

Swiss printing precision founded on SHOTS simulator Case Study: ERACOM — SHOTS simulator user for 15 years

The reference school for excellence in graphic arts training in French-speaking Switzerland is ERACOM. (l'Ecole romande d'arts et de communication). The Lausanne-based school provides training for around 650 students in areas that range from typography to prepress, printing to postpress, and multi media to web design.

The school's director of professional training for the last 25 years is Mr. Pandolfo, who was one of the first teachers to become interested in the SHOTS printing simulator. After seeing it at Drupa 1996 he convinced the school's management to invest in this training tool and the first system was installed in 1997. This was followed by the purchase of 5 more simulators the following year. Since then, Mr. Pandolfo has not ceased using them for the technical training of printers at basic and advanced levels, as well as for continuous professional improvement programmes.

The six SHOTS systems are used by around 60 students per year — generally for 20-25 hours per semester in sessions of up to 2 hours long. An important key for success is that the simulation exercises are short and distributed throughout the year to match the overall programme. Students always operate the simulator in pairs to stimulate team working because this is seen as an important professional requirement. ERACOM also uses three 1-colour and one 4-colour press to allow students the most complete and practical training as possible.

Mr. Pandolfo also uses SHOTS — linked to a video projector — for open classroom sessions for students new to printing. Once they have a basic understanding of the process he then proceeds to exercises on the simulator. As soon as the students have mastered the system's controls they proceed to discovering the relationships between their actions on the control console to the virtual printed results.

When a subject is understood, and its relevant series of exercises are completed, the students participate in a timed competition with a small reward for the winner. Mr. Pandolfo chooses exercises from the Sinapse workbook that are adapted to the level of the students concerned and the current content of his courses. He also creates new exercises specifically designed to suit his colleagues' needs. His students are motivated by this approach that combines learning with some constructive fun.

What does Mr. Pandolfo appreciate the most in SHOTS?

- The combination of its user friendliness and its game factor that allows students to learn without becoming bored.
- Its efficiency to teach problem solving as well as the use of diagnostic and quality tools (manual and in-line densitometers, gloss meter, etc*.).
- Making students aware of the costs of their actions.
- The enormous range of ready to use exercises, updated on a regular basis their volume is so large that he hasn't yet been able to run all of them during 15 years.
 - Each student has their own accompanying workbook as a guide throughout the academic year.
- The trace function allows teachers to review exercises with the students step-by-step to see exactly what was done in a simulator session and to identify the exact point of a poor choice and to understand the subject and methods that need to be revised. The student thus starts to think in terms of the "process" not just the "procedures" and has a more complete understanding of offset and of problem solving.



As he underlines, "The strong point of SHOTS is its capacity to improve student diagnostic competencies. It is not easy to teach printing quality analysis and problem solving, but SHOTS is an extraordinary tool for students to learn to 'see' something that is not working and to have the right reflex at the right moment to fix it. I enjoy 'tricking' students with everyday problems that are simple to resolve but not always obvious when you look at the printed sheet, for example plates mounted in the wrong colour sequence. The getting it wrong at first glance helps to get it right in the long term and makes sure the

right reflexes are in place."

Mr. Pandolfo strongly recommends SHOTS to printing trainers. "This simulator is an indispensable tool for teaching printing and I cannot do without it. Once you see it, it's use is obvious: as we say in French, 'If it did not exist it would have to be invented' The young students are extremely happy to use it without being aware that they are learning. It is possible to push the limits of press settings to provoke virtual accidents that we could never allow on a real press. "

"Experienced operators see problems that they have never encountered even after years of working in the industry — whereas the simulator can reproduce them at any time. The association of game and advanced analysis is impossible on a real press. This is why I continue to recommend the usage of SHOTS as a complement to the learning apprenticeship on real printing presses and after 15 years of using it, I am still very happy to have it as a teaching tool."