

Bike Puncture



Trend task

Approach: One to one

Focus: Retelling a process.

Resources: Video recording on laptop computer, tyre tube and puncture repair kit.

Level: Year 4 and year 8



Questions/instructions:

Video showed bicycle technician Peter Goding checking tube for a puncture, repairing it, reinflating and checking for further leaks.

Have you ever fixed a bike puncture?

Have you ever watched someone else fix a bike puncture?

We are going to watch a video showing how to fix a bike puncture once the tube has been taken out of the tyre. After watching the video, I want you to tell me what you would do to fix a puncture.

Click the **Play** button to start the video.

Now I want you to explain to me, as clearly as you can, how you would fix a puncture. Here is a bike tube and a puncture repair kit. Use these to show and explain how you would fix the puncture.

Steps included	% responses	
	2000 ('96) year 4	2000 ('96) year 8
pump tube up	51 (48)	81 (86)
find hole	78 (64)	93 (97)
check for other holes	31 (31)	55 (56)
rough up tube with sandpaper	65 (73)	86 (94)
roughened area as large as patch	5 (2)	20 (20)
put glue on roughened area	93 (98)	97 (97)
wait for glue to dry	72 (77)	86 (84)
peel cover off patch	39 (41)	63 (63)
place patch over area of glue/hole	74 (68)	79 (82)
press down firmly	30 (29)	53 (53)
peel off backing paper	57 (57)	77 (74)
check all edges pressed down	27 (33)	46 (52)
pump up tube	16 (15)	29 (39)
check for leaks	24 (20)	43 (40)

Sequencing

	% responses	
	2000 ('96) year 4	2000 ('96) year 8
all steps mentioned are in correct order	53 (45)	61 (59)
1 or more steps out of order, but later corrected	21 (28)	29 (28)
1 step out of order	12 (15)	6 (9)
2 steps out of order	5 (7)	3 (0)
explanation jumbled or very incomplete	9 (5)	1 (4)

Speech clarity

	% responses	
	2000 ('96) year 4	2000 ('96) year 8
very clear and well articulated	19 (22)	44 (50)
some minor limitations	62 (64)	54 (46)
significant limitations	17 (14)	2 (4)
very hard to understand	2 (0)	0 (0)
Total score: 16-19	2 (1)	24 (22)
13-15	27 (23)	45 (50)
10-12	43 (46)	25 (22)
7-9	19 (24)	5 (6)
4-6	6 (3)	1 (0)
0-3	3 (3)	0 (0)

Commentary:

On average 18 percent more year 8 than year 4 students succeeded with each task component, with 40 percent more gaining a total score of 13 or more. The 2000 results were very similar to the 1996 results, at both year levels.