

Timing: 2 to 3 hours

Level: Ages 15 and up

Getting started with Adobe Flash Professional

Activity Overview

Adobe Flash Professional is a professional tool for creating interactive media with a combination of graphics, video, audio, and animations. Use this activity to introduce the Flash Professional interface and teach your students to understand the principles of Flash animation.

Note: Portions of this activity align to the Adobe Certified Associate objectives. Within the instruction steps and technical guides, the specific learning objectives for the exam(s) are referenced with the following format: [1.1](#)

Activity Objectives

Technical Skills

Flash

- Understanding the Flash workspace
- Customize the layout of the workspace
- Define the tools and features in the workspace
- Work with rulers and guides

Project Assets

- *Presentation:* Introduction to Flash Professional and Flash animation [2.1, 4.7, 4.10, 4.11](#)
- *Flash guide:* Overview of Adobe Flash Professional [3.1, 3.2, 3.3, 3.4, 4.2](#)
- *Flash guide:* How to use guides and rulers [3.5](#)
- *Electronic file:* sample_animated_face fla
- *Electronic file:* sample_animated_face swf
- *Worksheet:* How to analyze Flash content [1.1, 1.2](#)

Background preparation resources

[Technical and content information](#)

[ISTE NETS*S Standards for Students](#)

[Adobe Certified Associate objectives](#)

Activity Steps

1. Introduce students to the interface, terminology, and basic panels in Flash Professional. Utilize portions of the *Introduction to Flash Professional and Flash animation* presentation and the *sample_animated_face.fla* file to explain the following elements:
 - *Flash document*: Where you create your Flash content. You save a Flash document as a file with a .fla extension. When you open Flash, the Welcome screen gives you a choice of Flash file formats: HTML5 Canvas, ActionScript 3.0, AIR for Desktop, AIR for Android, AIR for iOS, and ActionScript File. The format you choose depends on the platform on which you plan to publish your Flash movie. Demonstrate and discuss document properties and settings (and how to change the document properties within the Properties panel and Document Settings dialog box).^{3.7} Demonstrate how to set up a new document.
 - *Workspaces*: Use preset and custom workspaces. Demonstrate how to access a preset workspace and how to create, modify, and delete custom workspaces.^{3.1}
 - *Tools panel*: Tools for drawing, painting, writing, selecting, moving, modifying, viewing, and coloring.
 - *Panels*: Additional tools for modifying and creating objects. Demonstrate various ways to open, close, expand, and collapse panels.
 - *Properties panel*: Set or change the most commonly used attributes of objects in a Flash document in the Properties panel.
 - *Stage*: Compose the content of a Flash document on the Stage. Discuss the Stage size and its relationship to screen resolution.
 - *Rulers and guides*: Discuss how rulers and guides can be used to help place and position assets and graphics on the Stage.^{3.5}
 - *Timeline*: Organize and control the content of a Flash document over time, using layers and frames. Discuss how the Timeline is used in animation and how to preview a document.^{3.3}
 - *Edit bar*: Indicates the current scene. On the right side, you can select the scene to open on the Stage or change the magnification for viewing the Stage.
 - *Library*: Store and organize symbols in the Library.^{4.7}
 - *Movie*: A published Flash document. Explain the difference between FLA files and SWF files.^{3.7}
 - *XFL file*: XFL is an XML representation of a FLA document. It is a declarative file format. In Flash Professional, a document uses the .fla extension but functions more like a container of compressed files (much like a ZIP file). It contains all of the individual files that make up the project, offering improved cross-product integration and workflow productivity.^{3.7}
 - *Extensible Metadata Platform (XMP)*: You can include XMP data such as title, author, description, copyright, and more in your FLA files. XMP is a metadata format that certain other Adobe applications can understand. Embedding XMP data in your Flash document improves the ability of web-based search engines to return meaningful search results for Flash content.^{3.7}

Presentation: Introduction to Flash Professional and Flash animation

Flash guide: Overview of Adobe Flash Professional ^{3.1, 3.2, 3.3, 3.4, 4.2}

Flash guide: How to use guides and rulers ^{3.5}

Electronic file: sample_animated_face.fla

Electronic file: sample_animated_face.swf

2. Using the *Introduction to Flash animation* ^{2.1, 4.7, 4.10, 4.11} presentation, introduce students to the principles of Flash animation. You may want to use the *sample_animated_face.fla* file to explain and demonstrate the following elements:
 - *Frame*: A single picture in a series that form the content of a Flash document. Discuss the frame rate and timing and the effect of frame rate on file size. The default frame rate in Flash is 24 frames per second. You may want to change the frame rate to show students its effect on an animation. ^{3.3}
 - *Keyframe*: A frame where a new symbol instance appears in the Timeline. A keyframe can also be a frame in which you define a change to an object's properties for a classic tween animation. Keyframes can also include ActionScript code to control some aspect of your document.
 - *Property keyframe*: A frame in which you define a change to an object's properties for an animation. Discuss the differences between keyframes, property keyframes, and regular frames.
 - *Layers*: Where you organize the various content elements in a Flash document. Discuss and demonstrate how non-symbol shapes merge when you place one over the other in the same layer. Demonstrate how to add, delete, rename, and organize layers and how to lock and unlock layers to protect objects. ^{3.3}
 - *Scene*: Each document can contain multiple scenes, each with its own Timeline and Stage. Scenes can be placed within other scenes.
 - *Symbol*: An element stored in a library for reuse in a Flash document. Discuss the editing modes, such as editing an object on the Stage versus editing a symbol.
 - *Instance*: A copy of a symbol when it is on the Stage. Each instance references the complete information stored in the corresponding library symbol, without duplicating that information. Using instances minimizes the file size of a Flash movie. ^{3.8}
 - *Tweens*: An animation created by specifying a value for an object property in one frame and another value for that same property in another frame.
 - *Motion tweening*: An automated way to create smooth movement and changes over time.
 - *Motion guide*: A way to move an object along an editable and defined path.
 - *Classic tweening*: A more complex form of creating smooth movement and changes over time. Classic tweening provides certain capabilities that motion tweening does not.
 - *Shape tweening*: An automated way to create shape changes over time.
 - *Inverse kinematics*: A method for animating an object or set of objects in relation to each other by using an articulated structure of bones.
 - *Sounds*: Music loops or sound effects that play during the movie or are triggered by an action.
 - *Actions*: ActionScript statements that control an object or the Timeline when a movie is played.
3. Distribute the *How to analyze Flash content* ^{1.1, 1.2} worksheet and ask students to research one or more applications, or other Flash content, to illustrate a variety of Flash techniques and document the techniques. (Alternatively, you could open such sites on the teacher workstation.) Individually or as a class, identify the following Flash techniques on the applications:
 - Motion tweens
 - Shape tweens
 - Movie clips
 - Buttons
 - Sound (number of sounds used, number of times a sound is looped)
 - Stop actions
 - Go to and play actions
 - Combinations of symbols (such as buttons that contain animated movie clips)

Assessment

	0 – Does not meet expectations	3 – Meets expectations	5 – Exceeds expectations
Analyzing Flash	Absent or incomplete.	Students research interactive media sites and applications that use Flash and can identify most of the animation techniques.	Students research interactive media sites and applications that use Flash and can identify all of the animation techniques.

Background preparation resources:

- For more teaching and learning resources on the topics in this project, search for resources from the community on the Adobe Education Exchange: <http://edex.adobe.com/>

Flash interactive media

- Waterlife is a preview for a documentary film similar to the cinematography and storytelling from the film. Especially interesting are the navigations, which mimic the motion of water: <http://waterlife.nfb.ca/>
- We Choose The Moon was designed to celebrate the fortieth anniversary of the Apollo 11 Lunar landing by developing an interactive re-creation of the event: www.wechoosethemoon.org/
- Interactive media awards: <http://www.interactivemediaawards.com/>

ISTE NETS*S Standards for Students

This project is aligned to the ISTE NETS*S Technology Standards. Depending on the subject and content area the student selects you may research your own state content standards to see how this project aligns to your state requirements.

ISTE NETS*S: Curriculum and Content Area Standards – NETS for Students

1. Creativity and Innovation
Students demonstrate creative thinking, construct knowledge, and develop innovative products and processes using technology. Students:
 - a. apply existing knowledge to generate new ideas, products, or processes.
6. Technology Operations and Concepts
Students demonstrate a sound understanding of technology concepts, systems and operations. Students:
 - a. understand and use technology systems.
 - b. select and use applications effectively and productively.
 - c. troubleshoot systems and applications.
 - d. transfer current knowledge to learning of new technologies.

Adobe Certified Associate Exam Objectives

Adobe Certified Associate, Interactive Media objectives

- 1.1 Identify the purpose, audience, and audience needs for interactive media content.
- 1.2 Identify interactive media content that is relevant to the purpose of the media in which it will be used (websites, mobile devices, and so on).
- 2.1 Identify best practices for designing interactive media content for desktop and mobile browsers, applications, games and HD video.
- 3.1 Identify elements of the Flash interface.
- 3.2 Use the Property inspector.
- 3.3 Use the Timeline.
- 3.4 Adjust document properties.
- 3.5 Use Flash guides and rulers.
- 3.7 Understand Flash file types.
- 4.2 Use tools on the Tools panel to select, create, and manipulate graphics and text.
- 4.7 Understand symbols and the library.
- 4.10 Create animations (changes in shape, position, size, color, and transparency).
- 4.11 Add simple controls through ActionScript 3.0.

For more information

Find more teaching materials for using Adobe software in your classroom on the Adobe Education Exchange: <http://edex.adobe.com/>.



Adobe Systems Incorporated
345 Park Avenue
San Jose, CA 95110-2704
USA
www.adobe.com

Adobe and the Adobe logo are either registered trademarks or trademarks of Adobe Systems Incorporated in the United States and/or other countries. All other trademarks are the property of their respective owners.

© 2014 Adobe Systems Incorporated. All rights reserved.