# CHAPTER 6
# IMPROVING PRIMARY EDUCATION FOR IMPLEMENTING CCA

The Child-Centered Approach (CCA) has been introduced to the Myanmar basic education sector and been implemented in primary schools on trial since MBESS started in April 2001. During this period, the counterparts and the working groups (for General Studies, Basic Science and Social Studies) have offered their precious time to cooperate with the JICA Study Team. The working group meetings have been held approximately 60-70 times (more than 200 hours) for each subject to discuss CCA, produce pilot lesson plans and develop Teacher's Guides. As a result, the working group members significantly gained knowledge and skills of CCA. These members will be possible resource persons for the extension of CCA nationwide and be great fortunes for future Myanmar education.

On the other hand of such a bright side for Myanmar Education, there are still large obstacles preventing the extension of CCA in Myanmar's education sector. Without overcoming these obstacles, it is difficult to work for the extension of CCA in every corner of the country. Through the study, some suggestions can be made for the extension of CCA, which include improvement in three different areas; "Teacher's Training," "Development of Curriculum," and "Improvement of Administration."

## 6.1 Teacher Training

The teacher plays a significant role for children's growth. The teacher is one of the closest role models for children. Especially, children at lower primary levels tend to copy teacher's behavior and attitude. It can be said that children's future life depends on their teacher. In the current situation, however, teachers do not seem to be a good role model for children. Teachers often are the great authority in the classroom that forces children to obey. This situation is also against the concept of CCA.

To extend CCA in Myanmar's schools, first of all, teachers must change. Teacher should replace the old thought that children are immature and inferior to adults with a new thinking that children are not immature, but have an inborn rich sensitivity and limitless talents and capability. Fostering children's limitless capability and guiding children in the right direction depends on the teacher. It may not be easy for teachers to change attitudes and behaviors or to accept the new idea immediately. Therefore, training is significantly important and is recommended as the first step for extending CCA in the primary education sector.

It is important for training to cover the following issues;

**(1) Training on understanding CCA**

The word "CCA" has many deep meanings. It cannot be explained with only a few words. In addition, it includes many different issues: teaching methods, teacher's behavior, lesson

structure, etc. When those issues are well-balanced, CCA can work effectively. If any issues are lacking, CCA cannot be conducted effectively.

The first step in training is to understand the ***concept of CCA***. It is very important for the teacher that shows off her power in the classroom to know the concept of CCA and understand it. At present, it is often heard that "I know CCA, but I cannot apply CCA in a real classroom." Such teachers may understand CCA theoretically, but not practically. Therefore, it is also significant for such teachers to understand CCA practically as well as theoretically. The training should include the ***practice of CCA*** in real situations. (This is the main reason why JICA Study Team has always prepared demonstration lessons in CCA workshops. The demonstration lessons are highly effective in understanding CCA practically.) Training for practice of CCA expects that the teacher can conduct CCA lessons effectively. However, to achieve this level, the teacher has to understand various pre-stages: selection of teaching contents, selection of teaching methods, how to organize one lesson and how to behave during lessons. Therefore, the training should include sessions for ***designing CCA lessons*** and ***applying CCA lessons*** in a real situation. The former session can clarify the issue of "how to make lesson plans," consisting of "what to teach" "how to teach" and "how to arrange each issue to teach." The latter includes ***teacher's attitude and behavior*** during the lesson.

**(2) Training on teaching methodology**

CCA lessons use various methods; observation, experiment, fieldwork, group discussion, debate and presentation. Each method has different effects and suitable conditions to be used. The teacher cannot use these methods randomly without deep consideration. In the current Myanmar's Education Colleges, 21 teaching methods are being taught. Teachers often asked the members of the JICA Study Team what methods among the 21 methods they should use in CCA lessons. It is very difficult to answer. It is also nonsense to think which method suits CCA and which does not, because teachers can use various methods depending on children's eagerness, classroom size, the number of children and availability of teaching/learning materials. There are no fixed methods for CCA. In other words, any lessons using any methods correctly can be CCA lessons.

To extend CCA, it is necessary for teachers to understand the ***effects and results coming from each method***. Observing a piece of a leaf, for example, can strongly stimulate children's potential biological sense. Children may find through observation that even a mere piece of a leaf is alive. If the teacher combines this activity with fieldwork (letting children go outside), it will be more effective. Children can observe various kinds of plants and find that every plant is alive. After school, children may continue researching leaves by themselves. This is a successful CCA, because the teacher fully motivated children to study and guided them in the direction of self-study.

**(3) Training on developing teaching/learning materials**

Teaching/learning materials are one of the key issues for CCA lessons. Teaching/learning materials can motivate children to study and help children understand the issues to be taught.

For example, children at the lower primary level, especially KG and G1, cannot concentrate on studying for 30 minutes, which is the formal duration of each lesson. To keep their concentration and interest, JICA Study Team has proposed to use picture-stories in lessons. Children can be absorbed listening to the stories even for 30 minutes, when teachers effectively conduct this activity. In the case of the upper primary level, such as G3 and G4, it is similar to the lower primary level. For another example, the teacher provides each group with a town map to explain the situation of their town. Children usually talk actively by pointing out a particular place on the map or by finding some new facts on the map. These effects obviously came from using teaching/learning materials. Therefore, teaching/learning materials play a significantly important role for CCA lessons.

However, it is difficult for most schools to get various teaching/learning materials because of financial constraints. Many teachers have claimed that they cannot conduct CCA because they do not have any teaching/learning materials at school. This is a reasonable opinion, but it cannot be the reason why they do not do CCA. Teachers can produce simple materials by themselves by using anything surrounding them; leaves, flowers, a small branch of a tree, and so forth. Teachers do not necessarily have to purchase gorgeous and sophisticated materials. JICA Study Team, therefore, suggests planning a training course for developing teaching/learning materials, especially focusing on low-cost materials. In this course, teachers will be provided some ideas of ***how to make low-cost materials*** and ***how to use them effectively***.

**(4) Training on class management**

CCA requires teachers to have advanced class management skills and technique because there are usually many children's activities in the lesson. If the teacher does not manage the children well, the lesson will be disordered due to children's selfish behavior. ***A clear direction and instruction*** are always necessary to have activities like group discussion, group work and presentation. For example, how does the teacher divide children into groups, what issue should children discuss by group, what result does the teacher expect from the group discussion, and by what order do children have presentations. Making such issues clear is important for the teacher to manage the class well.

In addition, Myanmar's primary schools are also severely crowded with children. It is common to have 60-80 children in one class. In rural areas, furthermore, there are no partitions between classrooms. The noise from one class spreads into other classes and often disturbs children's study. To solve these problems, ***multi-grade teaching*** can be applied. However, it requires that teacher should have special skills for preparation of teaching materials and arrangement of children. Without the specific skills and techniques for multi-grade teaching, it is very difficult to conduct effective lessons. JICA Study Team recommends Myanmar's Ministry of Education to plan a training course for class management including multi-grade teaching methods.

**(5) Training on assessment/evaluation**

Compared to the conventional way, assessment in CCA uses a great variety of methods, such as ***questionnaires, interviews, observation reports, essays and children's work*** as well as ***written tests.*** These assessment methods can be used based on an individual teacher's decision, depending on topic and content. It can become possible to measure children's performance from different points of view by using such various ways of assessment. Once such assessments are applied, children can be released from the current written tests and scores, which measure only their quantity of knowledge from the textbooks, not quality of knowledge or their studying process. These assessments, however, are totally new for most primary teachers. It is significantly necessary to train teachers on how to use such various assessment methods.

## 6.2 Curriculum Development

Curriculum is the heart of education for practical implementation. Curriculum is normally created based on the country's educational policy. The present curricula for primary education, especially General Studies, Basic Science and Social Studies, seems to be produced based on the educational decision on how much knowledge children should have at each grade. In other words, the current curricula focus more on quantity of knowledge and less on quality of knowledge and skill. Therefore, it does not completely match CCA, which considers more learning quality and skills for self-studying.

CCA takes children's feelings and senses into significant consideration. Psychology of children plays an important role for CCA. In the current curricula at the primary education level, there are several issues that are too difficult for children to understand based on children's mental development. JICA Study Team suggests that it may be necessary to review the current curricula for primary education and to redevelop them for CCA.

**(1) Setting grade-wise objectives**

The current curricula for General Studies, Basic Science and Social Studies have subject-wise objectives, but not grade-wise objectives. Children's growth especially at the ages during primary education is quite fast and their capacity of understanding issues also increases year by year. It is very important to reorganize issues to teach based on children's psychological maturity. To do that, it is necessary to set up grade-wise objectives under careful consideration of children's capability at each grade level[1].

**(2) Reviewing contents of the textbooks**

JICA Study Team proposes reviewing contents of the current primary textbooks for the

[1] MBESS developed model Teacher's Guides for General Studies, Basic Science, and Social Studies, in careful consideration of children's mental development at each grade. In this Guides, the grade-wise objectives are included in general objectives for each topic. In the future extension phase, however, the grade-wise objectives of each subject need to be developed in clearer ways, examining all the contents to be taught for each subject.

following two reasons; one is that the present textbooks contain too many topics, which cannot be covered by using CCA practices. Another reason is that the textbooks are not created in careful consideration of children's psychological development. Specifically speaking, some topics are too easy for children and the others are too difficult for them. The detailed explanation will be as follows.

The current textbooks for General Studies, Basic Science and Social Studies do not seem to be created with sincere consideration of practicing CCA, but still look like they are being based on the conventional teaching practice. General Studies for G1, for example, has 26 topics though the weekly number of classes is only 9. Basic Science in G4 includes 37 topics[2] for 4 classes per week. Moreover, Social Studies in G4 contains 54 topics in spite of only 8 classes per week. If the teacher continues conventional teaching, the number of topics and issues may be covered within the given number of classes. Because the conventional way of teaching gives children only the facts and results of issues without thinking about the causes and the process, teachers can teach many issues in one period. On the other hand, CCA is concerned with the process of studying more seriously. It takes more time to complete one topic. Therefore, it is necessary to select topics and issues which are more important for children at that particular level.

Another consideration is the level of difficulty of topics and issues. For instance, theframework of contents in Basic Science between G3 and G4 is the same. Both textbooks start from "living things" and end with "earth and space." Even though the issues to be taught in each topic are different from G3 to G4, this framework may not seriously consider children's psychological development. The topics of "energy," "motion/movement" and "the earth" seem to be too difficult for children in G3. On the other hand, some issues in the topic of "living things" and "animals" are easy for children in G4. In the case of Social Studies, there are many historical places and persons in the G4 textbook. Some of these are too difficult for children in G4 to fully understand[3]. For these reasons, it is highly necessary to review the contents of the current textbooks according to children's psychological aspect.

**(3) Flexible practice for teaching**

Myanmar has a large geographical size and a variety of natural conditions and cultures. Climate, geographical situations, agricultural production, people, language and culture vary from one area to another. This variety can be a great advantage for education if effectively used. Currently we can observe the same teaching style and the same issues anywhere we go. For example, a teacher teaching the topic of "Our Village" in the grade 3 class for Social Studies can see the same sentence in every textbook, "His (the main person in the textbook) village is situated in Upper Myanmar. His village already existed hundreds of years ago. It has about 500 households and population of over 2,400....." This is because the textbooks have a great

[2] In Basic Science, the number of sub-topic is counted.

[3] In Japan, the study of history starts from G6 (equivalent to 11-12 years old), because it is psychologically thought that children before G6 are not ready to understand a time line and historical concepts.

authority and cannot allow teachers to teach something beside the contents of the textbooks.

CCA usually begins from some simple issues, such as children's prior knowledge and experience. The real situation, the atmosphere and conditions around children can often be a more useful material than stories in the textbooks. Therefore, it is more important that the teacher deals with local facts and real experiences of children. Curriculum should provide teachers with more flexibility in practicing. The textbooks and the teacher's manuals should be no more than references for the teacher.

## 6.3 Improvement of Teachers' Condition

In Myanmar, teachers are usually highly respected by people and students. It is commonly observed that students deeply bow when they talk to a teacher and even when they pass a teacher. It is a good tradition. Teachers in Myanmar, in this sense, have a high social status. However, their economic status is quite the opposite. Due to financial constraints of the government, teachers are receiving a paycheck that is not enough to take care of his/her family. Therefore, most teachers have to seek additional income to complement the little salary from the government. In the urban areas, there are still opportunities to get additional financial sources such as private tutorial work after school, part-time work in a company, etc. In the rural areas, on the other hand, there are few chances to gain extra income. Most teachers become farmers to help families after school and during the holiday season. Others become venders to sell their home products like chicken, eggs, cloths, etc.

CCA usually requires enough time for preparation. In the current situation of teachers devoting their extra time to additional work, makes it very difficult to conduct CCA effectively, because teachers cannot spend their time to prepare lessons. JICA Study Team proposes that teachers should ***receive appropriate remuneration*** from the government in order to concentrate on their teaching work.

Also, as mentioned before, the current educational administration is highly centralized, which does not allow teachers to teach some issues outside of the textbooks. Myanmar has quite a variety of local characteristics and keeps precious local traditions. These are very useful for children's education and make children better understand their native areas and be more proud of their tradition. To extend CCA to local and rural areas, JICA Study Team recommends that teachers are allowed more flexible practices in primary education depending on locality. In other words, the ***local educational administration should have more power and play a more active role in their region's education***.

# COMPONENT B

# CHAPTER 7
# SITUATION ANALYSIS OF TEACHER EDUCATION

## 7.1 Policy Context for Teacher Education

### 7.1.1 Background

Initiatives to strengthen teacher training in Myanmar have been conducted over the past decade, most often with the assistance of international organizations, especially UNDP and UNESCO.[1] A number of substantive innovations in current education reform programs, especially relating to assessment, can be directly traced to UNICEF and its work in these areas since 1991. In the following sections, some highlights of these initiatives are summarized, as a way of providing a framework for better understanding the MOE's more recent education promotion programs, beginning in AY 1998-99.

#### (1) "Strengthening Teacher Training Schools and Colleges Project"

With funding from UNDP and UNESCO, and strong support from the DBE, the "Strengthening and Upgrading of Teacher Training Colleges and Teacher Training Schools" (MYA/90/005)[2] project was launched in 1991. The project provided fellowships abroad, for up to three months, for 40 teacher educators to attend short-term courses in Australia, South Korea, and the Philippines on various subjects. The subject areas, and number of participants, included: research and evaluation (8); curriculum and materials development (8); teaching methodologies (8); teacher education via distance education (8); computer use (4); and documentation (4). In addition, seven principals of the Teacher Training Colleges (TTCs) and Teacher Training Schools (TTSs) participated in one-month study tours to neighboring countries (Japan, Malaysia, Thailand) and studied the education systems of the respective countries.

The design of the training program linked the study abroad with in-country workshops, involving the 12 UNESCO consultants who had been with the participants in the respective countries. A total of 32 in-country workshops were held that trained approximately 2,000 teacher educators, curriculum and materials developers, policy makers, educational administrators, and others from both the central and grassroots levels, in the respective areas. During the second half of the project cycle, as a way of "institutionalizing the reforms," mobile training teams (MMT) were established. The overall goal of the MTTs was to promote improvement in the teacher education colleges, with a focus on the areas of teaching

[1] Through the UNDP/UNESCO project, "Improving Access of Children, Women and Men of Poorest communities to Primary Education for All" (MYA/96/004), teachers, head teachers, principals, cluster heads, and others such as ATEOs in 11 townships have received training in activity-based, child-centered approaches to teaching and learning. A number of teacher trainers from the education colleges have participated in project workshops.

[2] "Strengthening and Upgrading TTCs and TTS's" (MYA/90/005) was revised to include "Strengthening and Upgrading of State Primary Schools, Teacher Development, and Teaching/Learning Materials in the Border Areas of Myanmar."

methodologies; research and evaluation; teaching and learning materials; educational technology, and documentation.

The MTTs worked with teacher educators and trainees at Myanmar's teacher training institutions (then known as the teacher training schools and teacher training colleges, respectively). Purpose of the five-day workshops was to improve practices in the respective areas (such as teaching methodology) in line with the training that had been conducted in the large in-country workshops. Approximately 51 MTT workshops were held between June 1992 and February 1993.

The Mobile Training Team Program, as found in "Guidelines for Group Work Activity for Teacher Training Institutions," included training on research "...to provide information and which enables the teaching and assessment of trainees to be more effective, and the particular teacher training institution to operate as effectively as possible." The training was designed to be participatory. The MTT training workshops had the full support of the MOE and DBE. Following completion of project funding (5 September 1993), MTT activities continued, with DBE support until 1998[3].

### (2) Education Sector Study (ESS) Project: MOE and UNDP/UNESCO

The Ministry of Education, in a joint effort with UNDP and UNESCO, conducted a comprehensive evaluation of the education sector and manpower planning in the early 1990s. The joint effort was channeled through the Education Sector Study (ESS) Project that started in the early 1990s. Its main objective was to bring about improvements in the quality, efficiency and equity of the Myanmar education system, with a view to promoting human resource development, and to strengthen its contribution toward the country's social and economic development.

Phase 1 of the project involved a detailed diagnosis and analysis of the needs of the education sector, conducted by a team of 47 national participants, representing seven government ministries. The MOE's Department of Myanmar Education Research Bureau (MERB) and UNESCO guided the process, which included the assistance of six international experts. The national participants, organized by working groups, produced a series of 30 documents ("Working Papers") in the following areas:

- Education Data Review and Analysis
- The Quality of Education
- Education and Employment
- Financing of Education
- Education Infrastructure
- Organization and Management of the Education System

[3] Education Colleges opened in 1998 and the members of the MTT were assigned to Education Colleges in different States/Divisions, which made it impossible to continue the work of the MTT.

- Special Studies (Teaching of Science and Technology, Teaching of English, Higher Education, Economics and Business Development)

The series on the quality of education analyzed five areas: teacher quality, pedagogy, curriculum, student evaluation, and student characteristics.

Phase II of the ESS project (MYA/91/010) focused on strategy development.[4] The projects for quality improvement of basic education focused on curriculum development, student evaluation, teacher education, and academic supervision. With respect to teacher education, the project proposed to strengthen the professional competency of teachers through different delivery modes of training such as distance teacher education, township-based courses, in-service programs and, importantly, pre-service education. It was proposed that the first step be a critical review of the appropriateness of the content in teacher education and methods for meeting the needs of not just untrained but also unqualified teachers.

### (3) Education for All (EFA)

Myanmar participated in the World Conference on Education for All (EFA) held in Jomtien, Thailand, 5-9 March 1990,[5] which has guided and been the overarching framework for education reforms throughout the world over the past decade, especially reforms that are based on an expanded version of basic education. Teacher trainers are specifically mentioned in the EFA document, *Framework for Action,* as important to any strategy to improve basic education and to improve managerial, analytical and technological capacities in the respective countries.[6]

To reach country-wide EFA goals by the year 2000, Myanmar developed its "National Programme of Action" (NPA), specifically with respect to basic education: "universal access to basic education (primary level) by all school-going children i.e., 5+ to 9+ years old and at least 80% completion of primary education by means of formal education." The five-year (1996 to 2001) implementation strategy targets goal achievements in 324 townships by 1999-2000.[7] The 10-year follow-up to the Jomtien World Conference was held in Dakar, Senegal in April 2000. Myanmar did not attend the Dakar conference.

---

[4] Ministry of Education/UNDP/UNESCO (MYA/91/010) *Draft Proposal for Education Sector Development Vol. I Strategy Development (1993-2002),* MERB, Yangon, April 1993.

[5] Two documents were adopted by World Conference: *The World Declaration on Education for All* and the *Framework for Action to Meet Basic Learning Needs*. The documents had been drafted previously (October 1989 through January 1990 through a wide and systematic process of consultation, including nine regional and three international consultations). The Conference involved over 1500 participants and delegates from 155 governments, as well as education specialists and other officials representing 20 international bodies and 150 nongovernmental organizations (NGOs).

[6] *Framework for Action to Meet Basic Learning Needs*, World Conference on Education for All, Jomtien, Thailand, 5-9 March, p. 9.

[7] Government of the Union of Myanmar, MOE/DEPT, *Education for All in Myanmar*, March 2000.

Myanmar has participated in regional workshops on the education sector, especially on education and human resource development,[8] in 1996, and on the reform of teacher education,[9] in January 2001.

The country's promotion of basic education through specific reform initiatives, especially those conducted in collaboration with UNDP/UNESCO and UNICEF, for "...for strengthening EFA activities," is discussed in the following section on "Education Promotion Programmes."

### 7.1.2 Education Promotion Programs and Teacher Education: AY 1998-2004

Current education reform in Myanmar dates to the national seminar held in Yangon in May 1998, attended by 1,567 educators, professors and administrators. National seminars were held subsequently during May of 1999 and 2000, respectively, the outcome of which was the promulgation of education reform to be undertaken in the respective academic years (AY). These reforms are collectively referred to as the "Education Promotion Programme." Specific components for each phase (Phase I, Phase II, and Phase III) are found in **Table 7-1.** Phase III reforms are referred to as the "Special Four-Year Plan."

The MOE's planning seminar in May 2001 took place in Yangon and in Mandalay. A long-range plan (30 year) was promulgated in basic education: "30 Year Long Term Plan (Basic Education Sector) Seminar on Teaching Methodology and Assessment Procedures for Middle and High School Level (Tenth Grade) New Curriculum." Components, with respect to teacher education, are included in **Table 7-2.**

**Table 7-1: Education Promotion Programs (Phase I, II, and III): AY 1998-1999 to 2003-2004**

| Program Phases, by Academic Year (AY) | Nationwide Seminars, by Date and Number of Programs Promulgated | Programs of Action for Phases I, II, III and Objectives of the Special Four-Year Plan |
|---|---|---|
| | | **Programs of Action** |
| **Phase I**<br><br>AY 1998-1999 | May 1998<br><br>Nationwide seminar convened in Yangon<br><br>Ten (10) programs of action | • provision of pre-service teacher training by upgrading teacher training colleges and teacher training schools to teacher training education colleges (TECs), levels 1 and 2<br>• provision of in-service teacher training programs for uncertified teachers<br>• curriculum reforms at primary level<br>• changes in assessment procedures for students<br>• effective utilization of multimedia for teaching-learning activities<br>• introduction of preschool education<br>• introduction of school families (cluster) scheme<br>• expansion of parent-teacher associations (PTAs) and formation of School Board of Trustees<br>• changes in the system of matriculation and university entrance examinations |

[8] U Tin Than, *Country Paper for Education Sector*, Working Group Meeting on Human Resources Development (Promoting Sub-regional cooperation among Cambodia, the Peoples' Republic of China, Lao PDR, Myanmar, Thailand, and Vietnam), 5-6 December 1996, ADB, Manila.

[9] *Technical Report* UNESCO-PROAP Sub-Regional (Southeast and East Asia) Workshop on Reform of Teacher Education, 5-7 January 2001, Philippine Normal University, Manila, Philippines.

| | | |
|---|---|---|
| | | • implementation of the Comprehensive Personal Records for students in state schools |
| **Phase II**<br><br>AY 1999-2000 | May 1999<br><br>Nationwide seminar convened in Yangon and Mandalay<br><br>Nine (9) programs of action | ***Programmes of Action***<br>• instituting a post-graduate diploma in teaching (PGDT) course<br>• increasing primary school enrollment rate<br>• inculcating union spirit among youth<br>• utilization of multimedia technology in classrooms<br>• introducing special regulations and benefits for teachers serving in remote and border areas<br>• formation of Myanmar education development associations (MEDA) at the national, state and divisional township levels<br>• awarding prizes to outstanding students<br>• provision of basic education for Myanmar children residing abroad<br>• implementation of the school calendar |
| **Phase III**<br><br>Special Four-Year Plan<br><br>AY 2000-2001 to 2003-2004 | May 2000<br><br>Nationwide seminar convened in Yangon and Mandalay<br><br>Six (6) programs of action | **Objectives of the Special Four-Year Plan**<br>• to create an educational system on a par with that of international standards and keeping abreast with that of developed countries in Southeast Asia<br>• to enhance the performance of basic education schools to produce "well-developed, patriotic good citizens imbued with Union Spirit"<br>• to provide equal access to and wide utilization of multimedia education in classrooms to promote teaching-learning conditions of basic schools<br>• to raise the competencies of teachers, compatible with qualitative development of basic education<br>• to promote the level of national education by increasing access to basic education to meet basic learning needs<br><br>**Programs of Action**<br>• to revise basic education curriculum<br>• to introduce new assessment system, basic education completion and university entrance examination<br>• to introduce multimedia classrooms to improve the teaching/learning process<br>• to improve the quality of teacher education<br>• to support all-round education development activities<br>• to universalize primary education (UPE) |

**Table 7-2: 30-Year Long Term Plan**
**(Basic Education Sector)**

| Program Phases, by Academic Year (AY) | Nationwide Seminars, by Date and Number of Programs Promulgated | Programs of Action for Phases I, II, III and Objectives of the Special Four-Year Plan |
|---|---|---|
| 30-Year Long Term Plan for Basic Education Sector<br><br>AY 1001-2002 to 20300-2031 | May 2001<br><br>Nationwide seminar convened in Yangon<br><br>Ten (10) programs of action including 31 projects | **Objectives of the 30-Year Plan and Teacher Education**<br>• revision of the syllabus and teaching methods in the education colleges<br>• upgrading the level of education colleges land expansion of new colleges<br>• introducing intensive and refresher courses to promote the quality of teacher education<br>• bridging education colleges and institutes of education<br>• promotion of capacity of institutes of education and teacher education colleges<br>• technical cooperation with international organizations |

Selected education promotion programs, with special relevance to teacher education, are presented in the following section. Major changes include provision of pre-service education by

upgrading teacher training colleges and teacher training schools to education colleges (ECs); provision of in-service training for uncertified teachers; curriculum reforms at the primary level; and changes in assessment procedures.

### (1) Pre-service Education and the Upgrading of TTCs and TTSs

Pre-service programs in teacher education were stopped in AY 1971-72 and reinstituted, based on the May 1998 education seminar, in December 1998. The country's five teacher training colleges (TTCs) and 14 teacher education schools (TTSs) were upgraded to level I and level II education colleges, respectively. Level I education colleges award both a certificate in education (KG-4) and a diploma in teacher education (grades 5-8). Level II teacher education colleges offer only the first year course of study, i.e., certificate, first year program.

The upgrading of TTCs and TTSs includes a number of initiatives, including the following:

#### a) Development of Modular Courses

Courses have been redesigned by the teacher education colleges using the modular format. These include the following components: topic statement; objectives; content; activities ("practice tasks"); and feedback (answers). A goal is to develop trainee competency in writing, preparing lesson plans; constructing tests; and developing teaching-learning aids.

#### b) Introduction of the Credit System

Introduced in AY 1998-99, the use of the credit system involved changing from a system using marks to one using credits. The credit system is based on 45-minute instructional hours. A total of 16 instructional hours is equal to one credit. A three-credit course, therefore, would consist of 48 contact (instructional) hours. The grading system introduced includes 60 percent for completion of tutorials (assignments) and 40 percent for the two-hour written examination at the end of the semester.

#### c) Alignment of Rank between Teacher Education Colleges and the Universities

Rank is now the same as at universities. Previously, for example, the rank of assistant lecturer would be lower than that at the university;

#### d) Introduction of Academic Courses in the Pre-service Program

Academic subjects are a major component of the teacher education curriculum. The texts used for the academic courses are virtually the same as those used at the university level, but the course content varies somewhat. Professors from Yangon University, who serve as chairman of the respective academic departments, except the English department, at the Institute of Education (IOE), selected content from the textbooks to be included in the teacher education curriculum.

### (2) In-service Teacher Education[10]

[10] The details of in-service teacher education will be discussed in **Section 7.2.3.**

Prior to the reforms of 1998, the in-service teacher education program consisted of two programs: the one-year regular program (June to March), that included block teaching, and a correspondence course. The correspondence course was a five-week "face-to-face" program at the education college. Block teaching was included in the program. The correspondence course that is offered by the education colleges to certify untrained teachers (level one course) is virtually the same as that previously offered before 1998 at the teacher training colleges.[11] The "one-year regular program" was discontinued. The correspondence program includes assignments and feedback using the mail, but given constraints, that component is underutilized. College-based and Township-based In-service Teacher Education Programmes have been already introduced since AY 2000-20001.

The DEPT's assistant director of training is responsible for the correspondence program at the teacher education colleges.

### (3) Curriculum Reform at the Primary Level

The methodology courses at the teacher education colleges have had to be adapted to reflect curriculum revision in basic education since 1998. These include the addition of general studies (morals and civics, natural science, and life skills) at the lower primary level (KG-2) and, at the upper primary level (grades 3 and 4) social studies (history, geography, morals and civics, and life skills) and basic science. English was retained as a required subject beginning at kindergarten (following considerable discussion of its merits). Aesthetic education (art and music), union spirit, physical education, and other co-curricular activities were added for both lower and upper primary.

### (4) Changes in Assessment Procedures

Prior to 1998, in basic education schools an end-of-year examination (three-hour) was administered, preceded by a terminal test in October and another terminal test in March. Discipline and attendance also were calculated in the student's final marks for the respective course.

New assessment procedures were introduced to "lighten the burden of study for examination purposes," with the goal of introducing more child-centered and activity-based learning approaches. Chapter-end tests were introduced, replacing the examination system, and are administered approximately once a month. Teacher-constructed "chapter-end" tests are utilized for grades kindergarten through grade six (KG-6). Final examinations are administered only in grades 7, 8, 9, and 10. This change was introduced as one way to reduce the high dropout rates at those grade levels. Remediation was to be provided to those students experiencing academic difficulty. The basis for the new assessment system, "continuous assessment and progression system" (CAPS) is UNICEF's introduction of this approach in their project schools since 1991.

[11] Prior to 1998, the program of the TTC consisted of a one-year regular course (residential) to prepare junior assistant teachers (JATs) and a correspondence course, including an intensive summer course, to prepare primary assistant teachers (PATs). TTS offered a one-year course (residential) to prepare primary assistant teachers (PATs), as well as a correspondence course.

The introduction of the Comprehensive Personal Record (CPR) in the primary schools provides a framework for assessing student outcomes on a wide variety of factors, not only academic performance.

Changes in the examination system, effective since AY 1998-99 for primary education, have resulted in concomitant changes in the course content of the teacher education colleges that had to change the content of selected components of the methodology courses. Constructing valid tests requires considerable teacher skill. The teacher education colleges provide training in how to construct tests in the educational psychology course.

### (5) Other Efforts to Improve the Quality of Teacher Education

A postgraduate diploma in teaching (PGDT) course was introduced under the Special Four-Year Plan to improve access to pre-service teacher training, and to expand the pool of certified primary and middle school teachers. The PGDT course content and syllabus were prepared at a workshop prior to the commencement of the first PGDT.

Entry requirements for candidates include a bachelor's degree (in any field). The syllabus is parallel to that used in the education colleges, but course duration is different. Block teaching in the PGDT is one-week only in the practicing school adjoining the IOEs. The rationale is that the students are older, more mature, and already have degrees. Limited clinical experience is provided throughout the academic year. The PGDT is a one-year course of study with the first semester devoted to the primary level and the second semester to the middle school level.

Teacher incentives include a pay scale, for primary teaching, at the middle school rate. The differential pay scale currently in place, according to the Ministry of Finance and Revenue, is as follows: kyat 4,200 - 4700 for primary level; 4,800 – 5,300 for middle school level; and kyat 5,400 – 5,900 for secondary or high school level. The "ceiling" for each of the respective levels is based on increments of kyat 100 for every two years of service.

## 7.2 Teacher Education System[1]

### 7.2.1 Teaching Credentials and Qualifications

The structure of basic education in Myanmar consists of 5 years of primary schools, 4 years of lower secondary schools, and 2 years of upper secondary schools. A different type of certificate is required to teach at the different levels of basic education.

To qualify as a primary school teacher, one is expected to have a Certificate in Education (formerly called Primary Assistant Teacher Certificate: PAT). This is obtained by attending one-year course at an education college. To be a middle school teacher, a two-year course is required to receive a Diploma in Teacher Education (formerly called Junior Assistant Teacher Certificate: JAT). This is required in addition to the primary school teaching certificate and at least six months of primary school teaching experience. High school teachers are required to have a bachelor's degree, with primary and middle school teaching experience. Master degree holders are able to teach at an education college, regardless of their teaching experiences in Basic Education Schools. A summary of the teaching certificates and the length of training required is shown in **Table 7-3**.

**Table 7-3: Qualification and Requirement of Teachers**

| To be able to teach at | Years of Training | Institution offering the training | Certificate/Degree to be obtained |
|---|---|---|---|
| Primary Schools | 1 year of training course after high school | Education Colleges (Level I and Level II) | Certificate in Education (Cert. Ed.) |
| Primary Schools<br>Middle Schools | 2 year of training course after high school | Education Colleges (Level I) | Diploma in Teacher Education (Dip. T. Ed.) |
| Primary Schools<br>Middle Schools<br>High Schools | After receiving JAT certificate, 2 years of education | Institute of Education | Bachelor of Education (B. Ed.) |
| Primary Schools<br>Middle Schools<br>High Schools<br>Education Colleges | After receiving B.Ed, 2 years of education | Institute of Education | Master of Education (M. Ed) |

The teacher education system in Myanmar went through substantial changes in November 1998, one of which was the re-introduction of pre-service teacher education for the first time after AY 1971-1972, a hiatus of 27 years[2]. Before 1998, 4-year college graduates were nominated to be teachers by the government and after a few years of teaching, they took one-year teacher education course at education colleges to gain knowledge on teaching methodology[3].

[1] In this section, "teacher" is used to refer to a primary, middle, or high school teacher, while "teacher educator" refers to teaching staff (tutor or assistant lecturer) that teach at teacher education institutions, and "trainees" refer to student teachers.

[2] Pre-service training for high school teachers stopped in AY1986-87.

[3] In practice, however, uncertified teachers were also nominated by Township/State education office and approved by Directorate of Basic Education due to the absence of sufficient number of Bachelor

Only 8 % of teachers (PATs, JATs, SATs) had received pre-service training as of AY 1998-99. By AY 1999-2000, the percentage had increased to 11% according to the Government's statistics. The percentage of teachers who received in-service training and received an appropriate teaching certificate was 50.8% in 1999[4]. The number of teachers by level of certificates is shown in **Table 7-4**.

**Table 7-4: Number of Teachers by Level of Certificate**

| | | | Primary School | | | Middle School | | | High School | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Urban | Rural | Total | Urban | Rural | Total | Urban | Rural | Total |
| Headmaster | | Total | **3,133** | **29,865** | **32,998** | **461** | **1,600** | **2,061** | **552** | **352** | **904** |
| | | Female | 1,766 | 14,809 | 16,575 | 265 | 660 | 925 | 276 | 149 | 425 |
| SAT | G9-G10 | Total | **0** | **0** | **0** | **0** | **0** | **0** | **11,114** | **3,816** | **14,930** |
| | | Female | 0 | 0 | 0 | 0 | 0 | 0 | 8,604 | 2,463 | 11,067 |
| | G8 | Total | **0** | **0** | **0** | **308** | **208** | **516** | **319** | **10** | **329** |
| | | Female | 0 | 0 | 0 | 254 | 117 | 371 | 276 | 4 | 280 |
| JAT | Middle | Total | **0** | **0** | **0** | **10,264** | **14,692** | **24,956** | **20,111** | **7,358** | **27,469** |
| | Level | Female | 0 | 0 | 0 | 8,541 | 10,274 | 18,815 | 16,880 | 5,567 | 22,447 |
| | Primary | Total | **12,584** | **15,292** | **27,876** | **1,514** | **1,938** | **3,452** | **1,522** | **718** | **2,240** |
| | Level | Female | 11,197 | 10,581 | 21,778 | 1,341 | 1,428 | 2,769 | 1,304 | 579 | 1,883 |
| PAT | Primary | Total | **13,510** | **50,494** | **64,004** | **3,692** | **8,069** | **11,761** | **3,446** | **2,477** | **5,923** |
| | Level | Female | 12,565 | 39,587 | 52,152 | 3,469 | 6,721 | 10,190 | 3,253 | 2,132 | 5,385 |
| **Total** | | | **29,227** | **95,651** | **124,878** | **16,239** | **26,507** | **42,746** | **37,064** | **14,731** | **51,795** |
| Female | | | 25,528 | 64,977 | 90,505 | 13,870 | 19,200 | 33,070 | 30,593 | 10,894 | 41,487 |

Source: Department of Educational Planning and Training, Ministry of Education, *Education Statistics (March 2000),*

**Table 7-5** shows the percentage of certified teachers to the total number of teachers. As can be seen in the table, all of the high school teachers are certified, for both rural and urban areas. However, at the middle school and primary school levels, only about 48% and 62% respectively are certified as of March 2000.

**Table 7-5: Percentage of Certified Teachers**

| Level of Education | Urban/Rural | Percentage of teachers with appropriate certificate |
|---|---|---|
| Primary School | Urban | 66.23% |
| | Rural | 60.44% |
| | **Total** | **61.97%** |
| Middle School | Urban | 34.10% |
| | Rural | 66.91% |
| | **Total** | **47.82%** |
| High School | Urban | 100.09% |
| | Rural | 100.00% |
| | **Total** | **100.07%** |

Source: Calculated from Department of Educational Planning and Training, Ministry of Education, *Education Statistics (March 2000)*

Degrees.

[4] Government of the Union of Myanmar, Ministry of Education, *Brief Description of Education Reforms,* 31 July 2000

### 7.2.2 Teacher Education Institutions

One of the changes in teacher education made in November 1998 was the re-introduction of pre-service education as mentioned in the preceding section. Other changes included the upgrading of TTCs and Teacher Training Schools TTSs to Education Colleges (ECs), which provides pre-service education, and correspondence in-service education. The Institute of Education (IOE) continues to provide an in-service course, but since June 2001, the IOEs of Yangon and Sagaing respectively have started pre-service training for a bachelor degree course. This has been introduced on a trial basis. A list of all teacher education institutions in the country is shown in **Table 7-6**. The explanation of different training institutions follows.

**Table 7-6: Teacher Education Institutions in Myanmar[5]**

| Level of Institutions | State/Division | Name of Institutions |
|---|---|---|
| IOEs | Yangon | Yangon |
| | Sagaing | Sagaing |
| ECs, Level I | Mandalay | Mandalay |
| | Mon | Mawlamyaing |
| | Ayeyarwady | Pathein |
| | Bago | Toungoo |
| | Yangon | Yankin |
| ECs, Level II | Ayeyarwady | Bogalay |
| | Yangon | Hlegu |
| | Rakhine | Kyaukphyu |
| | Magway | Magway |
| | Mandalay | Meiktila |
| | Sagaing | Monywa |
| | Ayeyarwady | Myaungmya |
| | Kachin | Myitkyina |
| | Kayin | Pa-an |
| | Magway | Pakokku |
| | Bago | Pyay |
| | Sagaing | Sagaing |
| | Shan | Taunggyi |
| | Yangon | Thingangyun |
| UDNR | Sagaing | Ywathitkyi |

#### (1) Education Colleges

##### a) Overview

*Education Colleges (ECs) are under the supervision of DEPT.* The ECs are divided into two categories, Level I and Level II. Level I ECs were formerly called TTCs and Level II ECs were called TTSs. Level I ECs offer teacher education courses for primary school teachers and middle school teachers, whereas Level II ECs offer teacher education courses only for primary school teachers.

[5] A new education college is to be opened in Dawei, Tanintharyi Division in December, 2002.

Level I ECs offers

- A one-year pre-service course for a Certificate in Education (Cert. Ed.) (first-year course) for primary school teachers;
- A one-year pre-service course for a Diploma in Teacher Education (Dip. T. Ed) (second-year course) for middle school teachers, and
- A correspondence course for in-service middle school teachers.

There are five Level I ECs: Mandalay, Mawlamyaing, Pathein, Toungoo, and Yankin[6]. After the first year course, trainees are able to receive Cert. Ed. and after the second year course, they are able to receive Dip. T Ed. Originally, the second year course of Level I EC was to accept only outstanding students who complete the first year course, but the policy has changed to accept all the trainees who complete the first year and who wish to proceed to the second year[7]. After the completion of the second year course, trainees have to serve as primary teachers for at least six months before being promoted to middle school teachers. Trainees may leave Level I ECs after the first year to become primary teachers, but such a scenario is not very common. For example, in Yankin Education College in AY1999-2000, only 20 out of 239 students left the school after the first year of training to become a primary school teacher.

Level II ECs are located in 14 different places in the country, with the exception of some states / divisions such as Chin State, Kayah Sate, and Tanintharyi Division. Level II ECs offer:

- A one-year pre-service course for a Certificate in Teacher Education (Cert. T. Ed.) (first year course) for primary level teachers;
- A correspondence course for in-service primary school teachers.

Students who complete the training course of Level II EC can join the second year course (a one-year pre-service course for Dip. T. Ed) of Level I EC. Many trainees prefer to be enrolled in the second year course, hoping that they will be middle school teachers, and later on, high school teachers. For example, among 49 1st batch[8] students (AY1998-1999) of Myaungmya Education College, only two trainees became primary school teachers immediately following the first year of training, and 47 trainees proceeded to the second year course. This trend seems to continue; out of 76 2nd batch students, only three became primary school teachers and other 73 went on to the second year course.

**Table 7-7** shows the total number of graduates of the training course of all ECs and the

[6] It is planned that four Level II ECs (Sagaing, Meiktila, Taunggyi, and Monywa) will be updated to Level I ECs to accommodate the increase of new entrants to the second year teacher training course.

[7] Basically, education colleges receive all trainees who wish to attend the second year course, however, due to the limited availability of the boarding, only the trainees that can be accommodated in boarding are considered qualified and permitted to stay in EC. The other students are accepted but are required to find boarding outside of ECs. These groups are divided based on their academic marks.

[8] The term "batch" is used to distinguish a group of students who are enrolled at different times. The first students enrolled after the new training system was introduced in 1998 were called 1st Batch students.

percentage of the graduates who work as primary school teachers. Less than 10% of the graduates of the first-year training course work as primary school teachers since ECs opened. This figure indicates that the government's efforts to quickly produce a sufficient number of teachers to meet the goal of "Education for All" have not borne fruit. It can be assumed that a one-year training course is not sufficient to train primary school teachers.

**Table 7-7: Percentage of EC Graduates Who Work as Primary School Teachers**

| Batch | 1st year/ 2nd year | Number of Students who Passed | Number of Graduates currently working as primary school teachers | Percentage of Graduates who work as primary school teachers |
|---|---|---|---|---|
| 1st batch | 1st year | 2,381 | 237 | 9.95% |
| (AY 1998-1999) | 2nd year | 2,132 | 1,332 | 62.48% |
| 2nd batch | 1st year | 3,118 | 300 | 9.62% |
| (AY 1999-2000) | 2nd year | 2,825 | N/A | N/A |

Source: DEPT

**b) Training Schedule**

**Figure 7-1** describes the schedule of Yankin Education College (Level I). During the period of the Special Four-Year Plan (AY 2000-2001 to 2003-2004), which addresses the shortage of certified teachers, all ECs are required to accelerate the certification process and offer the in-service program twice a year, April and August. Since Level I ECs offer both the pre-service course for primary school teachers (first-year course), pre-service course for middle school teachers (second-year course), and correspondence course twice a year, the training schedule is very tight as shown in the figure.

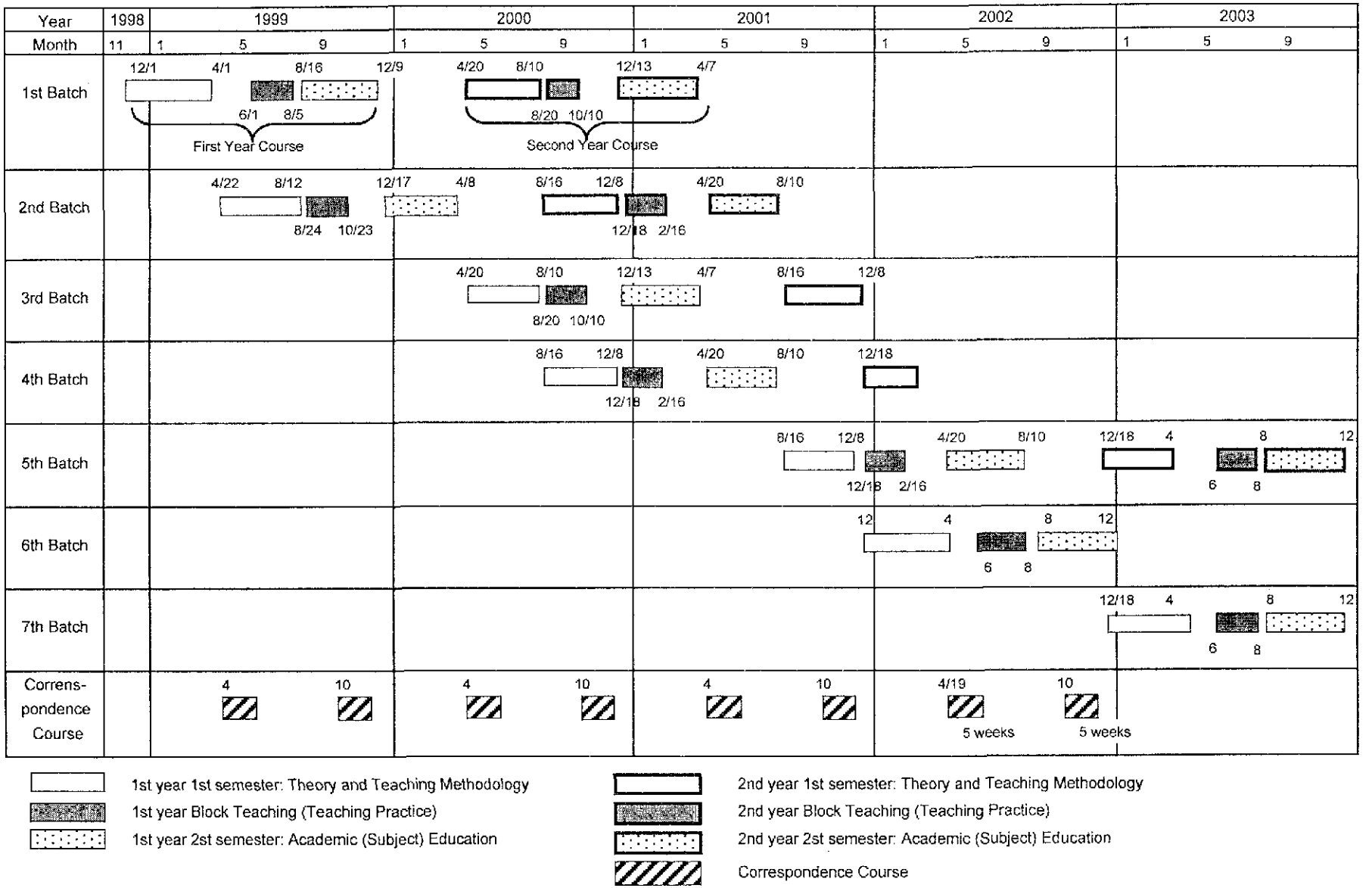



**Figure 7-1: Training Schedule (An example of Yankin Education College)** Source: Information obtained from Yankin Education College

**c) Teacher Educators**

There exists a serious lack of teacher educators in some ECs, particularly for the academic component. For example, in Hlegu Education College, 50 positions have been sanctioned, but, as of April 2001, only 29 had been appointed. The explanation given was because there are too few qualified applicants (with appropriate certificates). When an EC is located near the boarder area, it is very difficult to find personnel who are willing to work in those locations. In such cases, teacher educators from other ECs assist, if feasible, or teacher educators in a particular college have to teach subjects other than their specialization. This is a substantial additional burden for teacher educators.

Teacher educators of teaching methodology course are normally recruited from high school teachers and are required to have working experience as teachers in primary schools, middle schools, or high school[9]. Teacher educators of academic subjects, educational theory, and educational psychology are not required to have field experiences. Teacher educators of Teaching Methodology courses have an average of 15-20 years of experience in teaching (including experience in Basic Education Schools), while those of academic subject have a few years of experience, and no teaching experience in Basic Education Schools[10]. The educational backgrounds of teacher educators are summarized in **Table 7-8.**

**Table 7-8: Educational Attainment of Teacher Educators (2000-2001)**

| Age / Degree | Level I COE | | | | | Level II COE | | | | | Total | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | -30 | -40 | -50 | +51 | Total | -30 | -40 | -50 | +51 | Total | -30 | -40 | -50 | +51 | **Total** |
| Ph D | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **0** |
| Master | 13 | 27 | 16 | 10 | 66 | 15 | 65 | 15 | 5 | 100 | 28 | 92 | 31 | 15 | **166** |
| B.Ed | 0 | 6 | 66 | 60 | 132 | 1 | 25 | 107 | 80 | 213 | 1 | 31 | 173 | 140 | **345** |
| B.A./B.Sc | 6 | 4 | 2 | 2 | 14 | 11 | 15 | 14 | 5 | 45 | 17 | 19 | 16 | 7 | **59** |
| Other | 0 | 5 | 4 | 10 | 19 | 0 | 14 | 8 | 29 | 51 | 0 | 19 | 12 | 39 | **70** |
| **Total** | **19** | **42** | **88** | **82** | **231** | **27** | **119** | **144** | **119** | **409** | **46** | **161** | **232** | **201** | **640** |

Source: DEPT

Principals of ECs normally have working experience in several other ECs, before being promoted to principal[11].

As regards professional development of teacher educators, occasional workshops and training courses have been conducted by external agencies, namely UNDP/UNESCO as described in **Section 7.1.1.** and by the government.

College-based efforts can also be seen. Myaungmya Education College conducted mini-workshop once (4 hours) a week for two years. The teacher educators and teachers of

[9] Many teachers have field experience, but it was found from the discussion that not all teacher educators are accustomed to the situation of the rural schools.

[10] This is because the academic subject course was newly introduced in 1998.

[11] For example, the principal of Pathein Education College has experiences working as a teacher educator of Mandalay EC, Headmaster of high school in Sagaing Division, TEO in Kachin, Head of Curriculum Division of DEPT.

practicing schools discuss various teaching methodologies and techniques, and share their experiences. This workshop is purely the initiative of the college and the impacts are quite prominent in their active teaching-learning process.

Nevertheless, opportunities for professional development are quite limited. Only a limited number of teacher educators were able to attend the training or seminars. For example, in one EC visited by the Study Team, only three out of 14 teacher educators had received any training to improve their skills and knowledge in the last 10 years. The extension of what they learned from training to other teacher educators does not seem to be realized either. Clearly, the cascade style, or multi-layer training that expects the representatives who attend the central training be the trainers for other teacher educators is not working.

This is a serious difficulty especially when the country is trying to improve the quality of basic education at the level of international standards and to introduce new method of teaching, because these changes require fundamental behavioral changes of all the personnel concerned. It seems that the lack of information and training hinders smooth dissemination and application of the concept in the real situation.

Another constraint in professional development is the current compressed schedule of teacher education. As can be seen in **Figure 7-1**, training courses are offered without holidays and vacation. Teacher educators are unable to spend time for extra training if any, and furthermore, they tend to be less motivated to initiate self-study.

**d) Facilities / Equipment**

Most ECs are equipped with a library, a science laboratory, a language laboratory and a multi-media classroom, but the availability of equipment and apparatus is, in many cases far from sufficient. All ECs are equipped with some teaching aids such as OHPs and TVs, but due to the electricity problem, maybe in fear of breaking the equipment or lack of knowledge on how to use, they cannot be utilized to a maximum. In a newly founded education college, no library, no science laboratory, and no assembly hall were found. Some of the EC buildings are in need of large-scale maintenance; roof, fence, drainage in the area, and so on.

Among all, the first priority should be placed on the improvement of the science laboratory. Most of the trainees have no experiences in science experiment in the laboratory before they join the training course, and it is a minimum requirement for them to familiarize themselves with the basic concept of experiments and experiments to be conducted in primary schools. Unfortunately most of the current science laboratories of ECs are poorly equipped and are in need of improvement.

**e) Instructional Materials**

The greater needs for improvement are found in teaching aids. The lack of teaching aids is a major obstacle to the effective teaching-learning process of EC. Multi-media equipment

can be an effective tool when lessons need to be conducted in a large class. The use of multimedia in the classrooms to improve teaching and learning has been promoted in Myanmar's education reform initiatives since 1998. Some of the constraints that the teacher educators face in using multimedia are the absence of a consistent supply of electricity, the shortage of materials such as videotapes and other media, and the lack of knowledge on how to use them effectively[12].

Sufficient teaching materials for child-centered learning should be available in ECs so that the use of various teaching and learning materials are understood by all trainees. Some ECs have difficulties in purchasing these materials themselves, not only because of the lack of funding, but also because of unavailability of the materials in their respective towns.

The other resource urgently needed is reference books for all subjects. Most EC lack reference books for newly introduced academic subjects and the recent publications (books and educational journals) on pedagogical issues. Even when a library is equipped, only K2,000 / year or K4,000 / year is provided for maintenance by DEPT, with which only few books can be purchased.

**f) Cost and Budget**

Pre-service trainees of ECs have to pay for several items such as;

- School fees: K 120 / month
- Hostel and Food: K 1,000 / month
- Exam fees: K 50 / year
- Laboratory practice: K 60 / year (for science-major stream only)

The above fees are collected from students and handed over to DEPT. Then, DEPT will redistribute the budget to each EC, based on the number of the trainees. The budget that ECs can manage freely is limited to K 50 / year per student collected as school council fees[13]. In some colleges, extra income is sought through student donations and income generating activities such as selling calendars and college goods. These can be used as purchasing necessary materials or teacher incentives. When maintenance, new installation or construction is required, the EC makes a proposal and submits it to DEPT, in advance for the development fund, but the budget allocated is always smaller than required according to the feedback given to the Study Team.

Textbooks are sold to trainees, but the teachers' manual used in the schools can be lent to

[12] Initiatives, on another level, include using some of the Ministry of Information's (MOI) large satellite broadband capacity. The MOE has negotiated with the MOI to get some of the brand width, which has resulted in establishing 203 learning centers in Myanmar. The original purpose was to improve the teachers, but in the future it is expected to be the hub of community learning centers. The goal is to promote lifelong learning through distance education. The MOE plans to have 400 learning centers by the year 2002.

[13] This part is based on the information obtained from the interview with administration staff of Yankin Education College.

students before block teaching. During the training courses, trainees are requested to create several teaching-learning materials. The costs of these are assumed by trainers and trainees, which can be a burden for trainees especially those who come from rural areas.

For the trainees of correspondence courses, the township prepares a place to stay. Usually, high schools buildings nearby ECs are used as a hostel. Trainees pay their own transportation costs between their hometowns to ECs, but a full salary is paid during the training period.

### (2) Institutes of Education (IOEs)

The Institute of Education (IOE) is under the Department of Higher Education (DHE). There are two IOEs; IOE of Yangon, and IOE of Sagaing. The IOE of Yangon mainly targets students of Lower Myanmar, and the IOE of Sagaing targets those of Upper Myanmar who wish to pursue a bachelor's degree, which is required to be a high school teacher. In AY 2000, the IOE Sagaing received 300 students and The IOE Yangon received 500 students out of the total of 3,500 Level I EC graduates. Though the IOE and the EC have different supervising department (DHE and DEPT), the IOEs play a role as both academic and professional bodies of the ECs, and are involved in the curriculum development of the ECs.

The IOE provides the following training programs:

#### a) B.Ed course

IOEs provide a two-year correspondence course (including a one-month intensive course per year), and a four-year pre-service B.Ed course. The former course accepts JAT certified teachers and primary school principals (a total of 600 trainees a year). On a trial basis, from June 2001, both IOEs started a four-year pre-service (two years of training equivalent of EC Level I courses, plus two years of IOE courses) for a bachelor degree, with 50 students who scored high marks on Basic Education High School (BEHS) Examination. The high scorers will be trained to be senior teachers and future teacher educators of the IOEs and ECs, if they proceed to M. Ed course.

#### b) M. Ed course

A two-year course is granted to students with B. Ed. who wish to continue further study.

#### c) Diploma course

The following 10-month two diploma courses were created under the guidance of CHRD (Center for Human Resource Development) of NCHRD (National Center for Human Resource Development), starting AY 1999-2000. Both programs target bachelor degree holders who are not older than 30. How these courses were developed is shown in **Figure 7-2.**

**Post Graduate Diploma in Teaching (PGDT)**

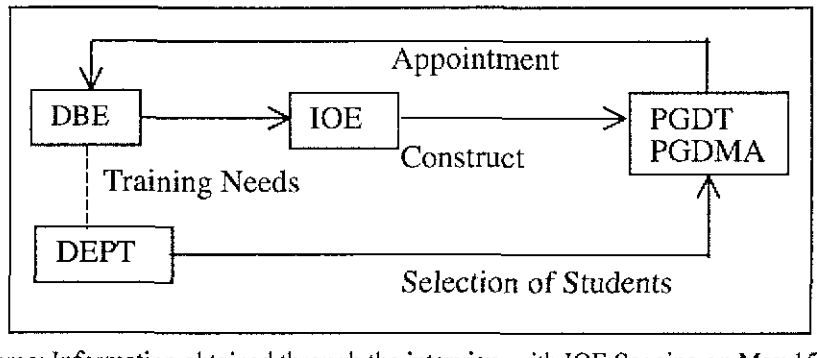
The PGDT course accepts students who hold bachelor degrees. After the completion of

this course, trainees shall be conferred with a Postgraduate Diploma of Teaching and be appointed as middle school teachers. In the PGDT course, all the courses for methodology and academic courses are included in the training. For the PGDT course, the emphasis is placed on child psychology, while the emphasis is placed on adolescent psychology in B.Ed course. During the 1st semester, trainees conduct block teaching at primary schools, and during the 2nd semester, they conduct block teaching at middle school level. Teachers who complete PGDT are paid as middle school teachers even if they teach at primary schools.

**Post Graduate Diploma in Multi-media Arts (Education) (PGDMA)**

PGDMA is made up of two modular courses and a final one-month session to consolidate the two modules. This final consolidation session will be mainly concerned with information technology and pedagogy to meet the human resource development needs of the education sector. After the completion, trainees will be awarded the Postgraduate Diploma in Multi-Media Arts (Education) by the CHRD of the IOE.

These two diploma programs are created to meet, in a flexible manner, the shortage of teachers in particular areas, such as science and multi-media. The following figure shows how the training course was constructed.




Source: Information obtained through the interview with IOE Sagaing on May 15, 2001

**Figure 7-2: Stakeholders in Training Programs**

**d) Certificate Program**

The following four certificate programs are offered:

- English speaking and Grammar
- Business English
- Basic Computers
- Advanced Computers.

Those who pass the matriculation examination can join this three-month (6 hours/week) course,

Besides the above program, Yangon IOE is currently working on creating a Ph.D. course, and Sagaing IOE will follow in the future.

### (3) UDNR (University for the Development of National Races)

There is one UDNR in Ywathitkyi in Sagaing Division. It was formerly called the Academy for the Development of National Groups, founded in October 1964 under the Basic Education Department. In effect from November 1 1988, it has been under the administration of the Public Services Selection and Training Board. UDNR is responsible for the training of youth from all the different indigenous ethnic groups to become teachers and community leaders, especially for remote and border areas.

The UDNR provides a curriculum similar to other ECs, but it differs in terms of the intake of trainees and the length of the training: It accepts students who finish 8th grade because of lower enrolment in high schools in the boarder areas. The training period lasts for three years, and after the completion of the course, trainees are granted a Cert. Ed. and are able to proceed up to the B. Ed. Course.

## 7.2.3 Teacher Education Programs

### (1) Pre-service Teacher Education Program[14]

#### a) Overview

As noted earlier, pre-service teacher education for primary school teachers, which was introduced in December 1998, is conducted at Level I EC, Level II EC, and UDNR. In Level I ECs, a two-year course is offered: the first year is for the training of primary school teachers and the second year is for the training of middle-school teachers. Level II ECs, on the other hand, offers only one-year course for Cert. Ed.

The students who passed the BEHS Examination can be admitted to the one-year pre-service teacher education course for Cert. Ed. Those who proceed to the second year course, after completion will earn Dip. T. Ed. and be appointed as middle school teachers. From the graduates of the second year course, the qualified ones shall be selected to continue to the 3$^{rd}$ and 4$^{th}$ year course at the IOE.

In addition to the regular training course mentioned above, some divisions have a special program of teacher education. In the Ayeyarwaddy Division for example, there is a four-month special program created by the order of the chairman of the Division. The training course is for those who complete high school, offering four-months courses including one-month of block teaching at primary schools. This program is only for this division and aims at producing teachers in a shorter period in order to cope with the shortage of teachers in the area.

[14] In this section, emphasis is on the pre-service teacher education program at the primary level.

**Table 7-9: Education Colleges Curriculum (First Year)**

1) First semester (16 weeks)

| Subjects | Periods Per Week | | | Total No. of periods for the Semester | Credit Unit |
|---|---|---|---|---|---|
| | Lecture | Tutorial / Practicum | Total | | |
| Educational Theory | 3 | 2 | 5 | 80 | 4 |
| Educational Psychology | 3 | 2 | 5 | 80 | 4 |
| Teaching Methodology of Myanmar | 2 | 2 | 4 | 64 | 3 |
| Teaching Methodology of English | 2 | 2 | 4 | 64 | 3 |
| Teaching Methodology of Mathematics | 2 | 2 | 4 | 64 | 3 |
| Teaching Methodology of Natural Science & Basic Science | 2 | 2 | 4 | 64 | 3 |
| Teaching Methodology of General Studies & Social Studies | 2 | 2 | 4 | 64 | 3 |
| Teaching Methodology of Physical Education | 1 | 6 | 7 | 112 | 1 |
| Teaching Methodology of Industrial Arts / Domestic Science | 1 | 1 | 2 | 32 | 1 |
| Teaching Methodology of Agriculture | 1 | 1 | 2 | 32 | 1 |
| Teaching Methodology of Fine Arts | 1 | 1 | 2 | 32 | 1 |
| Teaching Methodology of Music | 1 | 1 | 2 | 32 | 1 |
| **Total** | **21** | **24** | **45** | **720** | **28** |

2) Practicum Session (Block Teaching + Assessment) 8 weeks 2 credits

3) Second semester (16 weeks)

| Subjects | Periods Per Week | | | Total No. of periods for the Semester | Credit Unit |
|---|---|---|---|---|---|
| | Lecture | Tutorial / Practicum | Total | | |
| Myanmar | 3 | 2 | 5 | 80 | 4 |
| English | 3 | 2 | 5 | 80 | 4 |
| Mathematics | 3 | 2 | 5 | 64 | 4 |
| Physics / History | 3 | 2 | 5 | 64 | 4 |
| Chemistry / Geography | 3 | 2 | 5 | 64 | 4 |
| Biology / Economics | 3 | 2 | 5 | 64 | 4 |
| Physical Education | 1 | 6 | 7 | 64 | 1 |
| Industrial Arts / Domestic Science | 1 | 1 | 2 | 112 | 1 |
| Agriculture | 1 | 1 | 2 | 32 | 1 |
| Fine Arts | 1 | 1 | 2 | 32 | 1 |
| Music | 1 | 1 | 2 | 32 | 1 |
| **Total** | **23** | **22** | **45** | **720** | **29** |

Source: DEPT, MOE, *Education Colleges Curriculum and Syllabus for Certificate in Education (First Year) 1998*

**b) Curriculum**

The curriculum of ECs for primary teacher education is divided into three parts; First Semester (education theory, education psychology, and teaching methodology), Block Teaching (Teaching practice at primary schools), and Second Semester (academic subjects).

Since the beginning of AY1998/1999, the credit system with modular approach has been introduced for the system of marks, and it applies to all EC and IOEs. Trainees are evaluated by the assignments and tutorials (60%) and the final exam (40%). The former includes the results of quizzes and other work. When trainees get low marks in the semester end exam, they are given remedial lessons and another exam until they pass. This means that there are no failed students. The length of the remedial teaching can be determined by teacher educators of the concerned subject. The number of the periods and credit units for each subject is shown in **Table 7-9**.

**First Semester**

The first semester lasts four months. The following contents were included.

- Educational Theory and Psychology
- Theory on teaching methodology
- Basic techniques on how to prepare a lesson plan, teaching-learning materials, and evaluation
- Examples of syllabus and lesson plans of primary school curriculum

Lessons are conducted in both the lecture session and tutorial/practical session. Tutorial / practical session is designed to include quizzes, experiments, practices and physical exercises, but mostly conducted in an examination style.

Though this is the only occasion that trainees learn pedagogy and methodology, unfortunately, most of the classes in ECs are currently taught in lecture style that forces rote learning and there is an urgent need for changes. The textbook on educational theory includes examples of 21 teaching techniques to promote active learning in the classroom; however, very few are actually practiced in the classes of ECs.

**Block Teaching**[15]

Block Teaching takes place between the first semester (teaching methodology course) and the second semester (academic subject course). Two months are allocated to block teaching. Block teaching is currently conducted in the regular school located in the trainees' hometown, but not in the practicing school due to the large number of trainees.

The township Education Officer (TEO) plays the role of a supervisor for the trainees, not the teaching staff of ECs that trainees belong to. Some teacher educators pointed out that there

[15] An action research was conducted to analyze the current situation for block teaching by MBESS Team. For the detail, please refer to the report on "*Action Research on Block Teaching-Review of Current Practice and Some Suggestions.*"

is no direct contact between EC and TEO/ATEO nor is an orientation conducted for principals of block teaching schools[16]. In such a situation, supervision of block teaching can be weak. Teacher educators of ECs think that block teaching should be supervised by EC, but currently only schools that are located far from ECs are selected for block teaching practice, which makes the supervision by ECs difficult[17].

**Second Semester**

In the second semester trainees are taught academic subjects, which were newly added to the teacher education course after 1998. The contents of the academic course taught in ECs are the concise version of the first year course of other universities. Trainees are divided into a science and art stream based on the marks on the BEHS Examination.

Except the compulsory subjects (Myanmar, English, and mathematics), trainees are able to select three subjects from the following combinations.

| |
|---|
| Option 1: Geography, History, Economics |
| Option 2: Geography, History, Optional Myanmar |
| Option 3: History, Economics, Optional Myanmar |
| Option 4: Economics, Physics, Chemistry |
| Option 5: History, Physics, Chemistry |
| Option 6: Physics, Chemistry, Optional Myanmar |
| Option 7: Physics, Chemistry, Biology |

This streaming was already introduced to high schools in AY2000/2001, and ECs followed it to accommodate this change. This, however, would seriously limit the trainees' knowledge on academic subjects, because it will produce teachers with the subject matter knowledge of only middle school level for certain subjects. Considering that primary school teachers, in many cases, need to teach all subjects, they need to be taught various subjects at a certain level. For that matter, the selection of subjects in education colleges needs to be reconsidered.

Considering the above issues, careful examination of the appropriateness of the contents for the academic subjects may be required in the near future to align it with the necessary academic competency of teachers.

Another area for improvement is the daily schedule. The following **Table 7-10** describes the schedule all of the trainees have to follow. With the current schedule of ECs, trainees barely have time to do some activities, even to look for supplemental information in the

[16] The major problem that the principal mentioned is that assignments of the practicing schools made by TEOs are not always appropriate. Trainees may be sent to schools where there is a problem of insufficient number of teachers and therefore trainees cannot receive sufficient supervision from the teachers or principals of those schools.

[17] It is well assumed that TEOs or ATEOs do not have enough time to visit all the schools to supervise all the trainees, and may need to delegate responsibilities to the headmasters of block teaching schools.

library. In improving lessons of ECs to be more learner-centered, more flexible time scheduling need to be introduced, so that trainees are able to engage in activities such as individual research, writing essays, observation, and group work.

**Table 7-10: Daily Schedule of Pre-service Training**

| Time | Schedule |
|---|---|
| 5:00- | Rising |
| 6:00-6:50 | Physical Education |
| 7:00-7:50 | Co-curricular Activities |
| 8:00-8:30 | Free Time |
| 8:30-9:00 | Breakfast |
| 9:15-9:30 | Assembly |
| 9:30-12:50 | Lectures |
| 12:50-13:20 | Lunch Break |
| 13:20-16:00 | Lectures |
| 16:00-16:50 | Co-curricular Activities |
| 17:00-18:30 | Dinner |
| 18:30-19:00 | Free Time |
| 19:00-21:00 | Study |
| 22:00- | Bed Time |

Source: Mandalay Education College Brochure

## (2) In-service Teacher Education Program

As a part of the solution to the backlog of the untrained primary and lower secondary teachers, one-year distance learning through correspondence, has been introduced since the AY year 1978-79 for primary school teachers and since 1995-96 for middle school teachers. The face-to-face intensive courses are conducted for five weeks in April and May.

### a) Overview of Correspondence Course for Primary School Teachers

By the end of the Special Four-Year Plan (AY 2003-2004), it is anticipated that all teachers will be certified. As mentioned above, many teachers are currently being trained in a short course (five weeks) and all correspondence courses are very intensive, which raises the issue of quality.

### b) Curriculum

The correspondence course is composed of assignments before the beginning of the course, five weeks of face-to-face intensive courses, and the final examination. Three or four months before the course starts (usually in June), assignments for each subject are sent to the trainees by mail and trainees submit them in August when the intensive course starts. These assignments are made mainly for previewing textbooks before the classes start. Most of the assignments can be completed by reading textbooks. There is little feedback given to trainees about the assignments. After the intensive course, assessment is made based on the

assignment before the course, written exam, and discipline (attendance and attitude). After the five weeks, there will be no more follow-up training by correspondence.

As shown in **Table 7-11**, the in-service curriculum consists of methodology courses (educational theory, educational psychology, methodology of teaching English, Myanmar, mathematics, basic/natural science, general studies, and social studies), plus co-curricular content. Academic content is not taught. Given the compressed scheduling required by only a five-week format, all the courses are covered, but only selected content from each is presented. Despite the limitation of the training period, the training is positively conceived by the participants. Many trainees that the Study Team interviewed mentioned that what they learned at the correspondence course is very useful and they would like to apply it when they return to their schools.

**Table 7-11: Contents of Correspondence Course for Primary School Teachers**

| Name of Subjects | Number of Period (45 minutes) |
|---|---|
| **Training Subjects** | |
| Education theory | 12 |
| Education psychology | 12 |
| Teaching methodology of Myanmar Language | 18 |
| Teaching methodology of English Language | 20 |
| Teaching methodology of Mathematics | 20 |
| Teaching methodology of Natural Science and Basic Science | 14 |
| Teaching methodology of General Studies and Social Studies | 14 |
| Teaching methodology of National Sprit | 3 |
| **Sub-Total** | **113** |
| **Co-curriculum** | |
| Teaching methodology of Agriculture | 11 |
| Teaching methodology of Industry / Home Economics | 11 |
| Teaching methodology of Fine Arts | 11 |
| Teaching methodology of Music | 11 |
| Teaching methodology of Physical Education (theory) | 11 |
| Teaching methodology of Physical Education (practice) | 22 |
| **Sub-Total** | **77** |
| **Teaching Approach** | |
| Demonstration Teaching | 10 |
| Making Teaching Aids | 10 |
| Workshop for Using Teaching Aids | 10 |
| **Sub-Total** | **30** |
| TOTAL | **220** |

**c) Other In-service Training**

**Township-based training**

Township-based training started in AY 2000-2001. The training targets uncertified senior assistant teachers and headmasters of high schools and is conducted during the weekends, totaling 12 days of training. This training program will be offered at the township level

using high schools as training centers. During January to November 2001 Total of 5,077 primary teachers were trained.

**College-based training**

College-based teacher education started in AY2000-2001. It targets primary and middle school teachers, and primary school headmasters. The training is conducted on weekends and holidays for five months. The contents are the same as the correspondence course and the 1st semester of pre-service training, that is, the emphasis is placed on teaching methodology.

**Other training**

In addition to the regular training program mentioned above, Pathein, Mytikna and Taunggyi Education College offer one-month and three-month in-service courses for teachers in the border areas. The one-month course is for teachers and general workers of schools who have experiences in teaching but do not have a certificate. The three-month course is for those who have neither teaching experience nor a certificate. After the training, they are expected to teach in their native places. The training courses are short because these areas are facing teacher shortage.

There is no special training for supervision, management, or administration, intended for headmasters. These topics are included only in the "Education Theory" that is taught in all teacher education courses (pre-service, correspondence, college-based and township-based training).

### (3) Teaching-Learning Process of the Teacher Education Programs

Based on brief observation of classes of both pre-service and in-service courses at selected education colleges, the following common issues, relating to the quality of training, were raised. The schedule of the current teacher education programs may meet target with respect to the **quantity** of certified teachers, nevertheless, it may not ensure that all trained teachers are **well qualified**.

#### a) Overloaded Training with Too Many Trainees

The class size is quite large, especially for the correspondence course as shown in **Table 7-12.** This big class (section) size and the large number of intake for one batch make it difficult to control the quality of the training.

Due to the large size of sections, teaching style in teacher education is mostly limited to lecture style or demonstration style, where a teacher demonstrates in front of a big lecture hall or auditorium. As a result, rote learning and memorization, which are expected to be replaced by a more learner-oriented teaching style, still prevail in many classes.

The lack of the classroom, facilities and teaching materials inhibits effective education as noted earlier. For example, there is only one microscope in a science laboratory for about

70 students, and a group of students take turns to use it (in Mandalay Education College).

**Table 7-12: Number of Trainees in Education Colleges**

| Level of Institutions | Name of Institutions | Number of Trainees Pre-service First Year Trainee (Batch 4) | Number of Teaching Staff 2000-2001 | Remarks |
|---|---|---|---|---|
| ECs Level I | Yankin | 264 | 64 appointed | |
| | Mandalay | 211 | 53 appointed out of 62 posts | |
| | Mawlamyaing | 100 | 40 appointed out of 72 points | 1,644 correspondence course trainees (AY2000) |
| | Pathein | 90 | 40 appointed | |
| | Taungoo | 77 | 34 appointed out of 54 posts | |
| ECs Level II | Kyaukphyu | 175 | 18 appointed | |
| | Sagaing | 235 (4 sections) | 28 appointed | 889 (14 sections) correspondence course trainees (AY2000) |
| | Taunggyi | 302 | 30 appointed | |
| | Pakokku | 283 | 30 appointed | |
| | Pyay | 239 | 24 appointed | |
| | Bogalay | 183 | 32 appointed out of 57 posts | 971 correspondence course trainees (AY2000) |
| | Pa-an | 149 | 23 appointed | |
| | Magwe | 300 | 29 appointed | |
| | Monywa | 266 | 32 appointed | |
| | Myitkyina | 280 | 22 appointed out of 28 posts | 375 (2 sections) correspondence course trainees (AY2000) |
| | Myaungmya | 183 | 29 appointed out of 30 posts | 816 (2 section) correspondence course trainees (AY2000) |
| | Meikhtila | 355 | 40 appointed | |
| | Hlegu | 209 | 28 appointed out of 50 posts | 858 (9 sections) correspondence course trainees (AY2000) |
| | Thingangyun | 259 (5 sections) | 41 appointed out of 42 posts | 780 (10 sections) correspondence course trainees (AY2000) |

Source: Information obtained from each Education College and from DEPT

Correspondence courses are often conducted using high school buildings near the concerned ECs, and in such cases, it is difficult to arrange the necessary facilities and teaching aids such as science laboratories or audio-visual equipment for the training. Among the training courses that the Study Team observed, a hall of one high school was used to teach two

sections of correspondence course trainees. There was neither furniture nor a blackboard. Two groups of trainees sit on the floor facing the opposite side of the wall, and part of the wall was utilized as a blackboard. In another case, two sections in two classrooms were taught by one teacher educator, which means that she had to move from one classroom to the other frequently.

The lack of teacher educators compared with the number of trainees is another problem. In many cases, high school teachers or middle school teachers substitute teacher educators of ECs to teach correspondence courses, especially when the courses are offered using high school buildings. These teachers usually do not receive particular training before the course except some orientation session conducted by the TEO or teacher educators of ECs. Teachers are normally selected by the headmasters, and leave-credit is given, nevertheless, it can be said that the teacher education system is supported by the voluntarism of the concerned personnel. This may relate to the issue of the quality of teachers.

**b) Insufficient Training Period**

One difficulty of the correspondence program in achieving the objectives and goals of the training program is the length of the program. Many subjects and topics are included in the five-week course, and therefore an insufficient amount of information is given for some subjects. Particularly teacher educators of science subjects expressed their concerns that correspondence course trainees do not have time to conduct science experiments in the teaching methodology course. Also teacher educators are facing difficulties to motivate trainees who have been teaching in the same style for many years to change their teaching style during the short course.

**c) Importance of Exposure to International Experiences**

Some exceptionally good lessons were observed in both pre-service and in-service training courses despite of all the difficulties described above. Teacher educators who conduct such lessons are those who have received some training either from UNESCO, UNICEF, or JICA without exception.

### 7.2.4 New Direction in Teacher Education

From the MOE's perspective, training uncertified teachers is the current most pressing issue in teacher education, and by the end of AY 2003-2004, correspondence courses will have been offered to all the uncertified teachers. It is not clear yet whether the in-service training will remain after that.

In primary schools, a program to include G5 and G6 in primary education will be introduced in AY 2001/2002 in 180 primary schools in upper Myanmar. The program aims at reducing the dropouts at the completion of G4 particularly in the area where no middle schools are available. Therefore, schools in rural areas where the access to middle schools is difficult will be selected in this program. Also, only schools with a sufficient number of teachers and classrooms (at least 150 students and six teachers) are to participate in this program. This program is

conducted not as a trial but is expected to be implemented widely in the future. This initiative has a major impact on teacher education in that primary school teachers need to teach the middle school level. In other words, as this practice is introduced more widely, a new problem of uncertified teachers will arise because primary school teachers need to have the next level of certificate, Dip. T. Ed. Even now, most trainees who graduate the first year course proceed to the second year training course before serving as primary school teachers. One consideration may need to be made: providing the same amount of training and status to both primary school teachers and middle school teachers may be necessary so that they can serve both levels of schools.

## 7.3 Issues and Strategic Directions

### 7.3.1 Policy Issues and Systemic Reform

Myanmar's teacher education system is centrally planned and administered. This situation has direct implications for the degree to which changes can be introduced and implemented. The MOE's education reform efforts, within the context of meeting the goals of Education for All (EFA), began in AY 1998-99. These, and the education programs subsequently announced each year, aim to develop the country's human resource base in order to promote the national agenda.

Within the context of teacher education, the allocation of resources, including human resources, to meet the objectives of the education promotion programs, has not been sufficient to support their full implementation. For example, a critical resource is time, and there was insufficient time between promulgation of the reform and its implementation to develop a coherent and well thought-out strategy for teacher education, especially with respect to the pre-service component. Another resource that has been lacking is qualified staff, especially academic teaching staff, in the pre-service program.

The purpose of this section is to identify some major issues that require systemic reform.

#### (1) Standards and Indicators

The MOE's reform initiatives with respect to standards offer considerable promise. One of the five objectives of the MOE's Special Four-Year Plan is to "create an education system that is on a par with that of international standards and keeping abreast with that of developed countries in South East Asia."[1] International practice brings with it a solid research base on how students learn and the conditions necessary for such learning to take place.

In keeping with international practice, the development of standards and benchmarks should involve consensus building at all levels of the education community, especially teacher educators, teachers, and parents. The Government of Myanmar has committed itself to change in the education sector. The way the changes are implemented, and the degree to which all the actors are involved, will determine the outcome in terms of a quality basic education for all its citizens. Developing a strategic plan for the 19 teacher education could be a first step in this direction.

Standards should be based on the reality of Myanmar's schools, especially conditions in schools in the rural ands remote areas. Given current teacher shortages in primary education, many of the trainees will be appointed to those schools. An example of a "reality-based" standard for quality improvement is teacher competence in multi-grade and multi-age teaching strategies. Skills in multi-grade and multi-age (reflecting over-age and under-age children in the respective grades) include classroom management and classroom organization skills. Another standard would address the implications for teachers of the absence of instruction in the child's mother tongue in the lower primary grades (KG-G2).

[1] Government of the Union of Myanmar, Ministry of Education, *Basic Education in brief* Department of Basic Education (1), Yangon, September 2000.

Assessment procedures are of the utmost importance to qualitative improvements in teacher education and in the basic education schools. Since 1998, a credit system has been substituted for the system of marks. The allocation of weights to the respective components (tests, attendance, etc.) ensures that trainees do not fail. This applies both to pre-service and in-service trainees. Building on the credit system, reform initiatives should include identifying levels of competence in the respective skill areas, and developing a system for monitoring learning achievement within those areas.

The teacher education system's external efficiency can be determined, for example, by surveying the status of former trainees with respect to their employment and, if they have been appointed as teachers, their professional competence (criteria would have to be determined). In cases where the trainees have decided not to teach, even though having earned a certificate or diploma, the reasons should be ascertained. Feedback would provide the teacher education colleges, and the DEPT, with valuable information about the system's efficiency.

### (2) Shortage of Staff

An issue related to the overall quality of the teacher education program is the shortage of teaching staff, especially in the academic areas, a fact well documented by the study team. The serious gap between "sanctioned" and "appointed" teaching staff has resulted, for example, in large classes and overworked teacher educators, which negatively affects teaching morale.

An issue related to the shortage of staff at the teacher education colleges (there are insufficient number of candidates with master's degrees at the present time) is the dual responsibility for teaching the huge backlog of uncertified teachers through the five-week in-service teacher education. It was reported that sections of the in-service program are taught by high school teachers because of the shortage of staff. This affects program quality.

### (3) Sequencing and Balancing of Program Components

In the 19 teacher education colleges, the course of study includes two components, the training component and the academic component, each four months in length, plus the block teaching component, which is two months in length. The training or professional courses[2] area taught in the 1st semester. The academic courses[3] area taught in the 2nd semester. Block teaching takes place between the 1st semester and the 2nd semester.

In May 1998, the MOE decided that pre-service education would be reinstated, after a hiatus of almost thirty years. Pre-service commenced in December 1998 (pre-service at the teacher training schools and colleges was stopped in AY 1971-72). The short planning time available to the teacher education colleges is the rationale for a pre-service program that begins with

[2] The training or professional courses include educational theory, educational psychology, and the methodologies for teaching the curriculum (Myanmar, English, mathematics, general studies (KG-2); for grades 3 and 4, basic science and social studies.

[3] The academic courses for primary education include Myanmar, English, mathematics, physics, chemistry, biology, economics, history, and geography.

methodology and ends with content, and block teaching in the middle. This is not consistent with international practice.

In the short-term, it is proposed that the highest priority should be assigned to an analysis of the sequencing of the course components.

### (4) The Trainee's Curriculum Schedule

At present, the structure of the day for the pre-service trainee does not allow for flexibility, in terms of allocation of time, to meet the course aims of the respective colleges. These include conducting research, developing skills in working with the community, especially parents, and being competent and effective teachers, with a strong knowledge of subject areas, as well as skilled in methodologies in how to teach.

Field-based experiences, including observation of students in classes (e.g., in the practicing school), working one-to-one with a student or a small group of students, observing other educational institutions, visiting resource centers such as museums or libraries, are not currently possible because of the trainees' schedule.

Principles of adult learning (pre-service trainees are between 16 and 25 years of age), and what is known about the learning process itself (which requires time for reflection and integration), plus the need for field-based experiences, dictate an adaptation of the trainee's curriculum and daily schedule.

### (5) Effects of Proposed Policy Changes on Teacher Subject-Area Knowledge

The current situation (through AY 2000-2001) requires that trainees are "streamed" into either the arts or the science curriculum, based on their $10^{th}$ grade matriculation examination results. Students with the highest scores in physics, chemistry, and biology are streamed into the science curriculum. This means that teacher trainees streamed into the arts curriculum would not be eligible to take courses in the science department. Approximately 50 percent of the trainees do not have access to academic courses in the science area. The only training they receive is through the semester I course in teaching methodology of science.

Beginning in AY 2000-2001, students exiting grade 8 will have the option of being streamed into one of seven combinations of courses. Mathematics, English, and Myanmar language are compulsory subjects. Three of the seven streams[4] do not include any course in science.

The education colleges plan to align their program, with respect to streaming, with that of the high schools and other colleges. The rationale for this is that the education colleges need to prepare students to for the bachelor degree program at the Institutes of Education (YIOE and SIOE).

[4] The streams include (a) physics, chemistry, biology; (b) physics, chemistry, history; (c) geography, history, economics; (d) physics, chemistry, economics; (e) physics, chemistry, additional Myanmar; (f) geography, history, additional Myanmar; (g) economics, history, additional Myanmar.

The cumulative effect of this change would be that some of the trainees, in the future, will not even have had benefit of a science course in high school. Their knowledge base, therefore, will be negatively affected and their competence to teach also negatively affected. This situation does not promote quality education in Myanmar's basic education schools.

An assessment of the implications of this policy change needs to be undertaken.

### (6) The Block Teaching Component

**Selection of schools.** The education colleges do not participate in the selection of schools for block teaching, nor in the monitoring and supervision of the trainees. The schools to which the trainees are appointed are selected by a committee which includes the township education officer (TEO), the assistant township education officer (ATEO), the primary headmaster, and, if the primary school is located in a middle school, the headmasters of the high school and middle schools.

**School conditions.** Monitoring and supervision of trainees during the two-month block teaching experience are critically important, especially in view of conditions in many basic education schools, These conditions, especially in the rural areas, such as the lack of partitions in the schools, inappropriate furniture for activity-based learning, and multi-grade and multi-age classrooms, make it difficult to implement child-centered approaches.

**Change versus traditional teaching practices.** The trainees have little, if any, opportunity for field-based experiences before block teaching, so their base of experience in working with children is limited. Further, the teacher educators, from whom they have learned the newer methodologies, are not involved in the monitoring and supervision of the trainees. In many cases, the headmaster, the cooperating teacher, the ATEO have not been trained in the newer methodologies. The trainees' attempts, therefore, to implement changes in teaching are met with resistance. The study team was told that this is a fairly common situation. In those cases where the respective head masters and ATEOs have received training in the newer methodologies such as through the UNDP/UNESCO project, the situation is improved.

### (7) Textbooks, Teacher Guides, Instructional Materials

The quality and availability of learning materials, especially textbooks and teacher's guides are critical to the development and maintenance of a quality education. A constraint to the qualitative improvement of the instructional program at the teachers' colleges is the dearth of resource materials. There is a shortage of books, teaching and learning aids, and other resources to support instruction in the teacher education colleges. The study team verified the dearth of materials during site visits to the respective education colleges. Allocation of funds for library support is minimal.

The textbooks used in the state primary schools are utilized as the reference books by the teacher educators for teaching methodology courses (teaching of English, Myanmar,

mathematics, etc.). The textbooks for trainees for the methods courses (e.g., methods of teaching mathematics, methods of teaching the Myanmar language) were developed by the teacher trainers at the Yankin Education College (YEC). With respect to teaching English, the Yankin Education College developed the first year English Language Teaching (ELT) modules. To develop the second year ELT course, Yankin Education College invited Mandalay, Pathein and Myaungmya Education Colleges to collaborate in the preparation process.

There is no separate reference books or guidebooks for students to study professional courses such as educational psychology, educational theory. Textbooks for the teacher educators in the area of professional studies (education theory, educational psychology) were developed at Yankin Education College, and edited by the respective departments at the Institute of Education (IOE). Co-curricular teacher's guides were developed at the Yankin Education College. Approval for their use was obtained at three levels in the IOE: the Board of Study, the Senate, and the Administrative Body.

Textbooks for the academic subjects (taught in semester 2) are developed for both first year and the second year trainees by the respective academic departments of the IOE. The chairman for each of the academic subject areas, except English, is at the University of Yangon. The English textbook was developed by the Yangon Institute of Education.

The importance of exemplary textbooks and guidebooks is underscored by the practice of teachers to follow explicitly what is in the guide. Generalizability of knowledge is limited.

### (8) Low Status of Primary Teaching in Myanmar and the "Career Ladder"

The Education Sector Study (ESS)[5] report succinctly summarizes the situation with respect to primary level teaching:

*"The greatest impediment to motivating primary school teachers may be the career path for teachers in Myanmar's basic education system. Career prospects are limited not only within each cycle of basic education but also across the successive cycles. The only possible career promotion within the primary systems is from PAT to headmaster, or to JAT with responsibility for primary teaching...Career prospects for newly recruited PATs have been further reduced in recent years by policies that allow academically more qualified outsiders to be recruited directly into JAT or SAT positions...Primary teachers not only get lower pay than teachers at other levels, but also lower than workers in other professions requiring a similar education background...There are no financial incentives to improve teaching skills. Minimal increases are granted annually for seniority, but these are unrelated to the teacher's performance, let alone pupils' achievements."*

The situation has changed little over the past decade. The first year course is, in effect, used as a screening mechanism for entrance to the second year course. In fact, any first year student can continue, without being specifically selected, to continue to the second year course. In effect, the primary level teachers are being streamed to middle school teaching, which pays more and has higher status. Moreover, the TEOs have been instructed not to appoint any teacher without

[5] *ESS, Phase 1 Final Report*, February 1992, p. 45-46.

certification. The "pool" of certified primary teachers is, given this situation, depleted, contributing to the severe shortage of teachers in the rural areas.

Moreover, in Myanmar, if a primary teacher were to obtain a bachelor's degree, that person would not be appointed at the primary level. For a young person preparing to enter the teaching profession, options for career growth within the level (i.e. primary, middle) do not exist. The only way one can be promoted is to move out of that particular level and move onto the next level. Improving the status of primary teaching requires structural change in the system.

Another issue, according to information obtained by the study team, is that that a number of second year graduates (JATs) have been appointed as PATs, without benefit of the salary of a JAT, and so have decided not to teach. This situation is contrary to regular policy and leads to lower morale. Also, an issue is the appointment of the young PATs to rural and remote areas. The appointments have financial disincentives.

In addition, teachers in rural areas face special problems—dealing with isolation, working within the local community values and expectations, multi-grade teaching techniques, administration of small schools and heavier workloads, rural familiarity and lack of privacy, difficult housing and sanitary conditions, safety and value concerns (particularly for female teachers), are some of the issues.

### (9) Lack of a System for Professional Development of Teacher Educators

The issue of professional development can be addressed on a number of levels. First, a professional development program for the teacher educators themselves needs to be discussed.

The MOE has given some refresher courses or short-term training on the new education reform programs. However, teacher educators have not had any training to improve their own skills since the early 1990s, and that was done through the UNDP/UNESCO project. A system of professional development should be designed and implemented if qualitative changes are to take place in the teacher education system.

A second level is training for "new recruits" (graduates of the IOEs with master's degrees, without experience in teaching) was a recurring issue raised on the site visits to the education colleges. Preparing qualified primary and middle school teachers by those who do not have experience at the respective levels (primary and middle school) is a major issue. Training in pedagogical skills was identified by the education colleges as a priority need.

A third level has to do with ongoing support for the teachers in the schools. There is no system in place for teachers to receive ongoing professional support. The current system for supervision and monitoring of teachers at the township level is the responsibility of the ATEO. The ATEO typically has responsibility for 60 to 75 schools, and transportation generally is not provided. In effect, this means that teachers are, for the most part, without supervision. Supervision and opportunity for professional sharing are critical, not only for teacher her or himself, but to improve the overall quality of education.

It should be pointed out that there does exist in Myanmar a cadre of teachers who have been trained, especially through the UNDP/UNESCO project, and are motivated to use activity-based methodologies (estimated to be approximately 25 percent of teachers in rural areas). Some of these teachers meet regularly ("professional gatherings"). However, classroom implementation is seriously impeded by a lack of monitoring and supervision in the schools.

International experience in introducing instructional change in many countries moving toward a market economy, especially child-centered and activity-based approaches based on solid and recent research in cognitive psychology, provides a rich resource for designing professional development program for Myanmar's teacher educators. Some additional suggestions include the following:

- Study tours (exposure visits) to other schools, education colleges, educational institutions, including rural schools and "few student" schools (those with less than 50 students);
- Access to information available internationally (internet, videos, books);
- Journals for teacher educators to share their practical experiences; and
- Collaboration of faculty and students, more feedback to students.

### 7.3.2 Selected Strategies to Improve the Quality of Teacher Education

From an analysis of the current teacher education system, it is clear that quality issues assume priority status. The strategies suggested in the section below are one way of improving the quality of teacher education in the short-term. These strategies are presented in terms of three main issues: pedagogical renewal; narrowing the gap between theory and practice; and professional development. It should be stressed that systemic issues have to be addressed as well for the sustainability of educational reforms.

#### (1) Pedagogical Renewal

With respect to initial teaching competence, it is well known that initial preparation be must be provided in the respective subject areas such as mathematics, Myanmar language, English language, and some basic methodologies of teaching the subject matter. Teacher knowledge of subject matter needs to include not only facts, but also an understanding of the underlying concepts. Teachers need to have a strong academic background in order to appropriately guide their students and to accommodate diverse learners in the classroom.

Teaching methodologies need to include some basic strategies and develop competence in knowing when to use specific strategies, such as how children learn, how to use instructional materials and related skills such as communication, classroom management, creating a supportive learning environment. Trainees require a solid knowledge base and pedagogical skills to implement a child-centered curriculum. This needs to be emphasized for both teacher educators and for trainees.

Benchmarks for a child-centered curriculum have not been formulated.[6] A child-centered curriculum should be different for the different ages in order to reflect the developmental level of the learners. For example, younger children are more involved in sensory exploration, while older children learn about abstract concepts and develop critical thinking skills. In other ways, the curriculum is similar. It is critical that the teacher's guides and professional development reflect these understandings of curriculum. During the discussion with teacher educators, many expressed their desire to deepen their understanding of the concept of "child-centered learning," as well as the concept of "early childhood development" and "multi-grade teaching."

Teacher education in Myanmar places more emphasis on teaching methodology than on concept development. Since the academic courses are taught after methodology courses, there is no opportunity to link concept development and methodology. Moreover, the methodology courses are aligned with the topics of the textbooks used in the state primary schools, and without additional resource material on the specific topic areas.

Some measures to improve the situation could involve changing the format of the program to begin with the academic courses, followed by methodology courses, and then followed by block teaching. As an alternative, in the short-term, parallel teaching of academic course and teacher methodology course (teaching both components at the same time throughout the year) could be introduced. Team teaching, given this scenario, could be explored.

### (2) Narrowing the Gap Between Theory and Practice

A child-centered curriculum is congruent with developmentally appropriate practices and a child-centered classroom. The curriculum includes both a written curriculum (documents and standards) and a taught curriculum (the teacher's own interpretation and methodology.[7]

#### a) Inclusion of Practical Issues in the Curriculum

There is a serious disconnect between teacher education and reality as it exists in the schools. Lack of space and furniture, one-room structured room with all grades and ages of children, insufficient number of teachers, are some of the realities. Unfortunately, there is little reflection of these realities in the curriculum of teacher education. Many teacher educators, particularly those who are teaching methodology course have teaching experience at primary schools, but not many have experience in the rural schools, which are the majority of the schools in this country.

Currently, educational theory and educational psychology include some of the functional issues such as assessment and children with learning disability. It is suggested that more content - theory and techniques- that are useful to the classroom practice should be added.

[6] Examples of benchmarks for a child-centered curriculum include a well-articulated philosophy and goals; an emphasis on curriculum concept development; appropriate school and classroom structure organization; attention to children's developmental domains; planning for age-appropriateness; respect for children's individual differences; increased opportunity for children's social interactions; recognition of children's diversity and unique contributions; and integrated approaches to curriculum content.

[7] Isenberg, J.P. et al, Child-Centered Curriculum, Children's Resources International, May 1997.

The topics for expansion include;

- Classroom management (individual/group work)
- Multi-grade (and Multi-age) teaching,
- Teaching children whose mother tongue is different from the medium of instruction
- Teaching children with learning difficulties (including language, mental and physical disabilities),
- Students assessment, remedial teaching
- Counseling

**b) Provision of Learner-Oriented Lessons**

Child-centered and activity-oriented learning are keywords used in the teacher education colleges. The textbooks for education theory and teaching methodology list a total of 21 different teaching methods and encourage trainees to utilize the wide range of teaching methods. Unfortunately, most of the trainees had never been taught in such way that they were encouraged to be innovative, with help of the teacher as facilitator. Without this practical experience, the understanding of various teaching methods does not necessarily ensure that the methods are used, and used appropriately. The teaching style in many education colleges could be characterized as conventional or traditional, such as rote memorization and chanting responses. Some suggestions follow:

**Observation of primary schools and other institutions.** Observation is a learned skill. In order to implement child-centered practices, trainees must be provided guidance and practice in how to observe children. In this way, they will learn more about child development, discover the child's interests, observe the effects of various teaching techniques, and capitalize on external resources. Observation provides an avenue for trainees' ability to reflect and integrate theory and practice.

**Action research.** Previously, research was a component at the teacher education colleges. Teacher research is viewed by the colleges as being very important. Without it, the quality of the overall teacher preparation program at the primary and middle school levels is diminished. Action research is a useful tool to assist trainees to look at the complexities of teaching and learning. This requires frequent contacts with collaborating primary schools, or nearby communities.

**Improve the quality of assignments.** To effectively utilize the short period of in-service training (correspondence course), the quality of the assignments should be improved. Currently, these assignments require that the trainees preview the textbooks, prior to the face-to-face program. The task is not challenging since most of the assignments can be completed by simply following what is written in the textbooks. Little feedback is provided. Taking the advantage of the fact that correspondence trainees come from different states/divisions, a variety of information from different regions can be assembled by the respective trainees and shared. The time schedule needs to allow for group and project work, in addition to completion of individual research projects.

**c) Supervision of Block Teaching**

It is well documented that changing teacher behaviors in the classroom is complex, especially so because it requires concomitant changes in teacher attitude, not only toward the perception of children and how they learn, but also in terms of the teacher's own role as a facilitator of learning (e.g., child-centered approaches).

There is a need for supervision to narrow the gap between things taught in the training and classroom practice. Due to the large number of the trainees and the distance between the education colleges and schools where trainees are placed for block teaching, direct supervision by the teacher educators is, in fact, very difficult. Nevertheless, block teaching is designed as a part of teacher education curriculum of the education colleges, and the ultimate responsibility for the management and supervision of block teaching should be in the hands of the education colleges.

The system needs to be changed so that there provision is made for sufficient orientation for the trainees before the block teaching, for close communication and collaboration with the cooperating school, the headmaster, the TEO and the ATEOs, who are, in fact, the de facto supervisors of the trainees. Also, a viable system for evaluation needs to be in place.

It also is important for education colleges to be proactive with respect to locating cooperating schools for the block teaching experience. Although this would involve systemic change, it is vitally important because frequent communication and collaboration between the cooperating school (teacher/headmaster) and the education college are needed.

**d) Linking Teacher Education with Classroom Practice: Collaboration with Schools**

In line with an objective of the Special Four-Year Plan, to promote "...the qualitative development of basic education" (MOE/DBE, September 2000), links between teacher education colleges and schools should be promoted. It should be noted that Myanmar's education history includes examples of teacher educators surveying teaching methods used in primary and middle schools in order to develop new and practical teaching methods and techniques for teacher training.

Practicing schools, located on campuses of the respective teacher education colleges, should provide a feasible opportunity to establish viable links with schools. However, the function and roles of the practicing schools have not been thoroughly discussed. Due to the large number of pre-service trainees, the practicing schools are not currently used as a site for block teaching. In the case of Yankin Education College, students of the practicing schools are invited to YEC for demonstration lessons (a teacher educator demonstrates a lesson to students attending the practicing school), but this only occurs twice (two periods) per year. Other collaboration does not take place. In addition, the ECs do not generally have interactions with other primary schools and communication with the TEO and ATEOs (the supervisors of trainees during the block teaching) tends to be weak.

Efforts to promote collaboration and school-college links should be undertaken, including joint research on teaching practice and sharing of teaching resources.

### (3) Professional Development

During the early 1990s opportunities were provided for overseas fellowship programs, linked to in-country workshops. The mobile training team program offered professional development opportunities to over 2,000 teacher educators and others. The long-term effects of such training were evident to the study team during the site visits to the education colleges. Invariably the team was told that the teacher had participated in UNDP/UNESCO training in the early 1990s.

The teacher educators themselves should be role models for the student-centered, activity-based approaches that are being promoted. The change from rote learning, which tends to characterize Myanmar teaching-learning processes, to more interactive approaches that promote critical thinking and problem solving, requires specific interventions and support for the teacher educators themselves. Teacher educators should be given the sufficient opportunities to improve their knowledge, and trainees should be given sufficient time to understand and reflect on the practice teaching. Besides training opportunities, supporting materials, such as reference books and guidebooks are clearly needed. These pedagogical concepts, in fact, are currently being discussed internationally (e.g., OECD publications). Resources are easily accessible if access to the Internet is available.

In the short-term, professional development of teacher educators, including the newly appointed instructors who do not have teaching experience, and other key actors such as headmasters and township level officials is critical. The desire for training and willingness of many teacher educators to work toward improving teaching and learning practices in the education colleges provides a strong foundation for future initiatives.