## Catering for learner diversity when teaching map reading skills in Secondary 1 Geography lessons

Map reading skills have long been considered a difficult topic in Geography. To help students of different abilities handle these skills, Ms Chan Suk Fun, a Geography teacher at **Henrietta Secondary School**, uses a wide repertoire of strategies to cater for the diverse learning needs of students.

## Planning for progression

Ms Chan begins considering how to teach these skills in the curriculum planning stage. She plans to teach different map reading skills in progression across the junior form Geography curriculum. Since the skills are of varying degrees of difficulty, the adoption of progressive approach enables teachers to allocate students to different entry points after assessing their learning abilities.

For example, before teaching gradient to Secondary 1 students, Ms Chan will conduct a pre-assessment so that she can determine whether students know how to calculate distance and scale. According to the teaching schedule, these two skills are to be taught in the first term and are required for calculating gradient. The results of the pre-assessment inform her of the levels of competency of her students and help her design suitable entry points for them.

## Learning and teaching strategies that support weaker students and develop the potential of more able students

Learning and teaching strategies, such as scaffolding, tiered activities and collaborative learning, are used in map reading lessons. For example, Ms Chan first demonstrates how to determine height from a contour line map. She then asks students to determine the heights of points, which are arranged in such a way that skills of increasing complexity are required. After students master these skills, Ms Chan demonstrates how to calculate gradient. Students grouped according to ability are then given tiered activities to ensure that weaker students can learn the basic skills with hints and guidelines before moving on to the next stage while abler students are given more challenging tasks to develop their learning potential.

## A learning menu as a post-lesson assessment

A post-lesson assessment is designed as a learning menu to evaluate how well students can use their skills. The menu is composed of a "main dish" and a "side dish". The "main dish" contains questions on the skills that students must learn. In the "side dish", students choose a task according to their interests and readiness to challenge themselves. Throughout the process, assessment for learning is applied to determine when and why students fail to learn these skills so that remedial measures can be taken.

Since she began including these strategies in her lessons, Ms Chan has found that more students have acquired difficult map reading skills. She can also better detect problems at an early stage and offer immediate help, especially to weaker students.

If you are interested in catering for learner diversity, read also Examples 34 and 35.