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Japan Advanced Institute of Science and Technology

Research on Satisfaction Rating Evaluation for Interaction of Distance Learning in Real-time

Kuminori Tajima (410076)

School of School of Infomation Science,,
Japan Advanced Institute of Science and Technology

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1   Background and Purpose

The real-time type remoteness lecture on which the professor person and the learner in the remote place in real time lecture : because it is achieved with media that usually differed from the lecture, and the communication (interaction) that the professor person and the learner did mutually between lecture rooms depended on the system such as tools offered as an image, a voice, and a learning environment of the execution in the classroom actually. The difficulty of the interaction of not happening in the lecture and learner's sense of alienation become problems usually. Especially, it is very difficult for the fact of the real-time type lecture form by the combination of various components to do various, suitable evaluation for the lecture environment.
The purpose of this research enhanced the remote lecture evaluation technique of the accumulative self-study form that has been done so far, and exists in the proposal of the satisfaction rating evaluation method to the interaction that learner's system achieves in the real-time type lecture form. In this research, the satisfaction rating evaluation system by AHP intended for a remote lecture of the accumulative self-study form is enhanced paying attention to the interaction in the real-time type lecture form.

2   The main evaluation method of remote learning

When preceding was researched, Inomata, Fujibayashi and Honse proposed the satisfaction rating evaluation method using AHP (Analytic Hierarchy Process: hierarchizing decision making method) to the learner who had attended the electronic teaching material that was called WBT(Web Based Training) of the accumulative self-study form. As for two or more learners' common criterias (evaluation parameter), this technique is the evaluation methods to be systematically enforceable of a subjective, intuitive evaluation concerning the side of the content on the function side of an electronic teaching material by presumption by the approach that statistically processes the learner's answer. However, compared with the case of the accumulative self-study form, it is difficult to use it

from the point etc. to have to evaluate the influence on the satisfaction rating by the interaction achieved with media of the image and the voice, etc. limited by the system for a point where the design of the question paper item is not easy and transitory lecture because the lecture environment of the real-time type lecture form is greatly at each lecture different more severely as it is as an evaluation method of the real-time type lecture form.

3 Interaction model of remote lecture

In this research, how the remote lecture system has achieved the interaction between each lecture participants is modeled aiming to facilitate the problem grasp concerning the interaction, and it proposes the method of designing the question paper item corresponding to the lecture environment. The component of this interaction model is as follows, arranges the relation beforehand by the viewpoint which system achieved as mediation by each participant's interaction corresponding to the lecture environment, and is a technique of evaluating only the interaction generated in an actual lecture environment as a question paper item in that.

- Lecture environment: Lecture participant (professor person, learner, and TA) and lecture bases(professor person side classroom and learner side classroom learner PC, etc.)

- System: Remote lecture system that connects lecture base in remote place

- Interaction: Communication of information of the lecture participant between lecture bases

The actual, real-time type lecture form can be evaluated as AHP evaluation method using the question paper item designed here.

4 Example of applying this evaluation method

The AHP evaluation method designed by using the proposed evaluation method was used and evaluated. The object went partially of the lecture of built-in graduate school "Component technology and middleware" by this assistant professor Masato of Suzuki to whom learning Tamachi was started on campus by the real-time type lecture form at this knowledge remote learning center. As a result, the correspondence of the hierarchy diagram was not kept, and it did not come to extract an important criterion about a final AHP evaluation by the pair comparison method though the AHP hierarchy diagram was able to be made by the preliminary research using the designed question paper item.

5 Finally

In this research, to find the improvement point concerning media achieved on the system, the interaction model of a remote lecture was constructed. As a result, the question

paper investigation item was produced with the interaction of media and the participant actually used on the system that connected between complex multi points so far, and it proposed the satisfaction rating evaluation method of the system in the real-time type lecture form. The analysis of the result that exceeds it to the adjustment value of a couple of comparison value by AHP and the method of settlement are examined as a problem in the future.