CLASSES, CLASSES EVERYWHERE

The United States Power Squadrons® (USPS®) and the United States Coast Guard Auxiliary are increasing and broadening their coordinated safety efforts to assist boaters in learning as much as they can about their boats, good seamanship, and the environment in which they run.

Acquiring knowledge takes a time commitment, and in our busy society, some folks don't have the time to attend nearby scheduled classes; for them, an online education at home or in the office may be a better fit. In this article we take different tacks, even though we both recognize that there are advantages to each learning style (and above all, want everyone to be safer boaters). With deference to William Shakespeare, we ask, *To study online or in class? That is the question…*

The Case for Interactive Classroom Study
By Peter TenBrink, SN
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Courtesy U.S. Coast Guard

Given a choice between taking a boating safety course online or in a classroom setting, I would always choose the latter. This is primarily because, as adults, we are usually far removed from attending school. The process of learning and (gasp!) taking an exam afterwards is often enough to have many of us quaking in our boat shoes.

As an instructor, I prefer it when my students are face-to-face with me (and with the other students). I believe that being in the same room makes learning easier and more enjoyable. Students have the opportunity to ask questions and we can have open discussions about topics being presented. The teacher can customize graphics for the situation at hand. Instructors can relate actual experiences to create better understanding among the students. When, after explaining a topic, the instructor sees blank stares from the students, he or she will know that further explanation is needed; that can't be done on-line.

Our attention spans are, by nature, limited. Whether we've spent the day at work, school, or some other pursuit, we can only be expected to absorb so much at any one sitting. High school and college class sessions are usually two hours or less, so I prefer two-hour classes to completing an eight-hour course in a day or even two half-days. We want students to learn the material so that they become safer boaters...not so that they can pass the test!

Along with covering the curriculum, the experience of being in a classroom with a knowledgeable instructor and fellow students is unique and invaluable; we love boating and this is a chance to be with others who feel the same. The interaction between students and their instructor actually enhances the learning process and, I believe, makes it more enjoyable.

Please know that in New York State, you must take a proctored exam in order to earn your certificate of completion. So, at some point you will have to come to a classroom anyway.
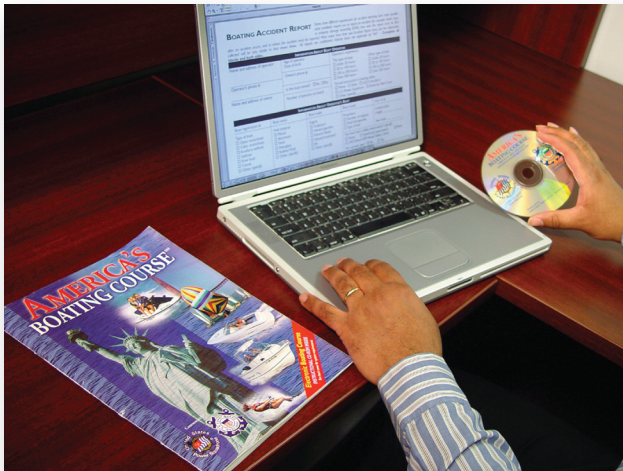
100% Scores for 100% of the Students - The Argument for Online Study
By Vincent Pica
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Comparing today's online classes to those stilted ones offered just a few years ago is like comparing today's classroom experiences to those of the 19th century. Everyone is doing a better job in delivering content, but the leaps and bounds that online classes have made is astonishing.

Stanford University recently offered its machine learning class (normally attended by 400 students) as an online course. 100,000 people signed up for it, which means that the professor would have to teach in a lecture hall for 250 years to reach as many people as now can be reached by putting the class online. If you are a teacher, regulator, or boater interested in safety of life at sea (SOLAS), that statistic should be a "prolonged blast" on the ol' fog horn.
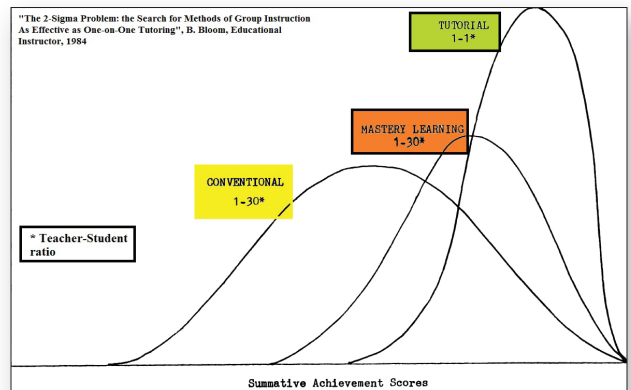
As with most material that makes the leap from the conventional world to the online world, you can't just scan the book into the computer, add some Q&As and be done. That is the old way—and why the classroom was so much better then. Now, course material can be broken into modules of 10-15 minutes each with content-linked Q&As interspersed within the information. The computer never gets bored, angry, or condescending, no matter how many times a student needs to go over the same question or concept. How many students don't ask a question in person because of fear? On the web, there's no fear whatsoever, as it is just the student and an avatar (software that imparts the *sense* that there is an instructor behind the screen).

Educators realize that no one learns as well by passively watching videos as they do when there's some form of interaction (like with a teacher) — but we have the technology now to create engaging, interactive courses that enable individual students to try and try again.

Something else has changed—these courses are designed to impart knowledge, not to stratify the students into cadres of A's, B's, C's, D's and... F's. If you are interested in SOLAS, you should <u>want</u> all

students to leave with 100% on the test. That cannot usually be done conventionally, as it takes too long. However, 100% scores for 100% of the students are possible online, and that is good for the safety of life at sea.

This "mastery-based" system, in which a student must master a section before going on to the next section, leads naturally to higher achievement levels by students. In this illustration, scores go up dramatically as individual-based interactivity, i.e., tutoring and mastery, are applied.

Courtesy of TED and Dr Daphne Koller

Online classes are now designed to link mastery, which prevents students from moving forward until they have mastered the current section of material, with tutoring, in which a tireless computer is focused on only one student.

I wouldn't suggest that all subjects are suited for online classes. Subjects that require critical thinking are not yet suited for online classes, because interaction with fellow students and the teacher is important (if you've ever been in a chat room with more than five people, you know how difficult the "traffic-cop" job is).

However, SOLAS is perfectly suited for fact-based web teaching, matching one student to the material to be tackled. Welcome to the *Brave New World!* ⚓

*Boaters under age 17 may be subject to different standards; all boaters are cautioned to check with their local authorities. Boating and seamanship courses are offered by the United States Power Squadrons® **www.weboatsafe.org,** by the United States Coast Guard Auxiliary **http://cgaux.org/boatinged/**, and New York State **http://nysparks.com/recreation/boating/education.aspx**. There are also private course providers who meet all requirements.*