Nothing is worse than having your client find an obvious error in a program that's already been released.

The troubleshooting, re-testing and scrambling to fix the problem can turn into a heart-pounding race against the clock. Not that this ever happened to me, of course, but a friend told me this can happen.

Our best defense against these high-risk scenarios is to conduct thorough and systematic quality-control (QC) reviews and testing before any deliverable is released.

QC evaluations are needed before any deliverable is sent to clients or stakeholders for review, prior to a formative evaluation by target audience members, as well as before a formal course is released. But quality control need not imply that the learning experience is traditional. Rather, you can use this approach any time content is getting designed and produced.

Here are some QC steps to follow:

1. **Plan Ahead:** Plan the quality standards ahead of time rather than when the pressures of a tight schedule force you to take shortcuts.

2. **Be Holistic:** As you develop the criteria, think about all the standards the product must meet, including editorial, appearance, usability and instructional approach.

3. **Create Checklists:** Use checklists for standardization, efficiency and accuracy.

4. **Create Review Forms:** Use online QC forms to log every issue that fails review. Use an identification number for each issue, and ensure that each one is addressed prior to logging it as “Fixed.”

5. **Be Consistent:** Use the same QC standards across all projects and across similar media.

6. **Schedule It:** Reserve time in the schedule for QC review. It can take 10 percent to 15 percent of a project's time for QC and testing.

7. **Get QC Training:** Unless your organization is large enough to have a QC team, train instructional designers, graphic designers and media specialists in QC skills. They can lead the way, set up systems and train others.

8. **Use Fresh Eyes:** Use someone removed from the project to perform a QC review. People have difficulty finding all the errors in their own work. Continually improve your QC processes and criteria as you learn from your mistakes.

9. **Document It:** Write up your QC process. Revise it as you continue to learn what works for your organization.

10. **Debrief:** QC logs potentially hold a wealth of information. Use them at the end of a project to understand where the weaknesses are in your systems, and try to fix them.