CONTINUED, ACCELERATED EFFORTS IN STUDENTS' VOLUNTARY LEARNING BY ALL THE FACULTY MEMBERS IN NIT, GIFU COLLEGE
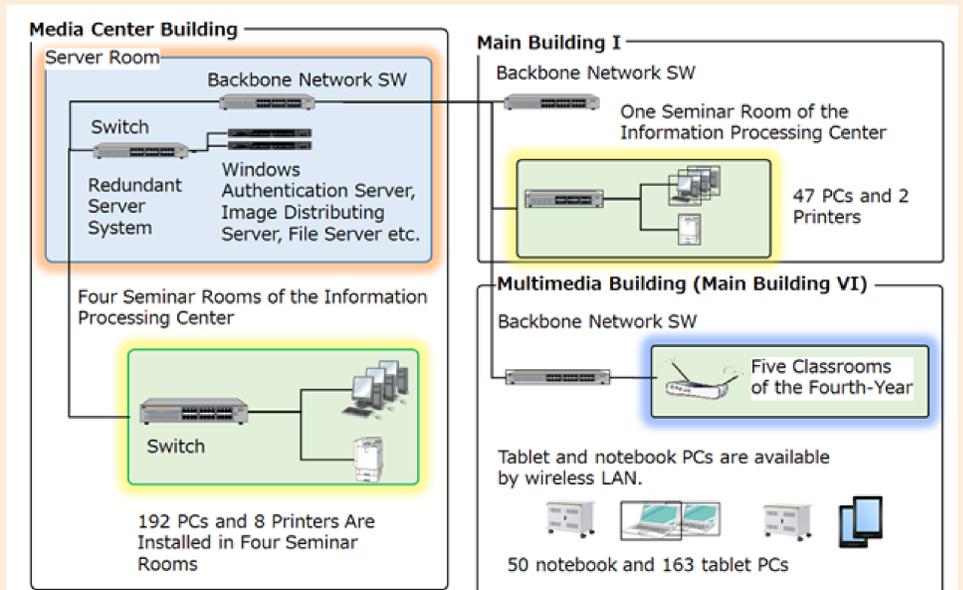
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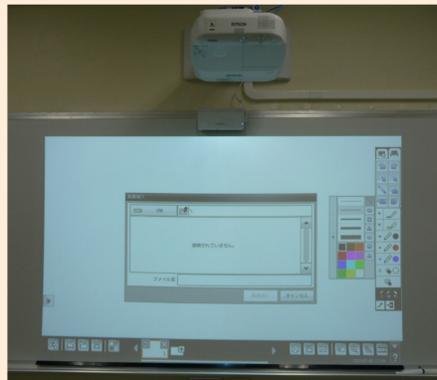
- Since 2001, National Institute of Technology, Gifu College has placed personal computers in the 5 classrooms of the fourth year just like the seminar rooms of the Information Processing Center, so that every student has exclusive use of a personal computer. However, in our fourth replacement of the entire system made last year, the fourth-year classrooms were reborn as classrooms where active education can be practiced. At the same time, the number of the seminar rooms of the Information Processing Center was increased from 3 to 5.
- In our AP project, we intend to create an active educational environment with equipment such as electronic blackboards in the classes of all years in all five departments in the three years between 2013 and 2016.
- In the last academic year, we promoted active education mainly by making specific, elementary-level teaching materials, based on the items suggested by some senior graduates of our college working in Japanese industries.
- We are aiming for students to acquire the ability to describe matters related to engineering in English, while promoting the interactions between the teaching of technical English and that of the specialized subjects through active education.

- In the fourth replacement of the fourth-year classrooms of all five departments, we changed each of them into a flexible classroom environment where active learning can be practiced by using tablet/notebook computers, connecting them to classroom wireless LAN. In addition, we increased the number of the seminar rooms of the Information Processing Center from 3 to 5.
- In our college, we are making teaching materials in cooperation with some senior graduates, while incorporating their suggestions about what students should learn. The suggested 45 subjects were categorized into the introductory, intermediate and advanced levels.
- Visualization of students' learning activities performed outside the formal curriculum: when students perform learning activities outside the formal curriculum, they evaluate their activities just like learning activities in the formal curriculum according to the rules of respective departments. We established a system with a database with the purpose of visualizing these activities.
- We made it possible to work under a versatile environment and separate the database and the website. The program was written with PHP and JavaScript, the operating software for the server was Cent OS, Linux-based OS, web management software was Apache, and the database management system was MySQL.

The whole image of the ICT environment (the Information Processing Center and the classrooms of respective departments)

The ICT environment with an electronic blackboard system and tablets

The ICT environment of the applied physics laboratory classroom

The active learning environment in a 2nd floor classroom of the library

We are promoting the development of educational materials on the basis that they will be used as study-support content when students tackle the challenges which corporate engineers face, and as CBT problems for checking and visualizing their learning outcomes. The educational materials can be used in some classes and as students' autonomous learning materials.

Software for making educational materials