Do Attack/Defend Exercises Belong In the Classroom?

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Description:

The issue of ways and means to enhance the teaching of security objectives has received increasing attention nationally. In particular, the 1998 Workshop on Security Education concentrated on the use of laboratory activities to enhance educational objectives.

Many instructors currently use attack/defend exercises as learning tools in the classroom. Some implementations involve students defending systems from “attacks” by instructors, while others allow students to simultaneously defend and attack one another’s systems. Still others require students to design systems which are then subjected to attacks. These attack/defend exercises are thought to be beneficial, since they provide hands-on experience, encourage creative thinking, and are highly motivating to students. However, there are many underlying issues that should be considered, ranging from the pragmatics of managing such exercises in a classroom setting to concerns about the educational objectives of such assignments. In this panel, we bring together educators and practitioners to explore the issues, aims, and educational value of attack/defend exercises in a classroom setting.

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