

Most complex systems with simplest tools

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<https://pedagogie.ec-nantes.fr/tablet-pc/> (in french)



PROJECT ABSTRACT: We are using HP mobile technology to increase the implication of students in various fields of our educational program (maths, computer science, mechanics, ...) and to enhance their capacity to work autonomously. HP technology constitutes moreover a very satisfactory answer to our concerns in the field of sustainable development as it drastically decreases paper usage.



Impact on Student Learning

Impact and success is measured by both qualitative and quantitative indicators, such as increasing of success rates to exams, satisfaction questionnaires filled by students at the end of each course and a comprehensive comparative study of the appropriations and usages of TabletPCs versus traditional laptops. We observe that involvement of students in some courses where they used to be very passive (e.g. maths) have improved. They also appreciate to take profit from the favorable IT teaching environment: they download materials at the very beginning of a course and then are able to annotate them according to the teacher's speech. We plan to use HP mobile technology to increase social diversity of students, hiring new talents by showing the benefits of the simplicity of yet high-tech tools.

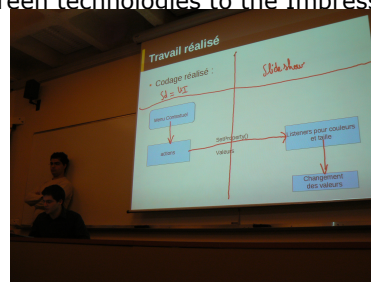
Impact on Teaching

With a Tablet PC, designing slides becomes really intuitive and demands just a little time. So teachers answer to some of the students' questions by creating new slides from scratch and then redistribute them thanks to the WiFi network. Beyond an easier way of creating learning contents, HP mobile technology allows new applications such as instantaneous presence assessment, or electronic evaluation. In computer science, reports and code listings are not printed anymore. They are straightly corrected by teachers and then forwarded to students. The grading process for lab works is consequently quickened. Furthermore our project perfectly meets with government recommendations about sustainable development. HP Technology allows saving more than 4000 paper sheets (for a single first year CS course).

Technology Implementation

With the on-screen inking capability of TabletPC and the powerful features of softwares like Microsoft OneNote, the students individually annotate these e-documents. They take part to on-line exercises and, thanks to a digital projector, expose their results to the entire classroom. Since September'08, some of our students contribute to the OpenOffice.org Education project to integrate

touch screen technologies to the Impress module.



Keywords: paper consumption reduction, Open Source software, improving student autonomy and involvement