

A light to manage learning exercises

January 21 2013, by Cécilia Carron

Imagine a classroom. Students are working on their exercises. The hands go up to call the teacher or assistant. It is impossible for them to know who asked first, who most needs their help, how much time the students spent on a certain exercise, or if a collective explanation would be more beneficial. Lantern reveals all of this using a simple luminous device – an invaluable aid for classroom management.

The colored lamps make it possible for the teacher to see both how much time [students](#) spent on an [exercise](#) and on which they are working. At the start of the session, students light their lamps. [Light intensity](#) gradually increases as time passes. When moving to the next problem, they turn the lamp up a notch. It changes color and begins anew at the lowest intensity. And then the cycle repeats.

Objectively managing expectations

Need help from the professor? The student presses the lamp. The top of the lantern glows pink and flashes more rapidly as time passes. Teachers can objectively manage a classroom in a blink of an eye. They can know, for example, how long students have been waiting or on which exercise they are working. If numerous lamps are flashing for the same exercise, the instructor knows immediately that a collective explanation will save time.

For students, it's also a time saver. No more long minutes spent trying to catch the instructor's attention to receive help. When assistance is needed, nearly 70% of the student's time is spent at this task. That is

what Hamed Alavi, head of the spin-off that developed Lantern, calculated when observing the work of many classes during his thesis at the Center for Pedagogical Research and Support at EPFL (CRAFT) .

After the lesson the teacher can connect the lamps to a computer, and software shows the statistics: the average time spent on each exercise, waiting time, etc. This creates valuable information for preparing upcoming sessions. They can then be reprogrammed to determine the time required to solve each problem for the next session. That is to say, over what amount of time the light's intensity will increase.

On the market since the end of last year, the Lanterns are already used at several universities in Switzerland, in the United States, and Finland, as well as in private schools.

Provided by Ecole Polytechnique Federale de Lausanne

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