

## **CONTINUED, ACCELERATED EFFORTS IN STUDENTS' VOLUNTARY LEARNING BY ALL THE FACULTY MEMBERS IN NIT, GIFU COLLEGE**

Nobuyuki Ogawa, Tetsuro Tokoro, Akira Shimizu and Yoshito Itoh

*National Institute of Technology, Gifu College, Motosu, Japan 501-0495, ogawa@gifu-nct.ac.jp*

For more than fifteen years, National Institute of Technology (NIT), Gifu College has utilized ICT-driven equipment, an educational server system and others, aiming at cultivating students' voluntary learning based on their own ideas. In the process, we have developed ICT-driven educational methods as well as a system to give students incentives for voluntary learning and evaluate its outcomes. These implementations received awards from several academic societies for education, in addition to the acquisition of the "Support Program for Contemporary Educational Needs (GP: Good Practice)" from the Ministry of Education, Culture, Sports, Science and Technology (MEXT). Our college acquired the "Acceleration Program for University Education Rebuilding (AP)" from MEXT in 2014. The acquisition of AP has triggered off the introduction of students' voluntary learning into the classes of all teachers, which previously had been performed only in a few classes.

The aims of our project are: (1) to expand "Active Learning (AL)" to all the subjects in our formal curriculum, (2) to visualize the outcomes of AL performed outside the formal curriculum based on the "practical engineering credit" system. This year, the third year since our AP project started, with the aim of developing classroom ICT environment we are planning to complete the installment of electronic blackboard and wireless LAN systems in all classrooms of all five departments from the first to the fifth year, and introduce 163 tablet computers and 50 notebook computers. Also, we intend to promote active, educational improvement by introducing a LMS server and software for creating teaching materials.

With regard to the creation of teaching materials, some senior graduates of our college suggested 45 subjects to be taught with respective objectives from the viewpoint of corporate engineers. Each of the suggested 45 subjects is being employed for creating teaching materials of the introductory, intermediate and advanced levels. Introductory level ones have already almost been completed and now we are making intermediate ones.

In the efforts to visualize students' learning activities performed outside the formal curriculum, all five departments selected the items to which the "practical engineering credit point" is to be given and determined the details. As a result, according to the regulations of respective departments, the students' learning activities performed outside the formal curriculum started to be definitely evaluated in addition to the ones performed in the formal curriculum.