NEMP Report 18: Technology 2000

Quiz Board

Approach: Group

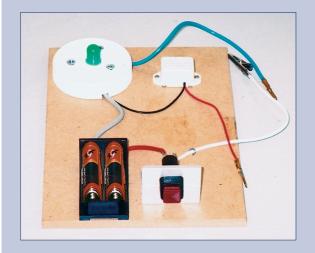
Focus: Evaluating technological solutions.

Resources: Two "quiz boards" with push buttons, batteries, buzzer and light.

Questions/instructions:

Put out the two quiz boards.

Here are the two boards that we will call "quiz boards". You can connect up the wire on the board so that it will make the light or the buzzer work. I want you to work in pairs to see if you can make the light work. When you have done that try to make the buzzer work. I will give you one quiz board for each pair.



Hand out the quiz boards and allow students to attempt to make the light then the buzzer work. If after a reasonable attempt they don't succeed, show them how to do it, then ask them if they can do it without your help.

% responses 2000 ('96) **year 4**

74 (91)

able, without help, to connect wires to make the light work (switch not essential)

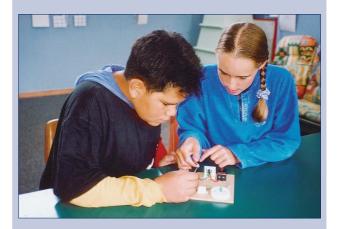
Put the quiz boards aside while the next instruction is given.

In this activity you are going to try to find out if it is better to use the light or the buzzer on the quiz board. First we'll try the lights, so connect the wire so that the light works.

Check the connections.

Each of you will have a different job — and you will all have turns. Two people will be judges. Two people will be contestants. I will ask the quiz questions, and as soon as a contestant wants to give an answer, they will make the light go on their quiz board. The two judges will say which light went on first.

Appoint 2 children as judges and 2 as contestants. Allow the contestants to practise making their light go.



Now we'll start the quiz. I'm going to ask 5 questions. The judges will say whose light went on first, then I'll ask that person to tell me their answer. Don't say your answer until I ask you.

Ask the questions, each time taking the lead from the judges before asking for the answer.

- 1. What day is it today?
- 2.3+3
- 3. Tell me the name of an animal that lives in the sea.
- 4. What is your favourite food?
- 5. What is your best programme on TV?

Now we'll swap around. The two who were judges can be the contestants, and the other two can be judges.

Trend task

Level: Year 4



% responses

2000 ('96)

year 4

Give the contestants the opportunity to try the lights before starting.

- 1. What is the name of your school principal?
- 2. 4 + 2
- 3. Tell me the name of a bird.
- 4. What is your favourite drink?
- 5. What is the colour of your eyes?

Now we'll do another round of quiz questions, but this time we'll use the buzzer instead of the light.

In your pairs, connect up the quiz board so that the buzzer works when you push the switch.

> able, without help, to connect wires to make the buzzer work. (switch not essential)

1) 80 (94)

Check the connections, then arrange for the first pair to be the contestants and the other two the judges. Give the contestants the opportunity to try the buzzers before starting.

- 1. What is your teacher's name?
- 2. 4 minus 2
- 3. Tell me the name of an insect.
- 4. Monday, Tuesday, Wednesday...— what day comes next?
- 5. What is your age?

Now we'll swap around again.

Contestants become judges, judges become contestants. Give the contestants the opportunity to try the buzzers before starting.

- 1. What is the name of your school?
- 2. 5 minus 1
- 3. Tell me the name of a vegetable.
- 4. September, October, November...— what month comes next?
- 5. What is the colour of your hair?

You've tried the quiz board using the light, then using the buzzer. To finish off, I want you to have a discussion in your group to decide which is better for a quiz — the light or the buzzer. I want you to think of good reasons and to talk about your reasons in your group. Everybody is to take part. Do that now.

Allow a short time for discussion.

Now tell me which you think is the most suitable for the quiz board the light or the buzzer. Tell me the reasons for what you are saying.

Strength of justification	very high	7 (3)
	quite high	41 (31)
	moderate	41 (48)
	low	11 (17)
	low	11 (17

Commentary:

Compared to the 1996 students, the 2000 students were markedly less successful in making the light and buzzer work without help, but more successful in justifying whether the light or buzzer was preferable to use in the quiz contest.

% responses

2000 ('96)

year 4