8. Curriculum development

8.0 Preview

This chapter takes up two major components of an MTB-MLE programme. One is the importance of developing a curriculum for the Singpho MTB-MLE programme, including the objectives of the Singpho curriculum (Section 8.1). The second component relates to the documentation and evaluation of various aspects of the Singpho MTB-MLE programme (Section 8.2). It also gives an account of the progress that has been made in this regard the context of the programme.

8.1 Curriculum development

Curriculum development is another important aspect of an MTB-MLE programme. A properly designed curriculum helps in achieving the desired outcome of such a programme. It has to be admitted that a complete curriculum for the Singpho MTB-MLE programme has not yet been prepared, since this is a work-in-progress. At the same time, the importance of a curriculum and a draft plan for the curriculum for the Singpho MTB-MLE programme is discussed below.

The curriculum for the Singpho MTB-MLE programme aims to achieve certain objectives. These range from developing basic literacy skills (8.1.1), promoting cognitive development (8.1.2), facilitating L2 learning (8.1.3), fostering heritage value (8.1.4) to incorporating subjects like environment studies (8.1.5) and mathematics (8.1.6). These objectives are discussed below in detail.

8.1.1 Developing basic MT literacy skills

Since the development of basic literacy skills is one of the most important goals of this programme, the curriculum for the Singpho MTB-MLE programme aims at providing a proper plan to help the teachers achieve this goal. These skills refer to the ability of the learners to listen, speak, read and write their mother tongue. A strong foundation in these skills acquired through the mother tongue helps the learners to learn new concepts and to acquire new knowledge of the world effectively. In this regard, the National Curriculum Framework (2005) states,
Though we strongly advocate an integrated approach to the teaching of different skills of language, the school does need to pay attention to reading and writing in many cases, particularly in the case of home language.

It further observes, (NCF 2005)

Language – as a constellation of skills, thought encoders and markers of identity – cuts across school subjects and disciplines. Speech and listening, reading and writing, are all generalised skills, and children’s mastery over them becomes the key factor affecting success at school.

Once the learners develop these basic skills in literacy through their mother tongue, it will be easier for them to transfer these skills to the learning of other languages such as their L2 and L3. Therefore, the Singpho curriculum will invest a maximum effort and time to incorporate provisions for developing these skills in the learners.

8.1.2 Promoting cognitive development of the learners

Along with the development of the basic literacy skills the curriculum will also emphasize the development of the cognitive faculties of the learners. Cognitive abilities refer to the skills of reading with understanding, the skills to analyse, assess and create new knowledge. The importance of developing these skills and their academic implications are clearly shown in ‘Bloom’s Taxonomy’ referred to in Malone (2008).

Figure 5: Taxonomy suggested by Bloom (1956) as cited in Malone (2008)
Figure 5 sets out the progression of cognitive development in the learners. This development needs to be facilitated by the curriculum through a systematic arrangement of the instructional materials available.

The curriculum lays stress on the designing of a complete course and syllabus which guides the learners to acquire skills that enables them to learn and observe concrete objects and then, in subsequent stages, to use those skills to learn about abstract concepts. In other words, the curriculum arranges for the developing the cognitive abilities of learners from the simple and concrete to the higher level thinking and understanding of abstract concepts.

The curriculum also focuses on building meaningful schemata or network in the learners mind which foster better understanding of concepts and prevents learners from resorting to rote learning. While discussing the Schema theory of learning, Susan Malone (2008) states,

‘There can be no real learning without meaning. Meaningful learning occurs when we are able to relate new concepts with our prior knowledge, or schemata. Relating or associating new data with what we already know is the way that we make sense of the new. The more relationships that we can establish between new information and prior knowledge, the more comprehension we achieve.’

Keeping in mind all these important observations, the Singpho curriculum aims at incorporating both the meaning and accuracy based materials into the programme. The MSM method provides the teachers with the opportunity to undertake different activities to develop the meaning-based understanding of texts and concepts as well as the accuracy-based skills in the learners.
8.1.3 Facilitating second language learning

Facilitating second language learning is another important objective of an MTB-MLE programme. It was mentioned in earlier chapters that one of the main aims of this type of programmes is to enable the students to transfer their literacy skills to learn a second language. In this context, it would be relevant to refer to Cummins' proposed model for second language learning that distinguishes between two kinds of language proficiency: language proficiency for general day-to-day conversations and language for academic proficiency which demands more complex language skills.

Figure 6: Two kinds of language proficiency (Cummins 1984)

While discussing Cummins' model, Virginia P. Collier (1988) comments,

'Cummins uses the term 'context-embedded' to describe face-to-face communication where meaning can be negotiated. This type of communication is enhanced by a wide range of paralinguistic (e.g., gesture, facial expression) and situational cues. On the other hand, context-reduced language relies primarily on linguistic or language-based cues to meaning and is more difficult to produce and comprehend. Cummins' model (see Figure 1) consists of two intersecting continuums: the first from context-embedded language to context-reduced language, and the second from
cognitively undemanding language (which requires little conscious attention to language forms or choices) to cognitively demanding language (which requires the active cognitive efforts of the speaker/writer to produce).

Therefore, it is evident that the learning of a second language at school demands a higher level of language proficiency. It also indicates that the MT learners need to be at a different age level in order to be able to attain the required level of proficiency. The Singpho curriculum will incorporate appropriate transitional materials in the course keeping in view the MT foundation of the learners and their level of preparedness for transition.

8.1.4 Fostering heritage value

The curriculum is also expected to foster a sense of belonging among the learners with regard to their own culture and tradition by incorporating cultural knowledge in the instructional materials and in the curriculum. As stated earlier in the discussion on material production, all the teaching-learning materials will be based on the indigenous culture and tradition of the learners. This will not only bring their world into the classroom but also encourage the learners to be active and confident in classroom interaction. This will be ensured by making a detailed week by week lesson plan which will evolve around the weekly theme as mentioned in the cultural calendar.

8.1.5 Incorporating Environment Studies as a subject

Apart from the language class, the Singpho curriculum also aims at incorporating the Environmental studies (EVS) in the MTB-MLE programme. Through the incorporation of EVS, the curriculum aims at achieving both a content-based grasp of concepts and language skill development in the learners. This objective is articulated in the National Curriculum Framework (2005) in the following terms –

'At the primary stage, the child should be engaged in joyfully exploring the world around and harmonising with it. The objectives at this stage are to nurture the curiosity of the child about the world (natural environment, artefacts and people), to have the child engage in exploratory and hands-on activities for acquiring the basic cognitive and psychomotor skills through observation, classification, inference, etc ; to emphasise design and fabrication, estimation and measurement as a prelude to the development of
technological and quantitative skills at later stages; and to develop basic 
language skills: speaking, reading and writing not only for science but also 
through science.

The Language Experience Factsheets and the Language Experience Activity 
(LEA) are the two productive strategies which engage the learners in active observation 
of the nature around them and in talking and writing about it. In addition to these 
strategies, the curriculum will also provide opportunity to the teachers to use their own 
innovative ideas and strategies to support further development of the content-base and 
the language skills of the learners.

8.1.6 Incorporating Mathematics as a subject

Mathematics is another subject which the curriculum will incorporate in the 
programme. At the primary stage, the curriculum will aim to include simple basic 
mathematical concepts. These concepts will be taught to the learners in their mother 
tongue so that it is comparatively easier for the learners to follow instructions in the 
classroom. It will also bring in the culture into play as the teachers will aim to use any 
traditional mathematical knowledge they can accumulate from the older members of the 
community. According to Mavis Price (2008), the teaching of basic mathematics is 
expected to enable the learners to

- Follow and give directions to move from place to place.
- Compare and group shapes in the community
- Measure and compare the length, weight, capacity of things using local 
  informal units.
- Compare and measure an area using local ways of measuring.
- Tell and use time in traditional ways.
- Count groups of objects in vernacular.
- Use number symbols that mean the same as vernacular number words.
- Solve problems using two-digit numbers to 20 or closest to 20 in 
  vernacular.
- Use different amounts of money to make up various sums of money.
- Recognise various local patterns.
- Identify and describe events that sometimes happen in the community and the environment.

In order to achieve all these objectives, the parameters of the curriculum for any language group need to be set out very clearly so as to bring coherence into it. One way of doing this is to make an elaborate theme web which allows the teachers and other members of the community to plan on a weekly basis. The following is a template of such a theme web.

Figure 7: Theme web indicating curriculum plan for a week

As indicated in Figure 7, the theme of the week is central to all the activities that take place in the week. While making the curriculum, the members and teachers from the community will consult the theme of the week from the cultural calendar and try to find all the materials related to that theme for all the components in the week. For example,

15 This theme web is a resource material for helping teachers and other community members to prepare week long lesson plans. It was made available to the researcher during a curriculum development workshop organized by Summer Institute of Linguistics International held at Guwahati, Assam in January, 2012.
if the theme of the week is ‘animal’ the teachers will look for a story about an animal to teach in the story track components. The teacher will encourage the children to talk and discuss about a particular animal. In the same way, the primer and pre reader will include lessons dealing with the animal for the week. While doing the language experience activity (LEA) outside the classroom, if possible, the teacher might ask the learner to look for that particular animal.

The main objective of organising the various activities around the theme in this manner is to bring coherence into the curriculum. This is because it is very important to form schemata or network of concepts in the learners’ mind. It is essential to guide the learners’ cognitive development through these familiar networks which will lead to the unfamiliar source of knowledge. Since the learners can identify the tail of a familiar schema, it becomes relatively easy to grasp the new knowledge. Malone (2008) makes this point clearly in the following remarks

‘If a new concept cannot or is not intentionally related to our prior knowledge in anyway, it is assigned an arbitrary place in the cognitive structure and learned by rote. This rote knowledge is significantly more difficult and time-consuming to comprehend because we cannot connect it to established information networks. It remains an isolated, essentially meaningless bit of data until new networks or links are established. Because it is not part of the network and therefore not linked or anchored to other concepts, this rote knowledge is easily lost or distorted as new and more meaningful information is brought into the schemata.’

8.2 Documentation and Evaluation

Documentation and evaluation are two major aspects of the whole programme. Both these aspects are complementary to each other. Proper documentation of all the aspects and stages of a programme paves the way for a proper assessment of it. It is a tool for establishing the success or shortcomings of a particular programme or scheme. In the case of an MTB-MLE initiative, documentation has a crucial role to play. Since MTB-MLE is a relatively new method of teaching, it is important to establish its appropriateness and necessity through the presentation of documented statistical records. This explains the need of continuous and systematic documentation of all the
aspects, processes, activities, challenges, and issues relating to a particular MTB-MLE programme. Once this is ensured, the community and the facilitator are able to make a proper assessment of the programme on the basis of which future planning can be done. Documentation for MTB-MLE programme is an on-going process. The scope of documentation increases with the incorporation of new components into the programme. The documentation of such programmes can be divided into the following broad categories:

**8.2.1 Documentation before the programme starts**

This refers to the need for documentation of all the related aspects of the community which might have an impact on the programme. These cover the following areas:

i. educational status (literacy rate, drop-out rate, number of schools, etc)

ii. economic status of the community (the common means of earning a livelihood, resources for economic growth, average income level, average level of expenditure level etc.)

iii. demographic details (population, number of males, females, school going children, location etc.)

iv. community's attitude towards their own language and the dominant language

v. community's expectations regarding the starting of an MLE programme.

**8.2.2 Continuous documentation of the programme**

Once the community decides to start the programme, the need for a continuous documentation of all the aspects of the programme becomes important. At this stage, documentation need to be done on the following aspects:

i. students’ enrolment, attendance record

ii. parents’ feedback

iii. teachers’ attendance record

iv. the curriculum and all the materials

v. community’s on-going support for the programme

vi. records of SMC meetings

vii. students’ performance
Malone (2004) cites four broad categories of documentation for evaluation studies. These are as follows:

i. national/ regional/ local demographic information

ii. linguistic information

iii. education information

iv. BE programme information

Documenting these categories facilitates a proper assessment of the various aspects and components of the programme later on.

Assessment of the programme enables the educators as well as the community to look at the strengths and weaknesses of the programme. In order to measure the success of a programme, it is essential to assess some of its components both before and after the start of the programme. Before the programme starts, assessment should be done on the following areas:

- educational status of the target community in terms of school drop outs, failures, accessibility of the school to the community etc
- method of teaching in the government schools, performance of the students of the community
- attitude of the members of the community towards their own and mother tongue and also towards the dominant language.
- Parents' opinion about the ability of their children in terms of their educational performance

Once the programme is started, there should be a system of continuous assessment of the programme at various levels such as

- Assessment of the students' performance in terms of their literacy skills
- Appropriateness of the curriculum and also that of the reading materials
- Involvement of the community, especially the parents
- Teachers' skill development in terms of using innovative strategies to help the learners acquire all the necessary skill as well as for developing a sense of belonging to their own culture and tradition

The documentation and evaluation of the Singpho MTB-MLE can now be reviewed on the basis of the categories and schemes laid out above.
8.3. Documentation and assessment in Singpho MTB-MLE

Documentation of the Singpho MTB-MLE started with a baseline survey that was conducted in 2006. This baseline survey tried to collect as much information as possible on the community located at Ketetong of the Margherita subdivision under Tinsukia district, Assam. Apart from demographic details, the survey also took stock of the attitude of the community members towards their mother tongue as well as the dominant language. All the information obtained from this survey has been documented and kept for future reference and assessment of the programme.

The programme also has a well-documented set of records of all the workshops attended by the Singpho participants over a period of 6 years. This documentation includes the following information:

- Topic of the workshops
- Place and time of workshops
- Names and addresses of the members of the community who participated in the workshops
- Names and addresses of the resource persons of the workshops
- Daily reports
- Final reports of the workshops
- In case of material production workshops, all the titles produced during the particular workshop were documented with their English translation.
- Photos of workshops

The documentation of the initial material production workshop and teachers’ training led to important modifications to the cultural calendar, and in subsequent workshops, to modification and adaptation of some of the reading materials.

One important aspect of the Singpho MTB-MLE programme is the task of documenting the involvement of the community. All the meetings and discussions with community leaders and even the informal interviews with parents have been documented on paper either in the form of reports or in the form of meeting proceedings. As a result of this exercise, the community leaders have been able to constantly check the goals that were set by themselves in regard to the programme and see how far they have been able to achieve these.
8.3.1 Issues in Documentation

In spite of being an important component of the MTB-MLE programme, the documentation activities do not proceed as smoothly as expected. In the case of the Singpho programme, a number of practical challenges have been faced in this regard. These are briefly considered below:

a. The documentation effort on various aspects of the Singpho MTB-MLE programme highlighted the need for greater attention to being systematic. It was also realized that a great deal of writing has to be done by the person who has been given this responsibility. Therefore, it has been an issue as to who among the community members would take the responsibility to document the various aspects of the programme, at least in paper.

b. There seem to be much confusion as to what the aspects are that need to be documented. Ideally, the documentation efforts should be comprehensive, covering all aspects of an MTB-MLE programme. However, many of the community members do not feel very comfortable about putting on record aspects that reflect some of the problems or shortcomings of the community. For example, the fact that formal SMC meetings do not take place frequently and regularly due to various reasons, needs to be recorded in the documentation. But members of the community are not very keen on putting such facts or omissions on record, for understandable reasons. This comes as a challenge to the objective of documenting the activities of the programme in a comprehensive manner.

8.3.2 Assessment in the Singpho MTB-MLE programme

The Singpho MTB-MLE programme has been assessed on the following aspects:

8.3.2.1 Community involvement

As far as the community involvement and level of community ownership of the programme is concerned, it has been noticed that there has been a significant level of community involvement in the activities of the
programme. Further details concerning this aspect will be taken up in Section 4 of the next chapter.

8.3.2.2 Quality of the materials produced
Most of the reading materials produced during the series of workshops have been properly field-tested. Modifications on some of these reading materials have been done on the basis of the feedback from the learned members of the community including some of the parents. Some of these materials also have been taught in pilot classes, and it was observed that most of them have been able to engage the attention of the learners by sustaining their interest. However, a more systematic and statistically oriented assessment of these materials has not been done as yet.

8.4 Overview
The present chapter dealt with the various aspects of curriculum development plan in the context of the Singpho MTB-MLE programme on the basis of the stated objectives of the curriculum. It presented plans to incorporate mathematics and environmental studies as component subjects of the curriculum. In the second part of the chapter, the need for documentation and evaluation of such programmes was highlighted. In particular, it focused on the documentation and evaluation in the context of the Singpho programme and drew attention to certain challenges that need to be taken into account in later stages of the implementation of the programme.