For regular face-to-face courses, the instructor can demonstrate how to navigate and access resources available in a course management system, demonstrate how to use technology tools and software, and give presentations and provide tutorials that engage and challenge students. Doing so in the online environment is more challenging due to the absence of face-to-face contact. However, one can create video demonstrations and tutorials using Adobe Captivate. Adobe Captivate can be used to create tools designed to help students to explore their online learning environment, to gain necessary computer skills, to learn software, and to create tools for tutorials and testing. Here, due to space limitations, we explore the Captivate environment, in general, in the context of creating a video demonstration for accessing and using Blackboard’s virtual classroom.

The main Captivate menu, Figure 1, has three parts: the first displays a list of recent projects as well as an option for opening others, the second has one entry for recording/creating a new project (this opens the new project dialog box), and the third provides access to tutorials on recording, editing, and publishing projects as well as for creating quizzes and exploring other aspects of Captivate such as adding audio, branching and interactivity. The New Project Options dialog box provides options for selecting the project type, a software simulation, Figure 2, and a scenario simulation, Figure 3, as well as other projects, Figure 4, such as from-scratch blank projects, image projects, importing MS PowerPoints, and creating projects from templates. The initial options for each are selected, for example, for a scenario simulation, one can use the Project Wizard or create a new simulation using a template. In order to create our demonstration for accessing the virtual classroom, we select Software Simulation, Figure 2. The initial options include
selecting an Application using recording options, defining the size and position of the recording window using the Custom Size option, and recording the application from the entire screen using the Full Screen option.

![Figure 3: The Scenario Simulations options.](image)

![Figure 4: The Other Projects options.](image)

Selecting any of the options in the Software Simulation menu, Figure 2, opens the main recording options dialog box, for example, Figure 5 for an Application and Figure 6 for Custom Size, each of which has similar options for selecting the Recording Mode(s),

![Figure 5: The main recording settings for an application.](image)

![Figure 6: The main recording settings for an application with a custom size.](image)

audio options, and language options (in Advanced) as well as options for changing the recording settings using the Settings... button. Left-clicking the Settings... button opens the Preferences dialog box with options for changing the Global settings, Figure 7, the recording settings, Figure 8, the full motion recording settings and key settings for recording, Figures 9 and 10, respectively, and the modes for callouts, captions, mouse movements and icons, click boxes, and text boxes, Figure 11. Some helpful settings include the *hear camera sound during recording* and *move new windows inside recording*.
area, both in Figure 8, the modes settings in Figure 11, and the keys (these can be changed by the user), especially that for manually taking screen captures in Figure 10.

Changing the color, font, and size options for text captions and frames, Figure 12, provides some design options when creating projects.

One aspect for recording projects that is particularly important to consider is the window size, in pixels, and the position for the region to be recorded. If we use a widescreen laptop or a PC with a large monitor then the full-screen view would be problematic for those using compact laptops or those who use a small screen resolution; while most users set their screen resolutions as 1024 pixels by 768 pixels or higher, there are still those who set their screen resolution as 800 pixels by 600 pixels. Selecting the appropriate
window size makes it possible to view a video demonstration, tutorial, or quiz with a variety of screen resolutions.

Captivate provides a several preset sizes as well as the option for manually setting the window dimensions directly by entering the height and the width for the region; here, we use a window height of 750 pixels and a width of 543 pixels. If the window from which we want to record is not directly behind the Captivate window, we may select a window from among the open windows using the Optionaly, select a window you’d like to record pull down menu. With the size of the recording region set and the recording window selected, Captivate displays a red border for the recording window. We may adjust the size of the recording window manually using the handles at the corners or sides of the rectangular region as well as left-click, hold and drag the region border to the location on the screen that we want to record; here, we change the width of the recording region to 862 pixels in order to include the Blackboard menu and the Join button for the virtual classroom, Figure 13. With these settings made, we are ready to record our demonstration: to begin recording, we left-click the Record button, Record.

Captivate records the movements of the mouse as well as the addition of new windows. Image captures may be added manually using the print screen button, PrtSc, on the keyboard, Figure 10. Adding screen captures can be helpful when new browser windows do not open rapidly. Moving the mouse deliberately as well as carefully considering what we want to display and the captions that we want to include enables us to determine when to add screen captures manually.

With the completion of recording, we press the End key on the keyboard, name the project, select the folder in which to save the project, and left-click the OK button; using the global setting to save each project in a new folder, Figure 7, keeps all project components together. With the project named and saved, Captivate opens the editing window to display the storyboard.
for the project; that is, Captivate opens a window to display all the screen captures for the project. Using the storyboard view, accessed using the Storyboard tab, we can edit the visual aspects for our project such as the mouse icons and movements, the callouts and text captions, and insert and delete slides. Using the editing options available on the Edit tab, we can change the timings for each slide as well as change the order in which individual slide elements are displayed. Using the Branching tab, we can view and edit the branching options for a project; this allows us to include interactive elements in demonstrations and tutorials that enable the user to jump to other slides, to view selected URL’s, and to open other projects.

Up to this point, we have not discussed adding audio to projects. While we can add narration as we capture images, it is more efficient to add audio after the visual aspects of the project have been collected and edited. Using a computer’s built-in microphone does not provide the best sound. Sound levels can be modified but the best sound recording is done using an external microphone: in order to avoid recording extra sounds due to movement of the microphone, it is best to place the microphone in a stand and to eliminate as much background noise as possible during the recording session. Creating a script for the narration and practicing helps one to consider the speed at which the narrative should be read and the tone to be used during recording so that the audio is pleasing rather than grating. Even if audio is to be added to a demonstration, it is important to include text boxes. We must carefully consider the needs of the user: audio is beneficial to some learners, visual elements and text are important to others. While using background music may be tempting, the user may not appreciate/like the background music that we select. In addition, background music can distract the user from important details that the tool is meant to communicate.

Finally, with the completion of editing of visual, audio, timing, and branching aspects of a project, we are ready to publish our project. Several publishing options are available including Flash, Adobe Acrobat Connect Pro, stand alone executable files, and creating a MS Word document for the project; Captivate can send files by email and send files to websites via ftp. The Flash version of the project can then be used in a website and directly launched in the browser window. Since the version of Flash Player must be selected when the Flash version of the project is created, users who need to update Flash Player will appreciate the posting of update instructions and a download hyperlink.