

Introductory activity Activity A

Climb that Mountain

Aim

The pupils are presented with an activity that gives them the opportunity to think systematically through a problem by means of group discussion, as they will be required to do in the activities that follow. The pupils also become more conscious of the techniques and strategies that make for effective group working. In addition, you, the teacher, have the opportunity to observe the groups and see whether you need to make any adjustments to their composition.

Materials

Supplied

- ◆ Resource sheet 1, which shows a mountain with three peaks and many stepping-stones leading to them. Each stepping-stone is labelled with a number between 0 and 9.

Before you start

Take photocopies of Resource sheet 1 – one copy for each group.

Activity

Cognitive conflict and social construction

- ◆ Explain to the pupils that they will be given an activity to do, and that they will have 10–15 minutes to complete it in their groups. They can use any means to solve the problem but at the end they need to be able to explain how they did it.
- ◆ Ask the groups to begin at the word '**Start**' and to climb to the top of the mountain by moving from stone to stone. Each step is worth the number of points on each stone. The object is to get to the top quickly, making the highest possible number of points on the way. The groups can move sideways as well as upwards. The group to make the most points in climbing to the top of any peak in the given time is the winning group. Pupils have to work out the best route in terms of time and points.
- ◆ After 10–15 minutes, ask each group to share their responses. If there are points of disagreement between groups, encourage whole-class discussion on how to resolve them.

Metacognition

- ◆ If all the groups solve the problem without any difficulty, look confused and say that you thought it was possible to make a higher number of points. Give them the opportunity to show you the method they would use to prove you wrong. **What did you have to think about to solve this? What did you discuss? Were there ideas that you decided not to follow? Why was this?** Encourage each group to listen and add to other groups' explanations.
- ◆ Ask the pupils to discuss how the members of their group worked together. **Were you happy in your group? Did your group work well? What made your group work well? What worked less well? How could that be changed to make things better next time?**

Reiterate the main behaviours that help to make a group work well, reminding the pupils that they should:

- ◆ listen to each other;
- ◆ think about the ideas suggested and decide which to try;
- ◆ speak in a voice that the whole group can hear;
- ◆ ask when something is not clear.

Also remind the pupils, **If you disagree with someone, explain your reasons so that the person understands.**

You may notice that some groups are not well balanced – for example, in terms of the personality types within the group. If so, note any changes that you will need to make before embarking on the next activity in about a week’s time.

