

### **Audio 2.4**

Betty is a Grade 5 teacher in Kabwe. There are 48 learners in her class, and she does not find it easy to know them all.

Charles is a learner in her class. He is noisy and volunteers frequently. Because of this behaviour Betty had assumed that he was one of the brighter children. However, during some group work, she noticed that Charles was not contributing very much. As she was walking around the class observing her learners working in their groups, she asked him some questions and realised that he could not read the sentence written out on a card as part of the task. Betty was careful not to draw attention to him as she realised he did not feel good about this.

Over the next few weeks, Betty made more effort to talk to Charles and find out a bit more about him. She realised that he was struggling with the work but did not want his friends to know. He put his hand up a lot to answer short closed questions but avoided the harder questions. He was very anxious to please, but too scared to ask for help.

Betty then decided to pair Charles with one of the good readers in the class and purposefully organised pair work activities in the next few weeks where the better reader could help him. Charles soon began to grow in confidence, his reading improved, and he started to participate better in all activities.

### **Audio 3.1**

Elisa is a teacher in grade 5 and she is exploring the local community and environment around their school in a village in Zambia. As part of the social studies syllabus, grade 5 learners need to study aspects relating to transport and communication in the district. Elisa hopes to develop her pupils' abilities in observing and respecting the environment surrounding their village. She hopes this will help them to understand their roles and responsibilities with respect to local resources and their community.

At the end of one day, Elisa explains to the learners what they will be doing the next day and what she hopes they will learn. As homework she asks them to note down all the modes of transport they see on their way home that day, and to bring their list to school the following day.

The next day, she writes on the centre of a large piece of paper:

What modes of transport do we have in our own environment?

Elisa asks for volunteers to come and add the names of the modes of transport learners have noted in their homework, for example: bicycle, car, minibus. As they add the modes of transport, Elisa asks them what is good and not so good about different modes of transport for the local environment, and for those living in it.

Elisa then draws a circle around all these modes of transport and asks learners to add any other modes of transport they know about but are not present in their own community. She also asks them about the benefits and issues of each transport. During this activity Elisa has to explain a number of modes of transport that some learners are not familiar with. To do this, she first asks her learners if any of them knows what it is, and then she adds some information herself.

For the next activity, Elisa draws a table on the chalkboard with 3 columns: mode of transport, benefits and issues. She puts learners into groups of 6 and gives each group a mode of transport

from their community, and one that is not present within their community. She asks them to copy the table on the paper she has given them and write what is good and not so good about both modes of transport.

As she walks around the different groups, Elisa finds that all learners are very engaged with this activity and are contributing very good suggestions.

For her next lesson, Elisa plans to ask each group to explain the benefits and the issues of each mode of transport, asking learners to make notes of all these in their notebooks. Elisa has also thought about how she can assess each learner's understanding and knowledge in a few weeks' time.

### **Audio 3.2**

Over the past 2 weeks, I have been collecting pictures and objects that illustrate different types of force action, drawing resources from around my home and school environment. For example, I have a screwdriver to demonstrate how to 'screw', and a sheet of ripped paper to visually show the meaning of 'tear' and 'rip'. I begin the class by demonstrating and eliciting the three key verbs (pull, push, twist).

Most of the learners are familiar with these words although a few are not sure of 'twist'. Once I've demonstrated and asked them to show me physically what it means, I write the three words on the board.

We then do a brainstorm activity where I ask my learners to call out all the action words they can think of. I make 3 'word spiders' on the board - one for each of the three verbs (push, pull and twist). We begin by using words in their home language and then move onto English.

I find using mime to demonstrate meaning is really helpful, and I check with them whether each suggestion they offer is a push, pull or twist verb to check their understanding.

Finally, I put all the pictures and objects I have collected on a table and ask the learners to label them with an appropriate verb and put them into 3 groups – one for push, one for pull and one for twist types of force.

### **Audio 3.3**

I am the teacher of a large Grade 6 class and I had become more and more concerned that I just didn't have time to check the reading ability of all my students during normal lesson time. A few of my students are great readers and I know that I tend to use them a lot when I want a learner to read aloud from the textbook because it saves time. I needed a better way of monitoring the skills of the whole class, as there are some students I had not heard read aloud for quite some time. So, for a month, every time I listened to a learner read, I made a note of it and how they did in my mark book. I deliberately created opportunities for less confident readers to read to me individually, rather than to the whole class.

It took a few weeks, but now I have listened to all the learners in my class and I have now been able to group them into reading sets which I believe will help them improve and practise their skills. Thanks to this information, I also sometimes use learners from the top reading groups to help learners who find reading more difficult.

### Audio 3.4

Lucy is teaching grade 4 learners about awareness and use of the past tense to write short stories. They have done many activities in her lessons over the past week, but she is not sure if all her learners have fully understood and remember the main irregular verbs.

In order to assess their learning, she asked them to write a story titled 'Janice's visit to the market last week'. For this she gave learners a list of 10 verbs, both regular and irregular, which they had to include in their story.

While she is correcting the stories, Lucy realises that most learners have clearly understood that all verb forms are the same for the different persons in the past tense. However, she noticed that some learners are still finding it difficult to use the correct forms for common irregular verbs such as *go*, *make* and *buy* for example. In her class list she made notes about how well the different learners had completed the activity.

The next day, she sets up an activity where learners had to change sentences which included both regular and irregular verbs in the present to the past tense. Before the activity, using the notes she had made on her class list, she put learners in groups ensuring that in each group there was at least one learner who had demonstrated good use of past tenses in the writing. As the groups worked, she walked around the classroom paying attention to all learners and ensuring those who had completed the writing correctly were assisting others rather than just giving the correct answer.

At the end of the activity, Lucy brought the full class together again. In order to reinforce their learning, she asked learners who had made mistakes in their writing to provide the correct sentences from their group.

A few weeks later, Lucy revisited past tenses as part of another topic they were working on. As she walked around the class while they were doing a pair activity, she used her notebook to remind herself of the learners who had struggled in the writing activity, and she was pleased to see that many of the learners who had made errors in their writing were now using more verbs correctly.

It took Lucy a lot of time to mark all the work and set up the groups, but when reflecting about this activity, she realised that all learners were now much more confident in using the past tense in their writing. The additional time she had spent in this series of activities to reinforce irregular past tenses had benefitted all learners.

### Audio 3.5

Charles, who teaches social studies and expressive arts at a small school in Mumbwa, wants to reinforce his Grade 6 learners' knowledge of important events in history. In order to do this, he plans a lesson where his pupils need to develop a timeline which would represent key events that have occurred in the history of Zambia, Central Province and Mumbwa District. Charles has already spent a number of days on this topic, so he is keen to know how much learners remember about the topic and how to help them to summarise their knowledge.

He divides the class into 6 groups of 4 to 6 learners and gives them each a big piece of paper. On each he has written Zambia, Central Province or Mumbwa. He gives two groups a paper with "Zambia" written in the centre; two groups a paper with "Central Province" written in the centre; and two groups a paper with "Mumbwa" written in the centre.

Each paper has a table divided into two columns: Date/Year and Event. He asks the groups to write all the events they remember that have occurred within their allocated jurisdiction, adding the date or year it occurred. If they can't remember the date, they can leave that blank as just naming the event already demonstrates they know that a key event took place.

After 10 minutes, he asks the two groups who worked on the same jurisdiction (Zambia, Central Province or Mumbwa) to exchange the pieces of paper and:

- assess whether they think the other group is right;
- put a question mark next to any dates or events they do not agree with; and
- add anything the other group might have missed.

As Charles is not planning on asking each group to share their work at this stage, he walks around the groups paying special attention to their writing to ensure that the information is correct. After 10 minutes, he asks the groups to return their paper to the original group.

After each group has received their paper back, Charles asks all learners to look at the board where he has drawn a timeline of the history of Zambia. To help pupils understand the concept of periods, he has divided the history of Zambia into the pre-colonial, the colonial and the independence periods. To give a sense of how long each of these periods is, he draws each period to scale. Charles asks each group to identify one event and asks for a volunteer to come to the board to place the event in the timeline. When all 6 groups have added their event, Charles explains that he now would like them to draw a timeline and present the events they have identified in the best possible way for others to learn from it.

### **Audio 3.6**

Geoffrey is working on proper fractions with his Grade 3 class. He wants to ensure that they all understand proper fractions and can explain their understanding of the topic. Geoffrey begins the lesson by taking a banana out of his bag. He tells the students that he wants to give an equal part of the banana to five of his friends and asks them to tell him how he can do that. Several students put their hands up and Geoffrey elicits the response that they will cut the banana to make 5 equal parts. Each one is a fifth. He writes  $\frac{1}{5}$  on the chalkboard.

Geoffrey tells the students they are going to work in pairs and asks them all to point to their partner. He then gives them four tasks to do around dividing bananas into equal parts or fractions. He asks them to divide an imaginary banana into 4, 6, 8 and 9 parts. For each one he asks them to write down the fraction.

As the students are working through the tasks, Geoffrey circulates around the classroom monitoring the students and asks them to explain how they reached their answers. He avoids telling them the answer but waits for them to find it and encourages pairs to help each other. In this way he is able to identify where there are problems of understanding.

When all the learners have completed the tasks, Geoffrey asks for volunteers to write each answer on the chalkboard. He then writes up two more fractions:  $\frac{1}{3}$  and  $\frac{1}{10}$ . He asks them to say which one represents the smallest piece of a banana; which one represents the largest; and how they

know. At the end, he helps them to deduce that the larger the number on the bottom of the fraction, the smaller the piece of banana.

### **Audio 5.3**

Teacher Samuel was teaching his Grade 3 class about animals and where they live. He teaches them in Chitonga. Only about 25 are confident readers out of the class of 76. He found pictures of six animals and stuck them on the classroom wall. He then drew pictures of where they live and stuck those up on the other side of the room. He made some cards out of old food packets and wrote the name of an animal on half of them and the name of where they live on the other half (all in Chitonga). He gave half the class the name of an animal, and the other half the places where they live. To begin with each learner had to stand next to the picture corresponding to their animal or place. This was to check that all the children could understand the word they had been given. They then had to walk around the room and find a partner who had the name of where their animal lived. For example, 'gorilla' was matched with 'rainforest'; 'worm' with 'mud' and so on. When everyone was paired up, Samuel collected in the cards and gave them out again so everyone had a different word. He did this a few times until he was confident that all the children could recognise the words, and they knew where each of the animals might live.

At the next TGM, he explained his idea to the other teachers.

Teacher Paxina was doing science with Grade 6. She adapted the activity but wrote the words in English. Also, when the pairs had found each other, they had to discuss how their animal was adapted to where it lived. At the end, they had to write a sentence about each animal and why it lived in a certain place.

### **Audio 6.1**

Fridah was teaching science to Grade 7. They were learning the ways to separate mixtures. Fridah had ready a large jar of muddy water, paper cups, squares of two types of material (cotton and muslin), a saucepan full of cabbage and water, and a colander.

Fridah gathered her equipment at the front. She held it up as she talked so everyone could see. She asked if anyone would like a drink. 'Yes please', came a shout. She poured some of the dirty water into a paper cup and offered it to George. 'Would you like this?' 'No thank you', said George, and everyone laughed. Then she held up the saucepan of cabbage and asked them how they would separate it from the water. Someone had spotted the colander and said, 'use that'. Fridah poured the water and cabbage into the colander. She asked the students to explain how it worked to the other person next to them. She asked Martha and Phyllis to explain their answer to the class. They did not give quite enough detail, so she asked a few other pairs.

Once they had established that the holes were too small to let the cabbage through, she asked them how they could separate the mud from the water. After a few contributions, a plan emerged: pour the muddy water through something with holes in – but the holes needed to be very small.

She asked three pairs to join together and form a group. Each group sent one person to collect a cup of muddy water, two empty cups and two pieces of material. She told them that the aim was to find out which material worked best for cleaning water. As a group they worked out what to do and one person drew a diagram. Fridah went around and questioned them about how they would make sure

it was a fair comparison, hoping they would realise that they needed to stir the dirty water. Then they tried it.

Fridah drew a table on the chalkboard with two columns – one for the cotton and one for the muslin. When they finished, each group had to put a tick in the column which had the cleanest water. At the end there were eight ticks in the 'cotton' and two ticks in the 'muslin'. She wrote three questions on the board for students to discuss in their groups.

1. Which material was more effective?
2. Explain why this was the case?
3. What question would you like to ask the groups who ticked the 'muslin' column?

When everyone had finished, she asked a group to answer questions 1 and 2. Then she asked another group if they agreed and if they wanted to add anything to the answer. Finally, she asked a third group to answer question 3. There followed a lively discussion and eventually one of the groups who ticked the 'muslin' column admitted that they had not stirred the water, so in the muslin experiment all the mud was at the bottom. This meant they could not do a fair comparison.

Fridah showed the class a column that she had made from an old pipe. She had filled it with sand and put a piece of muslin at the bottom to hold the sand in. She poured some muddy water in the top. While they waited, she asked the class to draw a diagram of the apparatus they used in their exercise book and write a few sentences about what they did and why it worked. After about ten minutes, they were all thrilled to see clean water come out of the bottom of the column. Fridah finished the lesson by explaining that this is what happens to water before it goes to the system and into our taps. Sometimes chlorine is added as well to kill bacteria. She asked what advice they would give to a household that was collecting their drinking water from a river.

Finally, Fridah pointed out that with 8/10 ticks in the column they could be reasonably confident that cotton was the 'best', but in all scientific experiments there was likely to be some uncertainty.