

## Chapter 6

### Assessment Suggestions

#### I. Objectives of Assessment

During the process of teaching and learning, teachers should set clear objectives and design teaching plans. The quality of teaching and learning is improved by reviewing, through assessment, the suitability of teaching materials and activities and whether they suit the needs and levels of pupils or schools.

Assessment aims at assisting:

1. teachers

- to diagnose the progress of pupils;
- to identify pupils' strengths and areas for improvement in learning;
- to seek ways of helping pupils to improve;
- to find out the learning attitude of pupils;
- to collect information to improve teaching.

2. pupils

- to understand their own progress;
- to recognize their strengths and areas for improvement in learning;
- to use the information as indicators for planning further studies.

#### II. Assessment Strategies

The forms and results of assessment have to be in line with the learning aims and objectives of mathematics. Learning of mathematics does not only emphasize the mastery of knowledge and skills, but also the development of thinking ability. Thus, apart from assessing whether pupils are able to give correct answers, teachers can also evaluate pupils' processes of thinking by asking them to explain the observed results and the method employed. Teachers should adopt diversified assessment instruments and assess students at appropriate time.

At the end of a school term, a school year or a Key Stage, teachers can carry out an assessment to determine the overall performance of pupils and their levels attained. In

addition, teaching effectiveness can also be evaluated.

## 1. Forms of Assessment

The curriculum requires pupils to learn and explore mathematical knowledge through activities and the use of various learning tools such as cubes, shapes, balances, various measuring tools, calculators and computers. Hence, teachers are encouraged to use various forms of assessment to evaluate the abilities of pupils in applying mathematical knowledge and language, performing operations and using tools.

Assessment activities may be conducted formally or informally, in small groups or individuals. Forms of assessment should be diversified. For examples:

- classwork and homework;
- short quizzes;
- project work, such as making models, statistical surveys etc;
- discussion and presentation in class;
- observation of pupils' performance during lessons; and
- tests and examinations.

## 2. Notes in Designing Assessment Activities

Assessment should cover the selected learning units. Opportunities should also be allowed to pupils with different abilities to demonstrate their capability in various aspects, including thinking abilities.

Types of question in written examination may include short questions, conventional questions, routine or non-routine problems and open-ended problems. Apart from assessing pupils' ability in calculations, teachers should also evaluate their abilities in communication, observation, analysis, exploration and problem solving. Pupils are required to calculate accurately and express their solutions in a clear and coherent manner.

Traditional written examinations may not be able to assess pupils' knowledge and skills in all aspects, such as using measuring tools properly. Teachers are encouraged to design some practical activities to assess these abilities. During the process of assessment, teachers can also find out how pupils work with one another and their learning attitude through these activities.

### **III. Record of Assessment**

A systematic assessment record can be helpful in diagnosing pupils' progress and reflecting the effectiveness of teaching. Therefore, schools need design an assessment record system to help teachers determine the overall performance of pupils in various aspects such as classroom performance, homework, project work, tests and examinations. During the process of recording, the following points should be noted:

- Methods of recording should be simple and practical.
- Relevant information should be recorded and collected for filling in school report.
- Teachers should let pupils know what is included in the records.

### **IV. Feedback**

One of the aims of assessment is to help teachers find out the progress of pupils and give appropriate feedback. Feedback should include:

- judgment on the accuracy of pupils' answers or responses;
- comment on the effectiveness of methods used; and
- suggestions for further activities.

Teachers can optimize classroom teaching and enhance the quality of teaching and learning through the cycle of 'Teaching – Learning – Assessment'.