

Lessons Learned

by Robert Chung

Test Target 2.0 began as an idea. We worked relentlessly for six weeks, and have transformed the idea into a reality. We learned that efforts required to put a publication together is much more than writing or grading a term paper. In addition, the amount of learning is proportional to the efforts made. Below is a summary of what we did well, and what we should avoid in the future.

Layout and imposition—We learned that a successful publication begins with good planning. The planning begins with how the publication is to be folded, stitched, and finished. We did not have the expertise in imposition and finishing when starting out the project. We created reader spreads in Quark, and had to adjust for creep after we proofed the job on the Indigo digital press. In addition, we had to output the page at 95% of its original size to account for the space for the footer. We plan to address these issues early, including the use of an imposition software, in the future editions of *Test Targets*.

File management—All files that we worked on resided on a multi-gigabyte disk, and were accessible by all networked stations. The shared disk was automatically backed up daily. The centralized file management structure allowed us to work simultaneously on various parts of the publication. When we performed a “Collect for Output” from the CMS lab (located at the main floor of the Gannett building), the entire Quark file could be made available at the Digital Publishing Center’s server (located in the basement of the same building) within minutes.

Press runs—In order to describe tone and color rendering of an output device quantitatively, multiple press runs were necessary. The objective of the first press run was to determine the calibration of the Indigo digital press with paper, toner, settings in the digital front-end, and the marking engine all taken into consideration. By including press profiling targets in the first press run, we were able to build press ICC profiles with the use of different profiling software packages. A second press run was to verify contents in the *Test Targets 2.0*. Another press run

was to verify the page layout and imposition. For verification of color image rendering or verification of proper creep compensation, we only needed one copy from the press run. We appreciate the short cycle time and very short run capability of digital printing.

Color management—*Test Targets 2.0* successfully illustrates how test forms are used for device calibration, characterization, and color management practices for printing and publishing. In this issue, a number of ICC-based color management applications showcased how digital images were reproduced accurately and consistently. A spot color match using ICC-based CMS was also demonstrated in the cover of this publication. The ΔE between the color specified and the color produced was 5.8. The major discrepancy was believed to be the gamut limitation in achieving a more saturated blue. The visual difference between the Pantone process swatch and the printed cover was small, but noticeable.

Class projects—There are vast differences between how individual lab assignments and how group projects are conducted and evaluated. In an individual lab assignment, the experimental procedures are given. Similar to a guided tour, a student would go through the hands-on portion of the lab and report back his/her lab findings. The instructor, then, evaluates the completeness, correctness, and the quality of the lab documentation. In a group project, both the success of the project and the evaluation of students’ performance become more complicated. We realized that the quality of the project, in this case—*Test Targets 2.0*, depends on how the class performs as a whole. It also depends on how a student carries out a specific part of the project, and how that student can contribute above and beyond his/her part in the area of problem solving and quality assurance. As far as the performance of the instructors, they are evaluated by the class. But the final evaluation comes from printing and publishing industries who hire our graduates to help them solve real-world problems.