

【研究室だより】

Active Participation Through Response Cards

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Response cards are "cards, signs, or items that are simultaneously held up by all students in the class to display their responses to questions or problems presented by the teacher" (Heward et al., 1996, p. 5). Response cards have been used in a wide variety of classrooms, from elementary school to graduate school, in a wide range of subject areas. The basic procedure is simple. Teachers distribute response cards to students. These cards could be as simple as four pieces of colored paper. At various points during a lecture, the teacher asks the class multiple-choice questions. The students are all required to answer by holding up one of their response cards.

In an early study, Wolf (1981) used four-color response cards at a medical university. Wolf found that the cards helped hold students' attention even in large lectures of up to 250 students. The students themselves reported that the response cards help them to stay awake.

In an elementary mathematics class, Lambert et al (2006) found that response cards helped students to participate more, and answer more questions correctly. They also found a decrease in disruptive behavior (ibid). Response cards have been found to increase test and quiz scores, increase participation, increase learning, and decrease off-task behavior such as chatting or sleeping (Randolph, 2007).

So, for students, the benefits are clear. They have to pay closer attention in class, to think about the teacher's questions, and all of them must show answers simultaneously to the teacher. For the teacher, though, there is an evaluative aspect as well. If nearly every student answers correctly, the teacher knows that the

students have understood the lecture so far, and the teacher can continue with the lecture. However, if many students answer incorrectly, the teacher knows that the students have not understood the lecture very well, and at that point, the teacher can try explaining that aspect of the lecture again.

A high-tech version of response cards are educational audience response systems. Instead of colored paper, the students have electronic clicker devices to send their answers electronically to the teacher's computer system (Banks, 2006; Wertheimer, 2009; Steinberg, 2010). I have developed a web-based system that students can access through iPod Touch or other mobile devices, including keitai phones (Pellowe, 2010; Pellowe et al, 2010), but in many cases, a simple, low-tech response card system is more flexible than a high-tech one (Pellowe, 2011).

In my English classes at Kinki University, I use a two-sided response card that I co-developed (Pellowe & Shimizu, 2010; Shimizu & Pellowe, 2010). Each side has two answer areas at either end [see Figure 1]. The answer area has a color, a shape and a letter, making it easy to see the students' answers. For the rest of this article, I will share some of the ways I use response cards in my English classes.

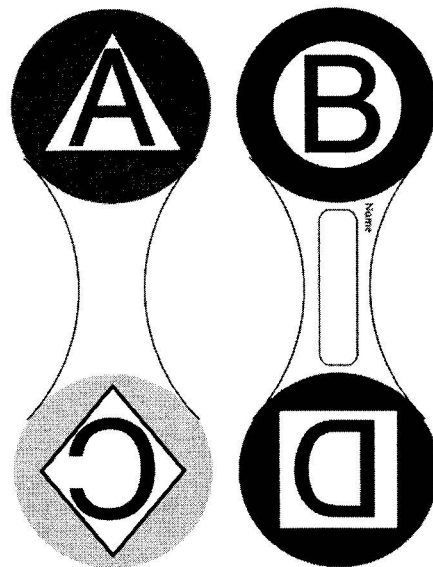


Figure 1 : Two-sided response card

Before listening **comprehension** activities, I give the students some **questions** to answer. The students understand that **they will all be asked** to answer with the response cards, so **they pay closer attention** during the listening activity. **An example question:**

What time will they meet?

- A: 2:15
 B: 2:30
 C: 2:45
 D: 3:15

These response cards are also useful to elicit students' own answers as a **warm-up to a speaking activity**. I write a basic pattern on the board, and **ask students a variety of questions**.

Have you ever _____?

- A: Yes, many times.
 B: Yes, a few times.
 C: Yes, but only once.
 D: No, never.

Of course, if the responses can vary between students (such as in this example, or in an opinion survey), there is a possibility that some students will answer randomly, rather than actually considering the questions. To ensure that this is not the case, some of the teachers questions should be easily verifiable. All students would be expected to answer "A" to the question, "Have you ever eaten rice?" All would

answer "D" to the question, "Have you ever gone to the moon?"

Often, instead of four options, I separate the colors, letters and shapes to make 12 options. For example, Figure 2 shows a vocabulary exercise based on a photograph of a young woman's face. If I ask them, "Which is her hair?", the students answer by showing me the triangle on their response card. Of course, the triangle on the response card also has a letter ("A") and color (green), so there is a small chance that some are getting a correct answer by chance. However, in my experience, this is unlikely.

These response cards are not used for the entire lesson. In fact, they are used only a few times each lesson. I have found these response cards to be very useful in checking students' understanding, and motivating them to pay closer attention in their English classes.

References:

- Banks, D.A. (2006) *Audience Response Systems in Higher Education*. Information Science Publishing.
- Harden, R. McG. (1968) "An Audience Response Card". *British Journal of Medical Education*, 2, 220-222. (Cited in Woolf, 1981).
- Heward, W. L., Gardner, R., III, Cavanaugh, R. A., Courson, F. H., Grossi, T. A., & Barbetta, P.M. (1996). "Everyone participates in this class: Using response cards to increase active student response". *Teaching Exceptional Children*, 28, 4-11.
- Lambert, M.C., Cartledge, G., Heward, W. L., Lo, Y. (2006) "Effects of Response Cards on Disruptive Behavior and Academic Responding During Math Lessons by Fourth-Grade Urban Students". *Journal of Positive Behavior Interventions*, Volume 8, Number 2, Spring, 88-99.
- Pellowe, W. (2010) *MOARS: Mobile Audience Response System* <http://moars.com>
- Pellowe, W. (2011). Featured speaker presentation: "Student Response Systems: What, Why and How". ACTC 2011 (Asian Conference on Technology). The Ramada Osaka Hotel, Osaka, June 10-12, 2011.

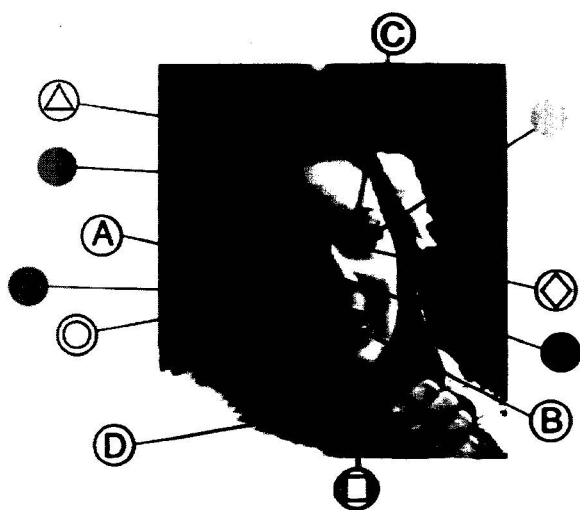


Figure 2: Vocabulary exercise with 12 options.