TV habits

Annotation

Anna evaluates the reasonableness of suggested headlines in terms of the data presented. She understands that headlines are written to be sensational and that their claims need to be tested. She considers the process used to gather the data upon which the headlines are based (questions asked, sample size) and the results (looking at the data in different ways).

Problem: TV habits

The students in Room 12 are studying two headlines that have been written to summarise data on TV viewing habits for a random sample of year 8 students. The teacher poses the following problem for the students:

Here are some data about the amount of TV some year 8 students watch and whether they have a TV in their bedrooms. Two headlines have been written about this data: "Survey shows girls glued to screen" and "Boys more likely to watch tube". Can both of these be true? Which do you think is supported by the data?

Student Response

Anna:	Deciding if these headlines are true depends on lots of things, like what questions did they ask? The two columns say "TV in own bedroom" and "TV time yesterday", but neither of those is really about whether girls are "glued to a screen" or not.
Teacher:	Can you tell me more about that.
Anna:	Well, also we've only got 25 people in the data set, although they are random from CensusAtSchool, so that helps us, because they are not just somebody's friends who might all be alike. So it's not really reasonable to say "Boys more likely to watch tube" when there are only 13 boys in the data set – you can't really say anything about boys and girls overall from only 25 people.
Teacher:	Can you tell me some more about your thinking.
Anna:	Well, nine boys and seven girls have a TV in their rooms, so I guess that gives boys more chances to watch, but two more is not really many. The boys watched 23½ hours of TV the day before, and the girls watched 20 hours, but there's one more boy so that might be why. There is one girl who watched a lot more than anyone else – 5½ hours – the longest a boy watched was 4 hours. The same number of boys and girls watched no TV or only half an hour, so it seems they are quite the same to me. I suppose you could say the headlines … aren't very good descriptions of all the data. Maybe "Wide range in viewing times" might be more true, but it doesn't sound as interesting or shocking, which is what headlines try to do.