The Importance of interactivity in distance education



Oct. 12 • 13, 2007 Katsumi SUGIURA

The Open University of Japan (The University of the Air)



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ABSTRACT

In the area of distance higher education, the learners' needs are becoming more and more diversified. With the increase in intercollegiate and international cooperation which expands the opportunities and ways of learning and teaching/guidance, this diversification trend is expected to continue. On the other hand, such diversification forces the distant learners into solitary learning situations. With a strong drive for accomplishment and motivation for studying, solitary learning can indeed be effective; yet we must admit that this is becoming increasingly difficult for many distance learners.

Interactive teaching/guidance is a means to support such learners.

Not only should we provide high-quality learning materials and courses that match the learner needs, we must also incorporate in the teaching/guidance process the interactivity between the learner and the instructor, and between learners. We have developed the means to realizes these objectives, and have been using them on trial basis. One is the utilization of a web-conference system for mentoring distant learners, enabling the interaction between the learner and the instructor as well as between learners. The other is the online practice tool which enables a personal interaction between the learner and the instructor. Parts of those means are ready for practical use.

The Open University of Japan (The University of the Air)

The undergraduate program established in 1985 The graduate program established in 2001

Roughly 100,000 student enrollments per semester

Around 360 courses offered every year

45 min. × 15 classes per course on TV or radio (2 credits per course)

An original textbook for every course

The end-of-the-semester exam offered in 57 Study Centers and other facilities (located in every prefecture throughout Japan)

Face-to-face classes offered every semester in Study Centers and other facilities

What made our educational success possible?

1) TV/radio broadcasting:
effective tool for
delivering information

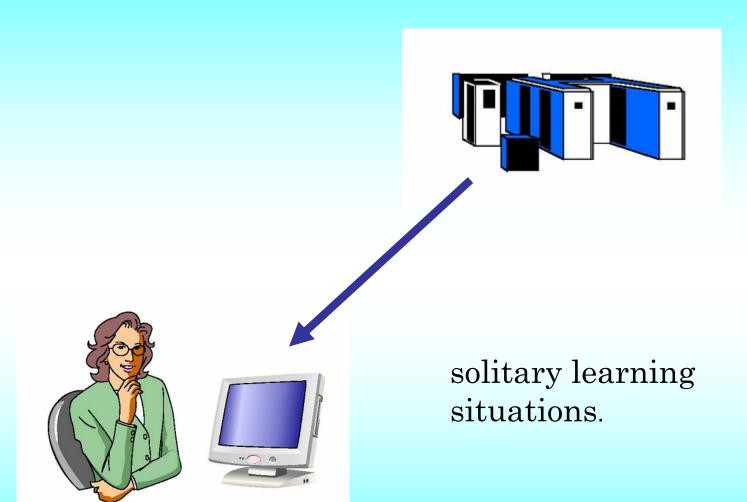
2) High societal recognition placed on broadcasting

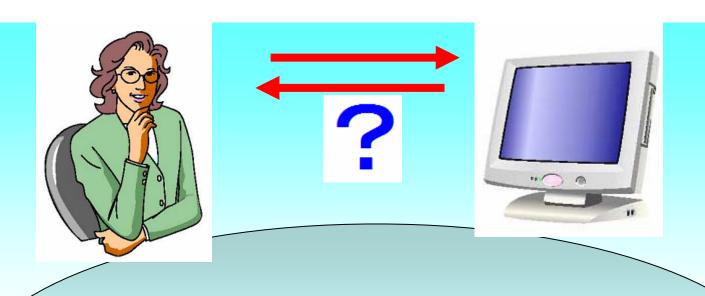
3) Learners' strong drive for accomplishment and motivation for studying





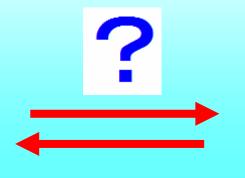
Lack of interactivity

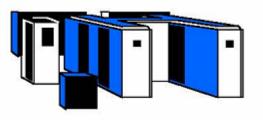




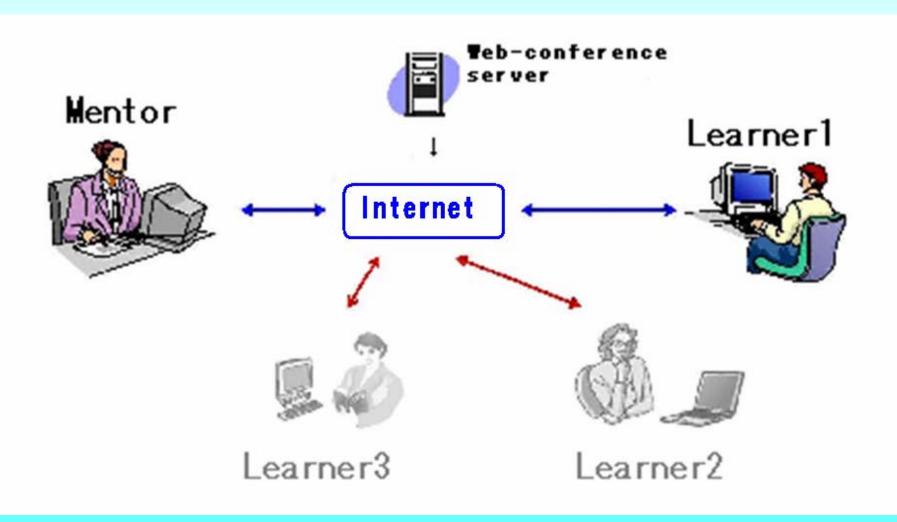
What is "interactivity" in distance learning?



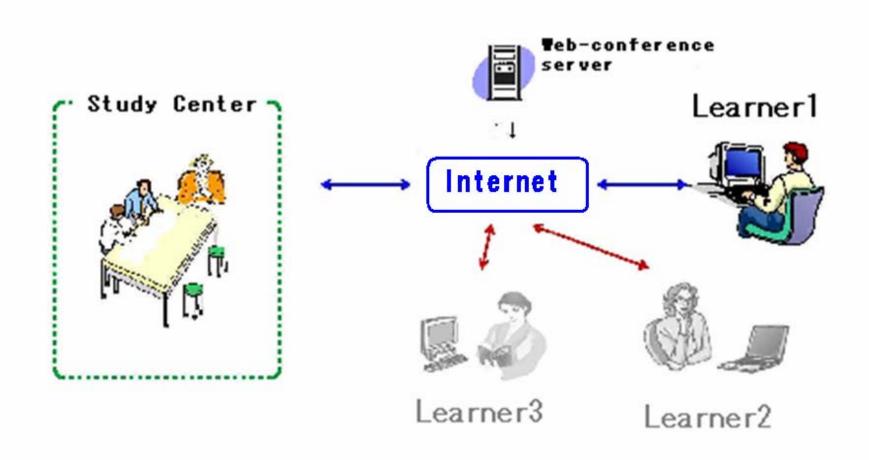




An example of using a web-conference system for mentoring BA-theses and MA-theses writing



An Application Example of Using a Web-Conference System (participating in a face-to-face seminar from distant locations)



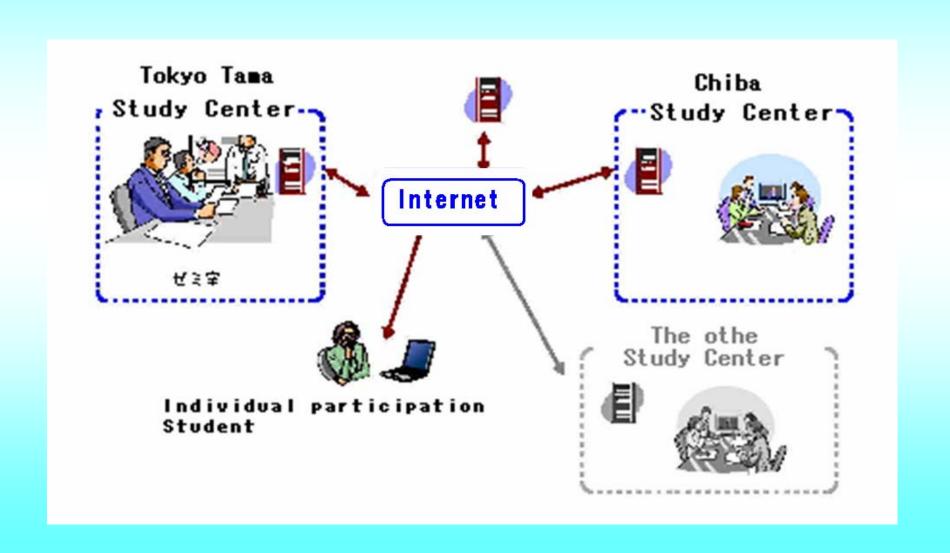
A group-based consultation for graduation research and the master's course research



Three difficulties in utilizing the web conference system in distance education:

- 1. The difficulties in a mediated one-to-one conversation (time-lags between different locations, the degradation of sound quality, etc.)
- 2. The difficulties in carrying on a conversation via the Internet (almost impossible when the participants do not know each other)
- 3. The difficulties in a mediated "one-to-many" conversation (the ineffectiveness of saying "Hello everyone!")

An application to a class conducted by connecting classrooms in distant locations (e.g. seminars, reading classes)



An experimental session (an English textbook-reading class)

Chiba Study Center ⇔ Tama Study Center

+ an individual participant connecting from a distant location

Chiba Study center



Findings from the experimental sessions: A textbook-reading class with genuine interactions between distant locations

An interactive exchange of information (with sufficient transmission quality)

The importance of feeling the "interactivity" (the sense of participating, being in class, watched over by the instructor)

Participatory feeling (can hear chats and mumbles of other students)

→ System Construction and Usage Expertise

The possibilities for an on-demand interactivity

The development of the Assignment Correction Feedback System (giving written and/or audio feedbacks to submitted assignments)

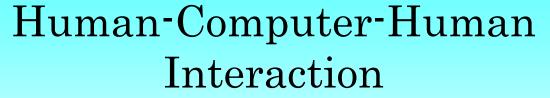
「日本語表現法 (論文・レポートの書き方)」課題添削運用システム 履修者 ------採点協力者 教材視聴 課題答案送付 添削返却 課題提出 インターネッ 添削返却 履修情報 の参照 随時質問 質問応答 管理運営 教材更新 ・提出された課題は、複写保存 の上、採点協力者へ。 ・返却する添削結果も同様に。 ・採点協力者は、当該学習者の過去の 履修情報記録 課題答案・返却された添削内容等を 添削内容→添削した協力者 課題答案 参照できる。 ・協力者はできるだけ課題ごとに担当。 添削結果 等の保存 補助的手段 郵便・CD/DVD-ROM・Fax など インターネット環境を持たない学生

The essences are:

Not HCI, but "HCHI" (Human-Computer-Human Interaction)

Interaction with genuine information exchanges

Ensuring the feeling of "interactivity"











My mentor is with me!
My friends are right there!
I'm not lonely!

The students' motivation for learning can be increased by ...

becoming aware of what he/she wants to learn.



Hint for the "new" system

Thank You Very Much!

