

### **Audio 2.1**

James teaches social studies to grade 7. Their examination is fast approaching and he is getting a bit behind with the syllabus. The next topic is the Zambian Family. He is apprehensive about teaching this topic because he is aware that Precious' mother has recently died after a long illness and he's worried that talking about families will make her sad. He talks to the Grade 6 teacher, Namwinga, who taught them last year. She remembers that in that class Changu is looked after by her granny and Joseph's family is headed by his older sister. So there are several types of family in the class. By focusing on this, she suggests James could emphasise that whatever the type of family, the reasons why families are important still apply.

Before the lesson he gets to talk to Changu and Joseph and tells them about Precious. He asks them to sit near her during the lesson. He also asks Precious how she and her brothers and sisters are coping. He tells her they will be talking about families and that Changu and Joseph would like to work with her as they are in a similar situation.

James starts the lesson with a brainstorming session about all the different types of family groups that exist. The class suggests nuclear families, extended families, single-parent families, child-headed families. They do a quick survey of all the different kinds of family in the class and then work in groups to discuss why humans live in families and why it is important to respect differences in family types. In Maths the next day they draw a bar-chart of the results.

### **Audio 2.2**

Hello, my name is Olivia and I am a Grade 4 teacher with 50 learners. We are currently studying citizenship and the obligations and duties of a citizen. I decided to use some group work to reinforce the work my learners have been doing over the past few days. It's quite difficult to do group work in my Grade 4 classroom as the desks are in rows and are very heavy. I decided to put the students in groups of four by asking students in rows 1, 3 and 5 to turn their chairs round to face the students in the row behind them. This way I can easily make a group of 4 without spending too much time moving the furniture!

I told the students that they have 10 minutes to make a list of the obligations and duties of a citizen. They must decide on one student to be the scribe and one person to be the spokesperson. I told them I will be very strict with timekeeping. After 10 minutes, I stopped the activity. I asked the spokesperson from each group to share one item from their list and as they spoke, I wrote it on the board. I stressed that there must be no repetition, so all the groups must listen when each student speaks. As each group added a different item, I wrote it on the board. After going around all the groups I asked if there are any other things to add and if there are any points that are missing.

To finish the activity the class copied the list from the blackboard into their books, and I walked round the classroom overseeing the learners' work and helping those who needed assistance.

### **Audio 2.3**

Patricia is a teacher in Liteta. In Grade 2 children need to be able to add and subtract numbers up to 100, in columns. Patricia noticed that some of her class were struggling to recognise two-digit numbers up to 100, even though they had done it in Grade 1. She invented a Bingo game to help her learners practise recognising numbers.

She played the game with the whole class first. She gave each pupil a card and some buttons, and some stones she had collected on her way to school. Each card was different. The cards had 24 numbers between 1 and 99, arranged in 4 rows and 6 columns. A few drew pieces of paper, numbered 1 to 99, from a box and read them to the class. If a pupil found the number read out on their card, they placed a button or stone over it. The first pupil who had buttons/stones covering a row, column, or diagonal correctly won the game. As the pupils played the game, Patricia went round the class helping. The successful completion of a row, column, or diagonal is evidence of the ability to recognise two-digit numbers correctly.

Next, she divided the class into groups of eight and they played the game at their own pace, taking it in turns to be the caller.

Patricia also allowed pupils to play Bingo at break and she was surprised how many pupils played, especially on a wet day. She also noticed how much more confident they had become in mathematics classes. She extended the game by making more cards and more pieces of paper to include numbers up to 1000.

### **Audio 2.6**

Rose collected a range of empty grocery packets, boxes and tins. She divided the class into groups of four or five and gave each group one or two items. She wrote the questions on the chalkboard but also read them out for the children who could not read very well. As she read them, each child wrote their own answers. Then she asked them to discuss them in their group and decide on a group answer for each question.

#### **Questions about grocery items**

1. What is in this tin/packet/box?
2. How do you know this?
3. Which word or words are in the biggest letters?
4. Why do you think this word or these words are the biggest letters?
5. How many words begin with capital letters?
6. Which words are written more than once in the package?
7. Which word is used the most?
8. What is the weight of this product (in grammes/kilogrammes)?
9. What do all the words and pictures tell you about this product?

While the learners were working in their groups, Rose walked around and helped the children who struggled with reading. After 10-15 minutes, she went around the groups and asked each group for one answer until she covered all the questions.

Then she asked them to discuss two more questions:

- Do you agree or disagree with what these words and pictures tell you?

- If you had the money, would you like to buy this product? Why, or why not?

In the next lesson, they worked in the same groups to design the print and visual information for the packaging of a real or imaginary grocery item.

### **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 3.4

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 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.