methodology of teaching. Evaluation through net need to be looked through the performance of the learners on the basic language skills viz, listening, speaking, reading and writing. In other words, the evaluation tools at the end of every lesson as far as possible should test the learner on the basis of the above basic skills. Only then the learner can be more confidently perform in the actual language environment. The evaluation tools should be devised accordingly.

PROBLEMATICS AND POSSIBLE SOLUTIONS

In this section we are basically concerned with the problems faced both by the material producer and also by the developer with reference to academic input and technology respectively.

We have stated above that the measuring scale of evaluation of the language achievement by the learners could be on the basis of their achievement in the four basic skills namely, listening, speaking, reading & writing. While measuring the rate of achievement in the above skills, the problems we face are in the areas of script teaching, and pronunciation practice, which can be attributed to writing skill and speaking skill developments respectively.

The writing skill development through this auto instructional package will be started with the introduction of individual Tamil script along with the native method of writing presented in an animated mode and its respective pronunciation. When it comes to practice, the learner can be asked to use the special type of paint brush which can be operated through the mouse and draw the specific Tamil letter within the predetermined four lines similar to the writing practice given traditionally. But, the problem faced here can be that the learner while trying to draw with the help of mouse may get more a drawing practice rather than the writing practice. Subsequently the technique to write the Tamil letter can never be achieved by the learner through this method. After teaching the individual Tamil script the learners will be introduced to write words and sentences. In this section again we can ask the learners to type the appropriate answers by looking at the key board displaying. This practice too cannot improve the actual handwriting of the learner though he/she can have the knowledge about the content in Tamil, which comes as the answer. Though at this level even if we feel that the learner has understood the content while making him to type the answer by following the key board display, it is understood that there are several types of key boards available developed by many companies. Some have followed the phonetic system and some have followed the general typewriter keyboard etc. This further complicates the learner while trying to type on the screen. It needs to be looked into by both the technical experts as well as by the academician more seriously and an uniform and user friendly keyboard should be developed.

The next problem will be to check the pronunciation of the learners. In order to solve this problem probably the speech analysis software can be incorporated which can help the students to match his/her pronunciation with the pronunciation of the master by comparing the graphics of both the master and the learner. But this facility as on today cannot be provided to the students who take the course through net. In the absence of this there is no evaluation for the pronunciation of the students. Hence till this date in order to rectify this problem, we may have to depend on the online tutor.
Conclusion
To conclude unless the problems mentioned above are not satisfactorily solved it may be difficult for the material producers, language learners and the technical experts to achieve Tamil teaching effectively on par with classroom teaching where the teacher can monitor the learners.