



How Instructors Enhance BOC Student Experience and Outcomes

Instructors Bring BOC Curriculum to Life

By sharing real world experience and wisdom, instructors help bridge the gap between concepts in the handbook and successful application at the student's facility. Great instructors look for opportunities to enrich the curriculum and engage students. They also understand that information overload is a concern for many students. BOC students, like most adults, are hands-on learners and problem solvers, for whom the classroom may not be an ideal learning environment. This guide was created primarily for BOC instructors who are looking to enhance BOC content through their personal experiences and materials, while maintaining consistency with the BOC curriculum. It applies to anyone for whom student success comes first.

This guide is based on the BOC Curriculum Design Guide (developed in 2023), which outlines best practices for developing and updating curriculum materials. Instructors looking to deepen their understanding of the BOC curriculum development process are encouraged to review the guide, which is available upon request.

Let's start with a look at the foundational BOC general design principles for adult learners found in the Curriculum Design Guide, then apply the principles to what instructors bring to the classroom.

The Four BOC Principles for Adult Learners

- 1. Know your learners and their motivations.** Students come to BOC training to improve their knowledge and skills in building technologies, operations and maintenance. Like most adult learners, they bring life experience and a variety of job skills to the classroom. They also bring

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various motivations, such as passing the test, meeting their boss's expectations, getting certified, and advancing their careers. What else might be motivating your learners?

- 2. Create relevant BOC learning objectives.** Good learning objectives are what we want learners to learn or achieve. Learning objectives are measurable checkpoints. Objectives have four components: Audience (the learners), behavior (what they will do), condition (the learner's situation), and mastery (what success looks like). Curriculum developers work to find a balance between learning objectives, time, and our students' capacity to absorb information.
- 3. The CPR learning format: content, participation, and review.** CPR provides the change of pace (at least every 90 minutes) that adult learners need. A change of pace moves the lesson from lecture (content), to demonstration/discussion (participation), to review of the lesson learned, both formally and informally. Providing a change of pace allows learners to move between passive and active learning modes. Instructor-led demonstration, discussion and review are key ingredients of the BOC training value proposition.
- 4. Content is organized as NNW: need to know, nice to know, and where to go.** There is so much that building operators need to learn to be effective, and the learning never ends. However, we have a responsibility to deliver the right amount of content to achieve the class learning objectives within the time available. "*Need to know*," obviously, must be delivered. "*Nice to know*" could be helpful to some, and "*where to go*" provides all students with additional resources (supplemental material). Students looking to gain a deeper understanding of a topic will appreciate the additional resources (now or in the future), and those who aren't seeking this will appreciate that the additional resources are optional.

What Instructors Bring to the Classroom

- 1. Success (and failure) stories.** Real world stories are highly effective at illustrating key points in the BOC curriculum. Stories can be taken from the instructor's or students' experiences. And students can learn from both positive and negative outcomes, particularly if the instructor or student can articulate lessons learned from the experience. For example, sharing a story about how lack of preventative maintenance on a specific piece of equipment led to a catastrophic

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result could really hit the point home about how important preventative maintenance is, especially if the story includes a description of the excess time and money required to remedy the situation. Storytelling engages all of the four BOC principles for adult learners. Get to know your students through their shared experiences, weave learning objectives into the conversation, change up the pace with a story, and connect students with relevant supplemental material. Swap stories around the BOC campfire and watch your students engage.

- 2. Perspective and wisdom.** Buildings are complex. No two are alike. And they get built and operated for a variety of reasons. A straightforward improvement in one building could be challenging in another. Instructors bring context, perspective and wisdom to BOC content. Engaging students about challenges in their facilities provides an opportunity to share wisdom and offer valuable advice. This may not necessarily require giving advice on how to solve a specific challenge, but could be advice on what questions to ask, what information to seek, what traps to avoid, and where to find help. Students come to the BOC program with lots of challenges (stories!). If you can help them move forward with one challenge, then they (and likely the other learners) will leave the training with more than they expected.

- 3. Additional details/pictures/videos/charts/websites.** Visual material greatly enhances understanding for a majority of students and opens the door for discussion and review. Pictures, short videos, samples, or a well-conceived graphic can clarify and help students get to the “aha” moment. For example, in the hypothetical story mentioned earlier about catastrophic damage to a piece of equipment resulting from lack of preventive maintenance, a picture showing the damage could further augment the point.

However, going off-topic or taking an unexpected deep dive into a subject is likely to confuse and frustrate students. BOC strongly encourages instructors to share supplemental visual material, while keeping an eye on the course learning objectives (and time). Pay attention to subjects where students struggle and enhance that material. Experiment with different content and build your effectiveness as an instructor.

- 4. Up-to-date, location-specific application information.** BOC instructors teach in a wide range of climate and political environments. Code, customs, criticality and resources vary widely. Instructors bring their local market knowledge to the classroom, enhancing student learning by applying local best practices to the concepts in the BOC curriculum. Students, and their

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managers, look for and value localized content. Enhance your connection to students by demonstrating your understanding of their unique circumstances. If applicable, become familiar with the local sponsor of the BOC course (e.g. utility or state agency) and supplement the curriculum with resources available to them (e.g. rebates, grants or financing for energy projects).

A Few More Things to Consider

- Instructors should avoid making substantive changes to BOC curriculum content without consulting with the BOC Training and Curriculum Manager in advance.
- When adding content slides to the BOC PowerPoint slide deck, don't use the BOC background template. Provide visual and audible notification to students that the added material is not in their handbooks, nor on the test.
- Consider how your experience may enhance the students' projects between classes, in addition to the lecture material.
- Remember that what works with in-person delivery may not work with virtual classes, and vice versa.
- BOC wants to hear your ideas about content for future updates, and so do other instructors. Keep a running list of comments and ideas when preparing and teaching (ideally using the Curriculum Feedback Tracking Form spreadsheet available on the BOC Repository) and send it to the BOC Training and Curriculum Manager as soon as possible following the class. If possible, please include source attributes for any images you provide. BOC maintains an ongoing curriculum update program and regular instructor calls, and both will benefit greatly from your feedback.