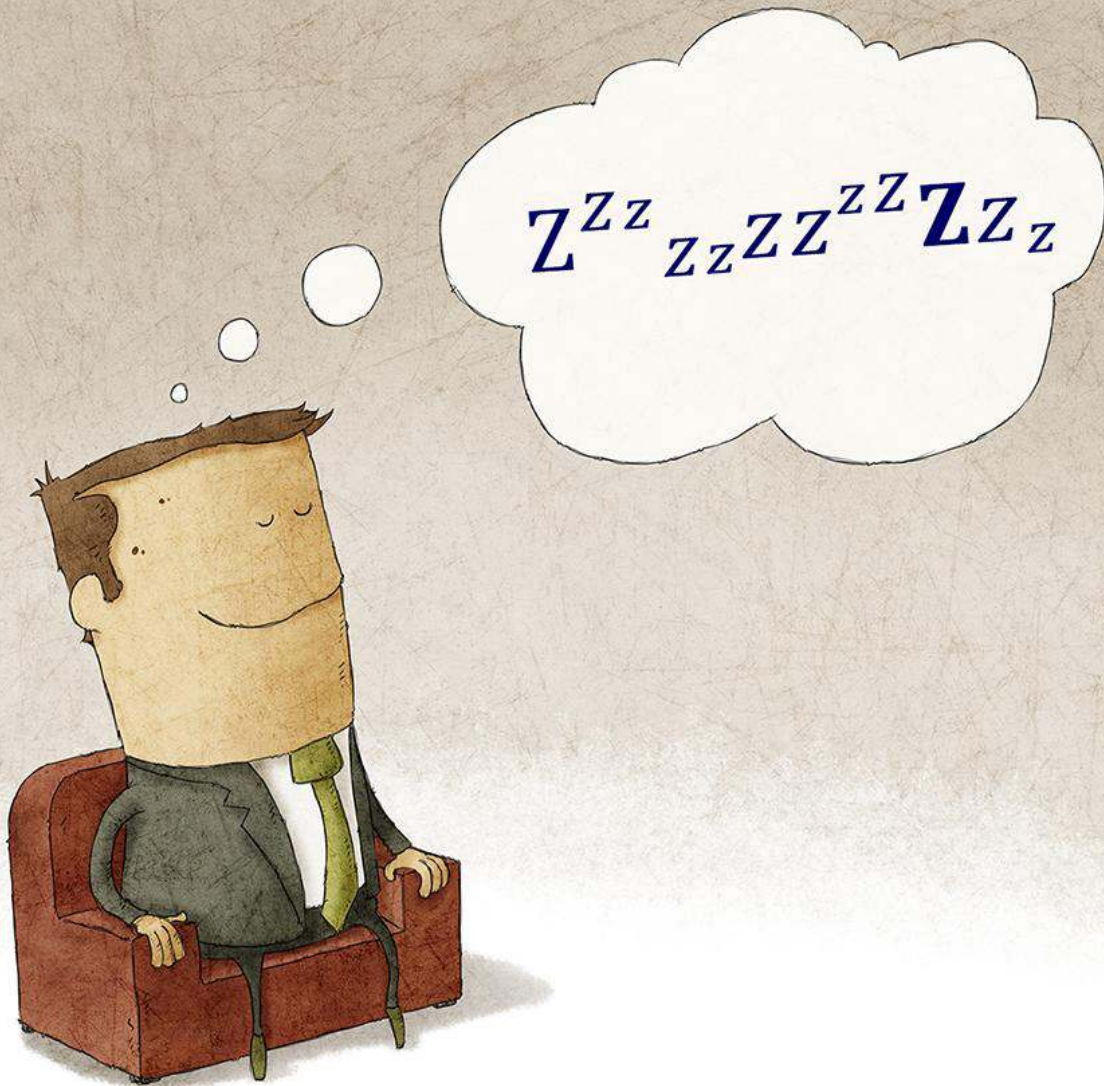


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– Barry Olney



# The *Art* of Presenting PCB Design Courses

## Beyond Design

Feature Column by Barry Olney, IN-CIRCUIT DESIGN PTY LTD / AUSTRALIA

In the early days of my career, I was a typical backroom geek more comfortable with technology than engaging in conversation. My obsession lay in my work, fueled by the exhilaration of mastering new technologies. The notion of standing before a class of 50 or more individuals to deliver a solo weeklong course seemed utterly terrifying. But necessity gives birth to innovation. When confronted with challenges, we have two choices: step up or fade into oblivion.

Thirty years ago, my journey into public speaking commenced with an unexpected plunge. I found myself at the helm of PCB and software training courses, sales demonstrations, and trade shows. Additionally, I was

appointed as president of the Australasian Chapter of the IPC Designers Council. Despite my initial reservations, I embraced these challenges head-on. I soon realized that technical training and sales demonstrations share common ground. They complement each other. To empower people with technology, you must adeptly convey its intricacies. Whether it's presenting software courses or demonstrating a product's value, effective communication is key. By imparting knowledge, you enable others to appreciate the technology. Understanding fosters confidence, and confidence fuels adoption. As a presenter, your role extends beyond information delivery; it's about igniting curiosity and competence. In this month's

column, I'll divulge a few essential techniques I've learned.

## 1. Know Your Subject Matter.

Avoid discussing topics you're not well-versed in. Instead, focus on what you know and love. Be yourself during presentations. Authenticity resonates with the audience. A great presentation doesn't rely on reading slides. Use concise bullet points to prompt concepts. When you truly understand the content, your delivery will flow naturally. Remember, confidence and passion go a long way toward captivating the audience.

## 2. You Don't Need to be a Performer.

While a touch of humor can break the ice, don't stress about being overly charismatic or a comedian. Instead, be genuine and discuss what you're knowledgeable about. Your authenticity will shine through, allowing your audience to connect with you. Be yourself, and you'll feel more at ease, enabling a stronger and more relaxed presentation. Your unique per-

## 3. Don't Think. Just Do It. Up There, You Don't Have Time to Think.

Thanks to Maverick from "Top Gun" for giving me this line. Before I start a presentation, I don't even think about the first word I'll say. Face it, you can't memorize the entire course (unless you have a Neuralink embedded in your brain). Start by introducing yourself. Validate your experience and your background. Briefly explain why the audience should listen to you. Ask the participants to share their background to get a feel for where they are coming from. Knowing your audience is crucial for any presentation, but it's even more important for a technical one. You may need to adjust the presentation to suit their needs. I often get requested to focus on particular topics when running in-house courses. Before diving into slides, share a relevant short story. It helps establish rapport with the audience and sets a positive tone.

## 4. Rehearse, Rehearse, Rehearse.

After practicing your presentation multiple times, it becomes second nature. Just turn up and start the show. Avoid using "um" or "ah." Instead, focus on volume and diction. Speak clearly and confidently, projecting your voice to reach the back of the room. I initially choose someone at the back of the room to focus on and then shift my attention to others. This technique eases nerves and enhances engagement. The best speakers don't even need microphones. We are not rock stars and don't have the benefit of fold-back. When you talk into a microphone, you hear an echo a few milliseconds later and it's very distracting. It is better just to project your voice. Keep a bottle of water handy; you will need it as your throat dries out.

## 5. Never Say, “I Don’t Know.”

Promote audience engagement by encouraging questions throughout your presentation. When unsure, assure them, “I’ll find out and get back to you.” Make a note of the question and the person who asked it, then provide accurate information later. This approach maintains the audience’s confidence in your expertise. If one person consistently asks questions, acknowledge their enthusiasm but mention that we’re falling behind schedule. Assure them that their queries will be addressed during the break. Fostering interaction enhances the overall presentation experience.

## 6. Pace the Course Content.

Starting with the basics, even in advanced courses, ensures everyone is on the same page. Make sure they fully understand each section as you progress. If in doubt, go back over the key points at the end of each section to reinforce the ideas. Understanding is crucial for retention. Pace the course by dividing the content into sections spaced by breaks. Gradually introduce more complex topics. A well-structured presentation keeps the audience engaged and facilitates effective learning.

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## 7. Picture the Topic.

Leverage the power of visuals. A single image can convey multiple complex ideas more effectively than words. Include plenty of graphics to illustrate the point. Use the whiteboard to assist in explaining any queries. In PCB design courses, I relate concepts to real-life scenarios. Demonstrations of complex techniques can clarify issues and make the content more relatable. Simulations also convey the message when discussing high-speed design. I get an awe-inspiring response when I graphically show the results of what-if analysis; it becomes more memo-

orable. Always keep a backup set of files so that you can quickly reset the database after showing a particular point. Technical glitches happen, and having a reset option ensures smooth transitions. A well-prepared presentation with compelling visuals can leave a lasting impression.

## 8. Feedback Matters.

Finally, ask the attendees to fill out a course evaluation form. Important questions to ask (good, bad, or ugly):

- Did the seminar meet your expectations?
- How do you rate the presenter?
- How valuable was the content?
- Are there any comments or suggestions you would make to improve the seminar?

Feedback is important for ensuring relevant course content and gauging your presentation skills. There is always room for improvement, and you get better as you gain experience. I normally fare pretty well, but there is always one guy who sits in the back, falls asleep, and gives you a bad rap. If you don’t listen, you don’t learn.

Don’t be apprehensive. Change is good, and if you know the subject well, then presenting ideas to others should come naturally. Give it a try. You may discover a hidden talent waiting to evolve. **DESIGN007**



**Barry Olney** is managing director of In-Circuit Design Pty Ltd (iCD), Australia, a PCB design service bureau that specializes in board-level simulation. The company developed the iCD Design Integrity software incorporating the iCD Stackup, PDN, and CPW Planner. The software can be downloaded at [www.icd.com.au](http://www.icd.com.au). To read past columns, [click here](#).