ENHANCING CURRICULUM AND TEACHING PROCESSES TO IMPROVE STUDENT LEARNING
MODULE 4

CONTENTS

LEARNING OUTCOMES FOR THIS MODULE 1
STRUCTURE OF THE TOOLKIT 2
SYNOPSIS 3
ENHANCING CURRICULUM AND TEACHING PROCESSES TO IMPROVE STUDENT LEARNING 4
SUMMARY 23
CASES 24
EVALUATION TASKS 29
SUGGESTED READINGS 30
REFERENCES 31
1.1 Become familiar with the planning, implementation and evaluation processes contributing to enhanced student learning.

1.2 Be able to identify the needs and gaps for facilitating and enhancing student learning at different local levels e.g. teacher, school and community.

1.3 Be able to plan and formulate strategies to inform curriculum planning and classroom practices with a view to enhancing student learning.

1.4 Learn the lessons from other countries and be able to select and adapt relevant practices to suit local needs.
**STRUCTURE OF THE TOOLKIT**

<table>
<thead>
<tr>
<th>Module</th>
<th>Focus</th>
</tr>
</thead>
</table>
| Introductory Module | Introduction to education microplanning  
Focus: The purpose and functions of education microplanning |
| Module 1        | Principles of decision-making: working with communities  
Focus: Working with local communities to build partnerships |
| Module 2        | Getting started: Preparing for an education microplanning exercise  
Focus: Getting prepared for an education planning exercise at the local level: spatial, social, economic and educational considerations |
| Module 3        | Conducting a needs assessment: instruments, data collection and analysis  
Focus: Understanding local needs through engaging communities in planning activities and building capacity |
| Module 4        | Enhancing curriculum and teaching processes to improve student learning  
Focus: Getting to understand the planning, implementation and evaluation processes that contribute to successful student learning |
| Module 5        | Data and information for decision-making and planning  
Focus: Using data for understanding and improving education at the local level: assessing the outcomes of planning in areas such as access, participation and learning |
In the earlier modules of this Toolkit (Module 1–3), you have learned the basic knowledge, techniques, process, skills and tools for conducting microplanning at local levels. The focus of this module is to help you become familiar with the planning, implementation and evaluation processes that contribute to student learning. It is important to understand that any changes being planned should contribute to improved student learning.

This module introduces the key elements and issues to be included in planning for enhancing student learning in the context of decentralization. They can be broadly categorized into two areas: 1) Curriculum and Assessment and 2) Teaching and Student Learning. In each area, there are specific focus questions that the microplanner should address in order to achieve education of good quality and enhance student learning. The module does not provide any typical or standard answers to the questions it raises. Rather, answers must come from a close analysis of the planning context and the needs of schools and their communities.

As will be shown in this module, teachers are among the key players that have direct and significant impact on student learning. Microplanning should therefore address issues related to teacher quality, teacher autonomy and teacher management. Various cases from developing countries are used to illustrate successful experiences in supporting teachers to carry out reforms at school sites and enhance student learning.
4 The quality of an education system cannot exceed the quality of its teachers.  
Barber & Moursheed (2007)

4.1 Overview

From the outset, education microplanning needs to be seen against a general background of decentralization – “goals and targets set in the national plan have to be broken down and adapted to the specific situation and needs in each provincial, district and community (local communities) through a process of decentralized planning” (UNESCO, 2005, p.2). Given that the actual teaching and learning processes are largely happening at school sites on a day-to-day basis, decision-making on teaching and learning matters should be geared to the needs of students, teachers and schools with a view to enhancing the quality of student learning. In this respect, active and quality participation in decision-making of teachers, school principals and education officers at the school and district levels, is important. In the following sections, we will look into different aspects of microplanning for curriculum, teaching and learning – the mechanisms, policies, process and people, all with impact on student learning.

4.2 Curriculum and assessment

It is generally agreed that curriculum is at the heart of the teaching and learning process. Traditionally, education planners and administrators below the central level “confine themselves to the existing structure of education, taking the actual teaching and learning process for granted” (UNESCO, 1991, p.28). They adopt a top-down and faithful approach to developing a national curriculum that may or may not have been developed with attention to the specific needs or situations of individual local communities. In the context of
globalization and the increasingly decentralized education environment, education planning tends to put more emphasis on using the results of needs assessment in formulating actions to address needs and problems of local communities and individuals. In this respect, local actors should be given more flexibility and support in adapting the national curriculum and developing local variations that can cater for their specific situations and needs. By the same token, planning could go further down to school and classroom levels through school-based curriculum development processes. Thus, there is a two-way pressure on the curriculum: it must be able to meet the needs of local communities and their students while at the same time it must be aligned with the national curriculum. This is a great challenge for most countries and it can be better understood by looking closely at curriculum development processes.

Inspired by the P-I-E model (Johnson, 1977), the process of curriculum development can be conceptualized by a Three-Phase Curriculum Development Model as outlined in Figure 4.1:

*Figure 4.1: Three-Phase Curriculum Development Model*

This model is cyclical in nature and each phase has several key steps and specific tasks to complete in a logical sequence. The following elaborations are largely adapted from Glatthorn, et al. (2006), Sawi (1996) and UNESCO-IBE (n.d.):
4.2.1 Phase 1 – Curriculum planning

Step 1: The first step is to set the scene or lay the foundations for curriculum planning. The specific tasks to be completed include:

Determine the focus of planning decisions and responsibilities among stakeholders.

Curriculum planning is a complex decision making process which occurs at different levels (country, province, district and school) to ensure legitimacy, accountability, practicality as well as supportiveness. In the current context of education decentralization, the central administration tends to empower or delegate more curriculum decision-making to districts and schools with a view to enhance effectiveness of the education process and achieve quality education.

For the purpose of this Toolkit, the discussion that follows focuses on the above two levels of planning.

Determine and set up the organizational structure needed to facilitate planning.

A desirable organizational structure should be simple, flexible and able to respond quickly to changing needs. Two similar standing committees could be set up to serve these functions at district and school levels respectively. It should be noted that these committees serve in an advisory capacity only. Members will be nominated and appointed by the relevant authority.
or leadership and their memberships could be renewed or replaced after serving for a stated period of time so as to ensure continuity and also allow a dynamic mechanism to bring in fresh ideas.

District Curriculum Advisory Council/Committee. Its membership normally includes:

- Superintendent of school district or assistant superintendent (Chairperson);
- District education/curriculum directors or officers;
- School principals;
- Teachers;
- Parents or Parent-Teacher Association (PTA) representatives; and
- Other community representatives.

School Curriculum Advisory Council/Committee. Its membership normally includes:

- School Principal or Deputy Principal (Chairperson);
- Curriculum development leader or coordinator;
- Subject department heads or panel heads;
- Grade-level headers or coordinators;
- Teachers; and
- Parents or PTA representatives.

**Step 2: Form a curriculum development team**

Once the major curriculum planning decisions have been determined and translated into action plans, the next step is to form curriculum development teams (CDTs) to develop new curricula or make major revisions to the existing curricula at district and school levels. To ensure the CDT is successful, the following points should be considered carefully:

*Select the CDT members*

Since no single individual has all the required skills, expertise and calibre to design and develop good quality curriculum, the team leader needs to ensure that the team as a whole acquires the required knowledge, competences and experience to accomplish its responsibilities. In general, team members selected should be creative, innovative and visionary. In addition, they should have prior experience in teaching and in writing curriculum or instructional materials
For the actual selection of the team, leaders may identify and develop specific criteria depending on the scope, complexity and goals of the curriculum development task. A successful CDT usually comprises a combination of specialists and educators as well as representatives from the community, if appropriate (Ibid):

- Curriculum planning and design experts;
- Subject matter experts;
- Exemplary teachers and experts in pedagogy;
- Specialists in the production of instructional materials (e.g. editor, graphic designer, technical writers); and
- Representatives from the community.

The major functions and responsibilities of CDT include the following:

- To gather and review relevant education and curriculum documents:
  - government education and curriculum documents, including: policy papers, consultation documents, curriculum evaluation reports, curriculum/school subject documents and guidelines;
  - School curriculum/subject areas documents, including course content and teaching materials and course evaluation reports; and
  - Other materials, including: research reports and publications published by academic institutions and interested groups in the community;

- To seek views and advice from stakeholders and experts for planning the curriculum. The actual process is presented under module 3 on conducting a needs assessment;

- To develop and write curriculum documents taking into consideration results and information derived from the above;

- To test, modify and finalize the developed curriculum materials taking into consideration feedback collected from consultation and/or trial teaching; and

- To provide consultation, user guides, training materials and staff development on implementing the new/revised curriculum materials.

**Step 3: Conduct needs assessment and analysis**

In simple terms, a needs assessment is a process of identifying gaps between ‘what is’ and ‘what should be’ which can be shown visually in Figure 4.3.
For a detailed description/revision of conducting a needs assessment you may refer to module 3 of this Toolkit. The following table 4.1 demonstrates how a needs assessment can be used by the microplanner for planning the implementation of the national (official) curriculum at the district level. Similar needs assessments could be done for curriculum planning at the school level. Results of analysis could inform curriculum development, teacher preparation and professional development.

Table 4.1: Needs assessment for planning the implementation of the national curriculum at district level

<table>
<thead>
<tr>
<th>What is (now)? Actual performance/current situation</th>
<th>GAP Needs</th>
<th>What should be? Desired performance/goals</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>What does the district want/need to know about its current situation?</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• The current district goals</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• The local needs and desired district goals</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• The current enacted curriculum – written curriculum (approved by the district) and taught curriculum (delivered at school sites)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• The current supported curriculum – what resources and supports are provided/available for implementing the official curriculum? (curriculum policy, curriculum guides and documents, syllabi, fiscal and human resources, teaching materials and textbooks)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• What are the characteristics (qualifications and quality) and performance of its teacher force? How do teachers interpret the written curriculum and translate it into teaching curriculum and teaching activities?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• What are the characteristics and performance of students in the district? How do students interact with the taught curriculum and translate it into learned curriculum and learning outcomes?</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>What does the district want/need to know about the national (official) curriculum?</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>What are planned and specified in the curriculum framework and formal curriculum documents?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Rationale that supports the curriculum</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• The general goals and aims to be accomplished</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• The specific objectives to be achieved</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• The sequence of teaching content – a programme or field of study</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Minimum standards for content, assessment and evaluation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Teacher qualifications and quality</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Educational resources and learning materials</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Step 4: Secure resources needed for new or revised curriculum

You may need extra resources for developing or revising the curriculum. However it is important to be aware that it usually requires much more resources in terms of both financial and human resources for implementing than developing a new curriculum. Therefore, it is important for microplanners to secure sufficient resources for adjusting curriculum in advance or in the early stage of curriculum development.

Step 5: Identify staff development needed for effective implementation of new curriculum.

Many curriculum projects of excellent quality have not been implemented successfully because they were not supported by sufficient staff development (Glatthorn et al., 2006, pp. 145–146). Microplanners should address this issue by making use of needs assessment results.

4.2.2 Phase 2 – Curriculum implementation

Curriculum implementation is a process of localization of the planned (intended or official) curriculum at different levels. The effectiveness of a curriculum is subject to how it is interpreted and translated by different parties into curriculum policies, framework and standards, curriculum documents (guidelines, syllabi, program, unit and lesson plans) and teaching and learning processes from central to province, to district, to school, to teacher levels. At the district and school level, curriculum implementation refers to the process of putting the planned curriculum “into practice through real teachers interacting with real students in real schools. It is the real or implemented curriculum that shapes students’ learning experience and determines their learning outcomes” (UNESCO-IBE, n.d., module 5). Microplanners should be aware of the constraints in the localization processes, in particular at the district and school levels, including lack of local technical expertise, curriculum materials and resources, resistance to change among teachers, local educators and community members. These constraints can be managed through (Ibid):

- Developing a curriculum framework, including a clear set of curriculum standards, at the central level.

UNESCO-IBE (n.d.) suggests that “[t]he purpose of a curriculum framework is to establish the parameters within which curriculum should be developed. It often expresses the State’s aims of education and can define minimum standards for content and assessment, as well as teacher qualifications, educational resources and learning materials, management and evaluation” (see examples provided in UNESCO-IBE, n.d., module 3).
Ensuring compliance with these standards in local and school developed curriculum, either through paper-based accreditation or endorsement processes or through supervision and monitoring processes or both.

Supervision has a long history but it has received much criticism in recent years. Schools, governments and international agencies have viewed traditional supervision services as mainly used for monitoring and control, which had little impact on the quality of teaching and learning. Recently, the concept of supervision has been renewed and supervision services are considered a key component of both quality monitoring. Many countries have attempted to reform their supervision services to take up functions such as for accountability - to inspect, control, evaluate; and for quality improvement – to advise, assist and support school heads and teachers. Usually these functions are conducted by authorities and supervisors located outside the schools in the form of external supervision. In the context of decentralization, there is an increased demand for internal mechanisms of supervision by devolving responsibilities of control and support to actors at the school-site level (principals, teachers and community members). Some authors suggest that there are four supervision models for delivering supervision services, namely the Classical Supervision model, the Central Control model, the Close-to-School Support model and the School-Site Supervision model. One should note that there is no ‘best’ model because the effectiveness of a supervision model depends on how successfully it is adapted to the context of a country, for example, the degree of autonomy that is allowed and the readiness of the schools (IIIEP-UNESCO, 2007, module 7; DeGrauwe & Carron, 2004).

In some countries that have introduced school-based management, in addition to external supervision or external school review (ESR), the school self-evaluation (SSE) mechanism is introduced as a compulsory component of the supervision and quality assurance system. It is generally agreed that the supervision of day-to-day teaching and learning should be conducted at school sites, where it would be more effective, which in turn achieves better quality improvements. In practice, SSE can be used as a preparation for external reviewing and linked to the internal quality assurance mechanisms. At the heart of supervision processes are the follow-up decisions and actions which must be supported by reliable and appropriate information that is timely and truly reflects the quality of teaching and learning occurring at the school site. The general principles of collecting useful information are presented in Figure 4.3.

---

Figure 4.4: Principles of Collecting Useful Information

TIMELY

• Use a combination of formative and summative assessments to gather data (evidence) regularly in the course of curriculum implementation at appropriate periods/points of time.

EVIDENCE-BASED

• To collect evidence through multiple channels (teachers, students, parents and other stakeholders) and in different formats (lesson observations, interviews, stakeholders survey, curriculum documents, samples of student artefacts, and student performance in internal and public examinations and tests), which can best represent and demonstrate the quality of teaching and learning, and effectiveness of implemented curriculum. Normally the evidence collected should be observable and measurable so that the information can be analysed, compared and evaluated against some agreed standards or requirements.

RELIABLE AND VALID

• Use sound and well-designed methods to collect and triangulate the evidence.

PROVIDE TRAINING

• For local and school based curriculum developers [and teachers]

ENSURE CLEAR AND OPEN COMMUNICATION

• Between central and localized authorities

In sum, it is generally agreed that the key to successful curriculum implementation at the school level is “whether the school properly deploys its human and financial resources and creates room for teachers to support and carry out the curriculum strategies and formulated plans” (EDB, 2008, p.17). Specifically, there are four major challenges or practical difficulties in implementing curriculum change – lack of competent staff, teacher attitudes and potential resistance, fear of the unknown and lack of resources (UNESCO-IBE, n.d., module 4). All these point to the need for capacity-building and management of resources for curriculum implementation. Obviously, it is no easy task for the school to deploy its human and financial resources effectively without an appropriate level of professional autonomy accompanied by a good understanding of its strengths and limitations in human and financial resources. The following analysis tool and framework may be useful for microplanners to develop action plans for curriculum implementation:

Conduct SWOT and needs analyses.

SWOT (Strengths, Weaknesses, Opportunities and Threats) analysis is also known as situation analysis which is a useful tool in education and other sectors for analysing the overall situation of an organization and its environment. It is easier to make sense of the results of SWOT analysis in the form of a matrix as follows:
**Figure 4.5: SWOT Analysis Matrix**

<table>
<thead>
<tr>
<th></th>
<th>Positive aspects</th>
<th>Negative aspects</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Internal factors</strong></td>
<td><strong>Strengths:</strong> Internal aspects of the organization that can <strong>help</strong> it realize its vision/policy objectives</td>
<td><strong>Weaknesses:</strong> Internal aspects of the organization that can <strong>hinder</strong> it from realizing its vision/policy objectives</td>
</tr>
<tr>
<td><strong>External factors</strong></td>
<td><strong>Opportunities:</strong> Factors external to the organization that can be <strong>leveraged</strong> for the realization of its vision/policy objectives</td>
<td><strong>Threats:</strong> Factors external to the organization that can be <strong>obstacles</strong> to the realization of its vision/policy objectives</td>
</tr>
</tbody>
</table>

**Develop and implement a framework of the human resources system.**

This framework helps districts and schools to look at the role of leaders and managers and to think critically about how they plan for, acquire, maintain, develop, retain and evaluate the professionals needed to offer quality education through implementation of planned curriculum (see Table 4.2).

**Table 4.2: A Framework of the Human Resources System**

<table>
<thead>
<tr>
<th>Focal areas</th>
<th>Roles of leaders and managers</th>
<th>Selected key actions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Create a positive organizational context</td>
<td>Leading</td>
<td>• Create and promote organizational culture dedicated to quality for all children.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Create and demand supportive environments for teachers and schools.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Establish overall staffing philosophy and hire highly capable managers (central office and principals).</td>
</tr>
<tr>
<td></td>
<td>Managing</td>
<td>• Define and focus on results (success for students).</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Motivate and develop teaching and other talents.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Create working environments that demand and support quality education and curriculum implementation.</td>
</tr>
<tr>
<td>Get the best people into suitable roles</td>
<td>Planning</td>
<td>• Forecast the demand and characteristics of top-quality people</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Identify people who have those characteristics.</td>
</tr>
<tr>
<td></td>
<td>Acquiring</td>
<td>• Develop strategies to get those people to fill the vacancies.</td>
</tr>
</tbody>
</table>

---

8 Adapted from Annenberg Institute for School Reform at Brown University, 2002
### 4.2.3 Phase 3 – Curriculum evaluation

At the system or national level, curriculum evaluation provides the basis for curriculum policy decisions, for feedback on continuous curriculum adjustments and processes of curriculum implementation. The fundamental concerns of curriculum evaluation relate to (UNESCO-IBE, n.d., module 8):

- Effectiveness and efficiency of translating government education policy into educational practice;
- Status of curriculum contents and practices in the contexts of global, national and local concerns; and
- The achievement of the goals and aims of educational programmes.

Evaluation specialists have developed an array of curriculum evaluation models since the middle of the last century. Each of these models has its strengths as well as its limitations and many of them are still valuable and widely used in school settings, for example the Context-Input-Process-Product model (see Glatthorn, et al. 2006. pp. 356–381).
At the district and school levels, microplanners are inclined to focus their concerns on two aspects. Firstly, how successfully have the teachers as a whole had carried out the curriculum strategies and formulated plans through teaching and learning processes? Secondly, how can the school improve its curriculum planning and teaching strategies based on results of analyses of evidence collected from systematic review of curriculum plans, activities and student performance? The first question aims to evaluate the effectiveness of curriculum implementation - whether the planned curriculum and activities produce desired results (McNeil, 1977). This information can be used for accountability or audit purposes from the school management perspective. The latter is about “how can the curriculum offerings best be improved?” (McNeil, 1977, p.134), thus enhancing the overall quality of learning and teaching from the curriculum and school development perspective. In the current tides of curriculum reforms globally, the latter function, i.e. continuous improvement and sustainability of curriculum development and implementation, is considered to be even more important. Thus, microplanners often ask the following two focus questions regarding curriculum evaluation (adopted from EDB, 2008, p. 16):

- What mechanism is in place for the school to evaluate the effectiveness of curriculum implementation?
- How does the school make use of curriculum evaluation data to inform curriculum planning?

These two questions could be answered easily if microplanners consider curriculum evaluation as “a [decision-making] process or cluster of processes that people perform in order to gather data that will enable them to decide whether to accept, change, or eliminate something- the curriculum in general or an educational textbook in particular” (Ornstein and Hunkins, 1998, p.320). The following five questions will assist schools in planning and implementing effective curriculum evaluation for improvement (adapted from Department of Education and Early Childhood Development, 2012):

- What student outcomes was the school trying to achieve through the delivery of the planned school curriculum?
- What student outcomes did the school achieve?
- Why did the school achieve/not achieve improved student outcomes? For example, curriculum content, existing pedagogies, instructional approaches and teaching and student learning activities.
- How effectively did the school manage its resources to support the achievement of improved student outcomes?
- What can the school do in the future to continue to improve the design and delivery of the school curriculum?
Quality data is a key component in any successful curriculum evaluation process. As a general rule, data should be collected from multiple actors in various formats so that the impact of implemented curriculum on student learning (achievement) can be accurately judged and evaluated. The following figure 4.6 shows the approach to gathering relevant evidence (EDB, 2008).

*Figure 4.6: Approach to Gathering Relevant Evidence*

Microplanners should highlight the quality improvement functions of curriculum evaluation. In other words, the success of curriculum evaluation depends on what decisions are made in the evaluation process and how the decisions are translated into strategies and actions for continuous and sustainable improvement in school curriculum development and teaching and learning processes. The curriculum evaluation process at the school site should be coordinated and conducted by a task group or the curriculum development team led by an experienced curriculum leader or school leader, who has good understanding of the process of evaluation and how it relates to the development of effective curriculum. He or she should have the expertise to analyse and interpret the data, evaluate the effectiveness of various aspects of the curriculum and its implementation and translate the evaluation results into concrete plans for curriculum development - showing how teaching and learning can be enhanced via the curriculum.

This process can be summarized as follows in figure 4.7.¹

¹ Ibid, Chapter 8.
Figure 4.7: Curriculum Evaluation Process

Phase 1. Aspects of the curriculum to be evaluated
- The evaluator determines what is to be evaluated which may be the total school system, a particular district, a particular grade level or a particular subject.
- The objectives of the evaluation activity are clearly stated.

Phase 2. Data collection
- Identify the information to be collected and the tools for collecting the data which may involve interviews, developing questionnaires, tests, collection of documents and so forth.
- The evaluator also identifies the people from whom data are to be collected.

Phase 3. Analysis of Information
- The data collected are analysed and presented in the form of tables and graphs. Statistical tools are often used to compare significant differences and to establish correlation or relationship between variables.

Phase 4. Reporting of information
- Reports are written describing the findings and interpretation of the data. Based on the findings, conclusions are made on the effectiveness of curriculum implementation efforts.
- Recommendations are made to reconsider certain aspects of the curriculum.

4.3 Teaching and Student Learning

In this toolkit, we see education microplanning as a means for achieving three broad purposes: efficiency (i.e. making the best use of resources); quality (i.e. enhancing student learning); and equity (i.e. ensuring that all students will benefit from the education processes). The three broad purposes are equally essential and microplanners should be cognizant and constantly strive to achieve greater levels of efficiency, quality and equity of education services.
4.3.1 Teaching process

It is generally agreed that teachers are essential to cultivate student learning. The role of teachers in the 21st century has undergone a paradigm shift from teacher-centered to student-centered and been expanded from focusing on student academic performance to wider capability development. As such, teachers need to employ effective strategies to engage their students in active learning in and out of school, taking into consideration the diverse needs of students. The following focus questions are useful for microplanners to identify the strengths and weakness of teachers in achieving quality education so that they can formulate relevant capacity-building strategies and programmes to enhance teacher effectiveness (adopted from EDB, 2008, p19):

- Are teachers guided by the learning outcomes they want students to achieve and the ability of their students to achieve these?
- Do teachers adjust their teaching pace and strategies to cater for the different learning needs of students?
- Do teachers create a good classroom learning environment for students? Is the classroom managed effectively?
- Do teachers provide various opportunities for students to participate in and share their experiences, which help to promote class interaction and to enhance learning effectiveness?
- Are teachers equipped with subject knowledge and do they have a good teaching attitude?

4.3.2 Student assessment, feedback and follow-up

Traditionally, student assessment and testing are mainly used for summative purposes such as selection and certification. They are designed for checking the outcome of learning and are separate from the teaching or learning processes. This evaluation approach is known as “Assessment of Learning”. In pursuing quality education, school systems around the world are moving towards a new assessment approach “Assessment for Learning” which is “a process in which teachers seek to identify and diagnose student learning problems and provide quality feedback for students on how to improve their work. Different modes of assessment should be used whenever appropriate for a more comprehensive understanding of student learning” (CDC, 2002, booklet 5, p.1). Research studies show that when schools adopt “Assessment for Learning” successfully, students can improve their learning based on feedback from teachers and other assessors. At the same time, teachers can improve their curriculum design and
content, teaching strategies and classroom organization so that they are better suited to the needs and abilities of their students (Ibid). On the other hand, the value of assessment for summative purposes or Assessment of Learning should also be acknowledged. Therefore, microplanners should help schools develop clear school assessment and a staff development programme to maintain and support the balanced use of assessment of and for learning. The content of a staff development programme should include the following:

- Different types of assessments and their purposes;
- Assessment strategies – traditional assessment vs. performance assessment (based on performance, requiring students to utilize their knowledge in a meaningful context)\(^\text{10}\);
- Reporting and using assessment results for enhancing teaching and learning; and
- Equity and fairness issues in implementing an assessment policy.

### 4.3.3 Learning process

To align with the changing role of teachers, students are encouraged to take a more active role and responsibility for their learning under the guidance of their teachers. Students are provided with various planned activities to actively engage in exploration, sharing and group work, designed to acquire and foster the learning aptitude to become a lifelong learner.

The following focus questions are usually asked for developing effective strategies to enhance the student learning process (adopted from EDB, 2008, p. 19):

- Do students possess good attitudes, motivation and interest in learning?
- Are students able to effectively apply learning strategies and resources in their learning and thus attain their learning goals?
- Are students able to utilize feedback to improve their learning?
- Do students successfully acquire and apply knowledge and skills?
- How well do students perform in their learning activities and assignments?

Some useful strategies/learning activities for fostering student learning, motivation and ability are displayed in Figure 4.8.

\(^{10}\) See for example here: http://www.park.edu/cetl/quicktips/authassess.html
4.4 Teacher Quality, Autonomy and Management

Above sections clearly show that we need a new generation of competent and committed teachers who can work successfully and contribute to enhancing student learning in and out of schools. This involves at least three major areas in microplanning – teacher quality, teacher autonomy and the teacher management and support system.

**Teacher quality**

This may be further categorized into initial (pre-service) training, in-service training (updating) and continuing professional development. Microplanners need to address the following key issues taking into consideration global, national and local contexts:

- Minimum academic qualification and professional training required for teaching at primary and secondary schools;
- Model for training new teachers;
- Teacher recruitment;
- Upgrading teacher and principal competencies; and
- Teacher retention.

The McKinsey report entitled *How the world’s most improved school systems keep getting better* (Mourshed, M., Chijioke, C., & Barber, M., 2010) summarized the lessons learned from twenty-five selected effective school systems and highlighted the clusters of interventions.
used to raise calibre (quality) of teachers along the improvement journey (according to student performance) – from poor to fair to good to great to excellent. Example interventions are shown in Table 4.3.

Table 4.3: Example Intervention to Raise Quality of Teachers

<table>
<thead>
<tr>
<th>Themes</th>
<th>Description</th>
<th>Examples of interventions</th>
</tr>
</thead>
</table>
| Raising calibre of entering teachers and principals | • Recruiting  
• Preparation and induction | • Recruiting programmes  
• Pre-service training  
• Certification requirements |
| Raising calibre of existing teachers and principals | • Professional development  
• Coaching on practice  
• Career pathways | • In-service training programmes  
• School-based coaching  
• Career tracks  
• Teacher community forums |

Teacher autonomy

Teacher autonomy or professional freedom is one of the most important factors to facilitate teachers in enhancing student learning, particularly in the context of decentralization of education. To some countries in the Asian region, teacher autonomy is still a comparatively new concept though they are moving from a highly centralized education system towards a more open and decentralized one. Based on the experience gathered from major projects conducted in some developing countries, there are two essential components for promoting and developing teacher autonomy:

National policy and support of the central government. The central government needs to establish and enforce a comprehensive, mandatory and long-term education policy (or Act) to legitimize the professional status and autonomy of teachers in making professional decisions on curriculum and teaching matters as well as innovations for achieving quality education. This is a top-down approach to both facilitate and ensure teacher autonomy.

Capacity-building. Teachers should be empowered to exercise autonomy through capacity-building activities including teacher training and professional development programmes at the national, district and school levels. Teachers should be empowered and have the capacity to perform the following functions (UNESCO-IBE, n.d., module 6):

- understand their changing roles as curriculum changes;
- comprehend curriculum objectives and national curriculum standards;

master subject matter and pedagogical skills to deliver subject-specific content;

have a positive attitude to curriculum change and be an agent of change;

break down isolation and develop a team spirit; and

engage in continued professional learning and development.

**Teacher management and support systems**

Traditional teacher management emphasizes the use of teacher appraisal as a means to monitor teacher performance for accountability purposes. Recently, the concept has been expanded beyond accountability by integration with teacher professional development and teacher support systems. Many countries have started to introduce this concept into their school systems in the form of Teacher Performance Management (EDB, 2012) or Teacher Performance Appraisal (Perera, 2002). In brief, “teacher performance management is a continuous process for identifying, evaluating and developing the work performance of teachers, so that the goals and objectives of the school are more effectively achieved, while at the same time benefiting teachers in terms of recognition of performance, professional development and career guidance” (EDB, 2003, p.1). To achieve the mentioned performance management purposes, an appraisal system should be established and administered at school sites.

The first and most important step in establishing the appraisal system is to define the objectives of the appraisal – it should meet the needs of teachers and the school. And then the school can decide on the methods and criteria for appraisal. It can be in the form of an accountability model or a professional development model or a combination of the two (EDB, 2003; 2012). In general, the teacher appraisal process and major components can be conceptualized into an appraisal cycle and presented graphically in the following Figure 4.9:

**Figure 4.9: Appraisal Cycle**

STAGE 1
(to start next cycle)

STAGE 2

Planning: goals/targets/tasks & performance indicator

• Identify professional development areas
• Develop overall school plan

Progress end of first term (& second term) or mid-year

Annual performance review

STAGE 3

STAGE 4

12 Adapted from Perera, 2002
This module helps readers to understand the process of curriculum development as a three-phase cyclic model including planning, implementation and evaluation. Each phase has several key tasks to be accomplished at the country, district and school levels. Building the school curriculum team and conducting needs analysis are the two most important tasks in the planning phase. In addition, attention should be given to strike a balance between national and local needs and interests. Curriculum framework including a clear set of curriculum standards and effective supervision system are the key components for successful curriculum implementation. At the school level, leaders may use SWOT analyses to understand strengths and limitations and implement a framework for a human resources system to address four major challenges: lack of competent staff, teacher attitudes and potential resistance, fear of the unknown and lack of resources.

Curriculum evaluation is done for accountability and quality improvement purposes. This process involves four phases:

- Identification of aspects of the curriculum to be evaluated;
- Data collection;
- Analysis of information; and
- Reporting of information.

By and large, all the processes and strategies introduced so far cannot be implemented successfully without good quality teachers. The following elements are essential for schools to maintain and develop good quality teachers:

- Teacher supervision and monitoring;
- Teacher performance management and professional development; and
- Teacher professional autonomy.
Case 1: ICT Professional Development of Teachers in Thailand: The Lead-Teacher Model

In recent years, the Institute for the Promotion of Teaching Science and Technology (IPST), an autonomous body within the Ministry of Education of Thailand, has developed a Teacher Professional Development (TPD) programme in support of educational reform. The TPD contains a component that aims to improve the skills of teachers in the use of information and communication technologies (ICT) and enable teachers to utilize ICT effectively as tools for teaching. The ultimate goal of IPST in terms of in-service teacher training is to improve student learning outcomes, particularly in science and mathematics, to reach international standards.

The IPST has adopted the Lead-Teacher Model as a vehicle for developing professional development through partnership and collaboration between schools and organizations, such as universities.

The IPST Teacher Professional Development Programme was established in 1995 with the goal of building the capacity of ICT teachers nationwide. This programme was funded by the government and by other donors. The primary objectives of the programme were to:

- Develop, support and empower lead trainers for in-service teacher training in the uses of ICT tools, particularly in mathematics and science subjects;

---

• Design and disseminate ICT-relevant training materials for in-service teachers;
• Utilize distance learning technologies to provide services to both trainers and teachers; and
• Develop networks with local authorities and organizations to facilitate the work of teacher trainers across schools in remote areas.

In the early years of integrating ICT into education in schools, most of the training programmes were designed to build the capacity of teachers who were assigned to teach computer courses. These teachers had different subject backgrounds and demanded intensive training to be able to teach the courses.

IPST, in collaboration with university partners, began a series of train-the-trainer workshops. Well-skilled ICT teachers from schools all over the country were recruited to be IPST lead trainers. These teacher trainers provided training to other teachers both in their own and other schools in their area. By 1995, there was a lead teacher trainer in each province (76).

Case 2: Teacher Deployment and Management in Pakistan

Pakistan has a well designed system and chain of accountability developed at the time of British Rule in the late nineteenth century and subsequently revised and modified periodically, to serve the needs of the country. Normally, 30–40 schools are supervised and accountable to such district/tehsil/taluka level Education Officers through their principals and Supervisors/Learning Coordinators. At the next level, District Education Officers (DEO) are accountable to Executive District Officers (Education), who in turn, are accountable to District Coordinating Officers (DCO) and the District Nazim on the one hand and the Director of Public Instruction (DPI) and the Secretary of Education (ES) at provincial level on the other hand. There is a separate Department for Adult Literacy and Non Formal Education in the province of Punjab headed by Executive District Officer- Literacy. The present system of local government i.e. District Nazim, District Coordination Officer and Executive District Officer (Education and Literacy) was introduced in 2001 under the Devolution Plan.

Although more than 90 per cent of teachers deployed in schools are academically professionally qualified, they do not receive enough opportunity for refresher courses on a

---

regular basis. Recently, the government has introduced a Teacher Training Programme for in-service and on the job training of teachers, which has improved the situation.

The decentralized system is comparatively more effective. Under this system, education planning, management and monitoring/evaluation have been decentralized to the district level. However, it has been observed that the new system is facing certain problems such as shortage of qualified personnel, facilities and services and ambiguity in functions, responsibility and authority, which will hopefully be addressed with the passage of time.

The targets set in education and literacy, though ambitious, are enabling considerable progress to achieve the targets despite many constraints. The system is evaluated on the basis of results of the promotion exams. Additionally, research and evaluation studies and surveys are also conducted to evaluate the system – especially to assess the quality of education. Recently, the Punjab Education Department has developed a standard manual to evaluate the system. Under the devolved system of education, accountability to beneficiaries and local groups has increased to some extent. There is a wider participation beyond the government. A number of non governmental organizations (NGOs), international development partners, support organizations such as the National Commission for Human Development (NCHD), Deeni Madaris (religious education institutions), the private sector and individuals are taking active roles in the promotion of education and literacy in the country. Moreover, Education Foundations at federal and provincial levels have been established to promote education through Public Private Partnerships (PPP). Information is gathered and used for the purposes of accountability through the Executive District Officer, Sub District Officer, Learning Coordinator/Supervisor and Head Teacher within the Education Department. Outside the Education Department, information for accountability is collected through the Village Education Committees/School Management Councils, Nazims (similar to mayors) and Councillors under local government as well as through media and public opinion. Recently, a new system for monitoring and evaluation has been introduced in each district of Punjab for a third validation and evaluation.

The Devolution Plan in Pakistan was announced in August 2000 and the corresponding enactment by the provinces made for its enforcement on 14th August 2001. Since then, no impact study could be carried out and as such, it will be difficult to demonstrate its effectiveness at this stage.
Case 3: School Education Quality Assurance in Viet Nam

The objective of the School Education Quality Assurance Program (SEQAP) Project for Vietnam is to improve learning outcomes and education completion for primary education students, particularly disadvantaged primary education students, through supporting the government’s full-day schooling (FDS) reform program. There are four components to the project; the first component being to improve policy framework for the implementation of the FDS program. This is a highly strategic component which will aim at completing the requirements for the transition to FDS in the 2009–2015 period but also at building a more efficient and equitable framework for scaling-up the reform in the 2015–2025 time period.

The second component of the project is to improve human resources for the implementation of the FDS program. This second component will support the training and professional development of teachers, school leaders and education managers to successfully move toward FDS in the provinces with focus on teaching methods, teacher standards and school management. The third component is to improve school facilities and resources for the implementation of the FDS program. This third component will mostly support the upgrade of infrastructure and facilities and support recurrent expenditures as needed in about 1,730 schools to successfully move to FDS, with related decentralized capacity-building for effective school construction and preparation of the FDS plans. Finally, the fourth component is the program management, which will support the management of SEQAP to ensure smooth implementation and results on the ground. It will support the Ministry of Education and Training (MOET) standing office in key areas, as well as additional capacity-building at the sub-national level in procurement and financial management.

LEARNING FROM THE CASES:

1. Why do you think the Lead-Teacher Model was adopted in Thailand (Case 1)? What are the critical components to make the case a success?

2. How would you evaluate the effectiveness of the decentralization of teacher management in the Pakistan case? What are the key issues that need to be addressed by microplanners?

3. What has been learned from implementing a quality assurance programme in the Vietnam case?
Why do we need to establish curriculum development teams in schools and what are their major tasks?

How can the school ensure that the planned curriculum and teaching and learning activities are carried out properly and that they achieve the expected learning outcomes?

What are some practical ways to help schools make use of curriculum evaluation data to inform curriculum planning and classroom practices? What type of data would you recommend for this purpose?

Can you identify the most needed knowledge, strategies and skills for teachers to enhance student learning in your own country or district or school?

What are the key issues in developing and enhancing teacher quality?

What is teacher management in the broader sense? How is it related to education quality and student learning?
SUGGESTED READINGS


