

HOW I TEACH TALLY TABLES IN THE CONTEXT OF THE CYCLE OF DATA HANDLING

Leonora Joy Davids

Tuscany Glen Primary School, Bluedowns, Eerste River, Cape Town

INTRODUCTION:

This presentation will be about how I teach tally tables in Grade 4. I have chosen this topic because Grade 4 is the first time that the learners are required to draw up tally tables. Another reason for choosing this topic is because teachers and texts often teach it in isolation, and not in the sequence that it should be taught – which is in the context of the cycle of data handling.

CONTENT

A brief video clip will be shown.

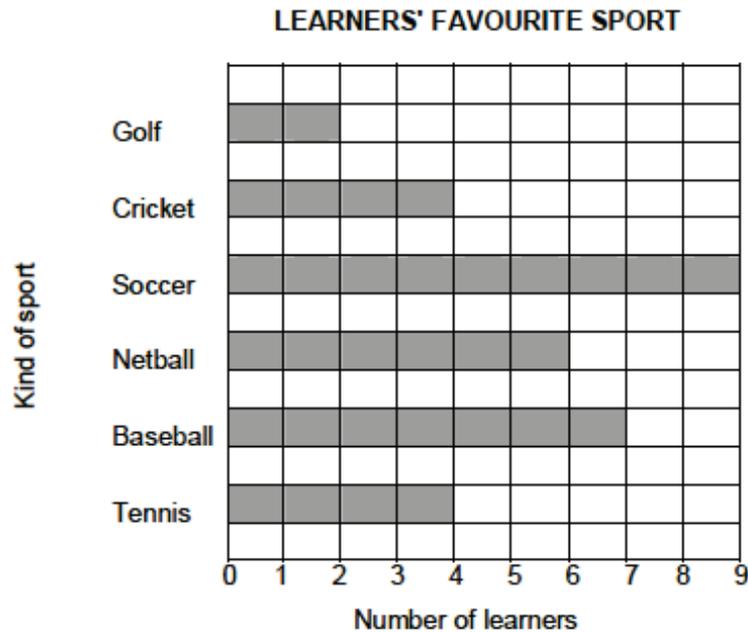
*** play clip (humorous YouTube clip about teaching - 1 minute)

When I started teaching, I just did whatever the textbook said to do, only to find out, four years down the line, that textbooks don't always give you the best way of teaching something.

I looked at the ANA test my grade 4's wrote in September, and saw that even there, they "put the cart in front of the horse".

*** Show and discuss example from ANA 2013 Grade 4 test.

18. This bar graph shows the most popular kind of sport amongst the learners in Grade 4.



18.1 Complete the tally table.

KIND OF SPORT	TALLY MARKS
Golf	
Baseball	
Tennis	

(3)

This brings me to the question: “What is the purpose of doing tally tables?” We can clearly see here that this test creates a misconception as to the purpose of tally tables. Why do we make tally tables? Do we want to see that the child knows how to draw up a tally table? Do we want to see if children can make groups of fives? Or is it simply to add marks to our question/test papers?

That this test item requires learners to make tallies from an existing bar graph, creates an impression that tally tables are arbitrary. Even if this is a testing context. Tests, even when not intended, can be formative, and can direct learners’ understanding of some aspects of school mathematics content.

I think a tally should actually be the basis of the other graphs – you should get your information from the tally to complete your bar graph, pictograph, etc.

Why are tally tables important? The reason we do tally tables is to sort out raw data; to sort out a mess in a systematic and organized way, without getting confused easily. This is especially if we are working with a huge data set.

If I had to find out from about 50 respondents, what their favourite soft drink was, choosing from Coke; Fanta; Sprite; Stoney; Appletizer, I would need to do the following:

- Find a way of recording my data (without worrying about organizing it – yet)
- Once I've recorded my data accurately, how can I organize it?
- Once I've organized it, how can I represent it in a way that the data can be easily read?
- What does my data tell me, and which further questions arise?

*** Work through the above steps, getting the required information from the participants.

- The preferences, in no order, are written on the board/flip sheet
- The data is systematically organized from the recorded raw data onto a tally table
- The organized data is now represented on a bar graph

I would ask as to how useful this data is. How can it be used?

The same way in my class, I must have reasoning behind why we are gathering information. I always try to collect data in my class that can lead to some sort of decision, or inform an upcoming event, like the class party, an outing, or any other decision that could influence the all the children in the class.

Another “danger” for when deciding on which information you wish to collect, is that you (or the learners) can come up with too many options. For example, if you ask: “What’s the most popular colour in this class?” you may come up with too many variations and preferences (red, pink, light pink, maroon, mauve, indigo, purple, etc.) It’s a good idea to give them a limited choice from a list. (Choose your best colour from the following list: red, blue, green, orange, purple.)

So what “themes” can we use to collect data in the intermediate phase classroom?

Some of my personal examples are:

Fun day events (What’s the most popular stalls to have?)

Fast foods (What’s the most delicious fast food? Choose from...)

Class party (Which cool drinks must we buy? Choose from...)

*** Practical exercise (depending on number of attendees)....

There are three types of lunches here today, which one would you prefer?

- Chicken burger
- Beef burger
- Rib burger

The participants can now organize themselves and collect the raw data, make tally tables and then draw bar graphs from the data that they've collected.

CONCLUSION

We will conclude with a discussion on tally tables and the role that they played in organizing the data during the activities. Participants will be encouraged to reflect on the activity. We will exchange ideas on topics and resources that could be used and how to make the learning experience fun for the learners.

REFERENCES

ANA Test 2013 (Mathematics Grade 4)

Course notes (ACE Curriculum Leadership Languages and Mathematics 2013)

Own Experience
