The Incorporation of an Analogue Debate into a Digital Debate with the Response Analyzer

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Abstract

This paper deals with the use of a Response Analyzer (RA in the following) that uses mobile phones as a tool to support the class. This technique aims at an interactive form of debates in class while controlling the direction of the discourse even with a large number of students.

Keywords

Debate, Response Analyzer

Introduction

The structure of an orchestra become a clue to our practice of debate in class. In 2006, using this concept of the structure, we practice debate in class. The participating students are categorized in several groups, according to their opinions and their reasons. Using this system enables the teacher to control the discourse by distinguishing irrelevant speaker from appropriate speaker. And the teacher can choose selectively appropriate speaker for efficient debate in class.

In an entirely open debate, sometimes the conclusion is unclear, therefore their class might lack a final result and a satisfaction.

Thus the teacher need to prepare an outline of the result of the debate as part of the preparations of the class and lead the debate towards this result, for the students deepening the understanding of the conclusion. But debate in a mode of orchestra restricts to liberty of speakers, so sometimes the restriction deaden their enthusiasm.

In general the highly motivated speaker tends to have the highly readiness and they supports efficient debate in class. In 2007, distinguishing the highly motivated students from other students in class, we practice more efficient debate in class.

We divided the students into two groups. One group doesn’t use RA system and debates freely.

Another group uses RA system and debates restrictively. We incorporated an analogue debate into a digital debate, so we practice more efficient debate in class. According to the result of the questionnaire, an increase about smoothness in class and arrangement of knowledge showed up in effective.

1 Design

1.1 Outline of the used system

The system is based upon the students’ mobile phones and the teacher’s personal computer. The students use their own mobile phones as terminals to access the RA-server via the internet while the teacher uses his own notebook as a terminal to sum up the different answers and create an overview (Figure 1).
1.2 Aims of the research project

Highly motivated students (as opinion leaders) sat in the front of the room. They didn’t use RA system and debates freely. Teacher wanted them (as opinion leaders) to develop their own opinion. (analogue debate) (Figure 2)

The other students sat in the back of the room. They used RA system and join restricted debate (as debate in a manner of orchestra). (Figure 2)

RA system could get the information of students of which they selected their own position in the debate, so the teacher could make a particular opinion leader and one of the other students to debate each other.

2 Research methods

In high school information class we performed an experimental debate for 102 male students (two classes 50 /52). the debate topic was discussing each characteristic of media (newspaper, TV, Web)

We gave participating students the assignment about this topic in advance, so we selected opinion leaders of each group.

(Their assignment was sufficient)

The participating students are categorized in several groups, according to their opinions and their reasons with using RA system. (Figure 1)

- Support newspaper \( \alpha \)
  (accuracy, catalogue, a public opinion builder)
- Support TV \( \beta \)
  (at a live performance, flash)
- Support Web \( \gamma \)
  (speed, dispatch of individual information)

Confidence: \( \gamma \), Convenience: \( \alpha \)

- Support newspaper due to confidence: \( \alpha/\gamma \) (12 students)
- Support newspaper due to convenience: \( \alpha/\alpha \) (3 students)
- Support TV due to confidence: \( \beta/\gamma \) (3 students)
- Support TV due to convenience: \( \beta/\alpha \) (8 students)
- Support Web due to confidence: \( \gamma/\gamma \) (2 students)
- Support Web due to convenience: \( \gamma/\alpha \) (17 students)

The participating students were separated into groups before debate. (The structure of an orchestra)

At first opinion leaders (6 students) listed some characteristic of media. They didn’t use RA and started to debate. (analogue debate)

The other students used RA. They usually listened to opinions and sometimes participated the debate. (Using RA, teacher selected appropriate speaker) (digital debate)

In case that the presentation of a representative of one of the groups had logical shortcomings, the teacher picked another student from the same group to support the student’s opinion (Figure 2).

\[ \alpha y + \alpha y \rightarrow \text{Support} \]

In order to create an better surrounding for a discussion, students belonging to the same groups were chosen to discuss their points of view.

\[ \alpha y + \beta y \rightarrow \text{Discussion} \]

The teacher, using RA (Figure 1), selectively names the students who shall present their opinion to control the appropriate direction of the debate.

\[ \alpha n + \gamma n + \alpha y \rightarrow \text{Guidance toward the result of debate} \]

The teacher guided the students towards the right-answer-model “\( \alpha n + \gamma n + \alpha y \)”, which was the intended result set up as preparation of the class in advance (guidance according to written musical notes).

The result of debate: Newspaper is less speedy than TV and Web, but has more accuracy and confidence. So newspaper should make up the deficit of other media.

(Quotation from Asahiguma.com debate lecture “the role of newspaper in the society of internet”)

In order to deepen the understanding of the theme, teacher guide students toward the regular result.
3 Result of questionnaire

According to the result of the questionnaire (Figure.4), in this manner of debate there was less tension than in an usual manner of debate and more efficient. Opinion leaders diminished the other students burden, so they could have enough time to arrange the knowledge.

Opinion leaders took the lead of debate, so debate class could proceed smoothly.

4 Summary

We incorporated an analogue debate (not use RA) into a digital debate (use RA), so we could make the most of high motivated students as the help of the efficient debate. In 2006 we suggested a digital debate (use only RA) in manner of orchestra and we had some problems that this restricted debate deaden their enthusiasm, a casual selected low motivated student might be an obstruction to progress of efficient debate. But in virtue of the above manner we could suggested the solution of these problem. In the meantime according to the result of the questionnaire, a number of students except opinion leaders might be the passive audience, sometimes might join the debate. This manner of debate might have some educational effects in an arrangement of knowledge.

5 References