

More Flash Practice and Project Assignment

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Primary Subject:	Introduction to Multimedia Computers
Grade Level:	11, 12
Lesson Duration:	50 Minutes

Learning Objective

After a demonstration in Macromedia Flash, the student will be able to create a two-second animation, in Flash, using a PC tablet, according to the teacher's rubric.

NBEA Standard – Information Technology

V. Application Software – Identify, evaluate, select, install, use, upgrade, and customize application software; diagnose and solve problems resulting from an application software's installation and use..

Performance: Use advanced features of common application software.

Materials and Equipment

Materials: Flash animation project student worksheet, rubric, and teacher worksheet.

Equipment: Computer lab with projector, scanner, network connection, Macromedia Flash, and PC tablets. Each student will need their own computer and PC tablet.

Activities and Procedures

Review Flash Document Setup	<i>2 minutes</i>
Setting document size, frames per second, and importing.	
Review Flash Features	<i>3 minutes</i>
Frames, key frames, and layers.	
Animation Demonstration	<i>10 minutes</i>
Create a new Flash document, use default document settings.	
Use the PC tablet and pen to begin drawing an object and enhance with color.	
Insert a key frame in frame 6, move the object slightly, and change the color.	
Insert a key frame in frame 12, move the object slightly, and change the color.	
Insert a key frame in frame 18, move the object slightly, and change the color.	
Insert a key frame in frame 24, move the object slightly, and change the color.	
Animation should be a smooth flow. Preview the movie to check transitions.	
In-Class Animation Activity	<i>25 minutes</i>
Students are to repeat the animation demonstration with their own object drawing.	
Activity is worth 10 points based on the rubric.	
In-class activity is a simplified version of the big unit project, so students are encouraged to ask questions immediately if they don't understand or are having difficulties.	
Flash Animation Project Assignment	<i>10 minutes</i>
Hand out student worksheet and rubric and give an overview of the project.	
Approve photos if students have them and have them scanned if necessary.	
Students may begin project as soon as they are finished with the in-class activity.	

Evaluation/Assessment

The students will be evaluated on their class participation and completion of the two-second animation in-class activity. The students will also need to have their photograph approved for the Flash Animation Project by the end of class.

Rubric

Animation must be two seconds in length, contain a minimum of four movements, and flow smoothly.

Criteria	Points Possible	Points Earned	Comments
Length	2		
Movements	4		
Flow	4		
Total	10		

Flash Animation Project

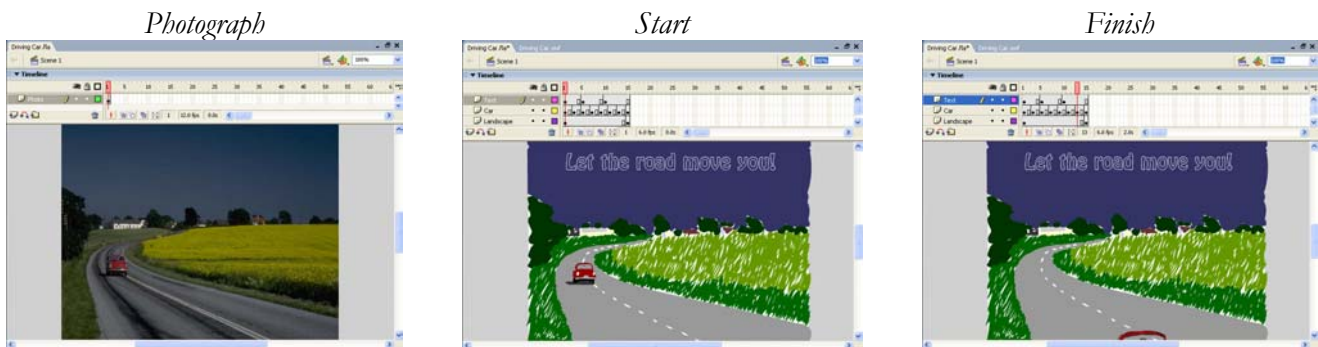
Introduction to Multimedia Computers

Purpose

To utilize your skills in using a PC tablet with a pressure-sensitive pen and Macromedia Flash, you will design a Flash animation from a photograph. This will show your knowledge of the software and hardware and allow you to show a bit of creativity with the photograph you choose.

Final Product

The final product will consist of an animated drawing completed using Macromedia Flash and a PC tablet with a pressure-sensitive pen. This is completed by starting with an approved photograph and replicating it on the computer. A static sample is shown below with a car “driving” off the screen.



Time Frame

You are allowed two full class periods to complete this project. If extra time is needed, the computer lab will be open before and after school and during lunch. Be sure and plan your project accordingly to have it completed and turned in on time. See the detailed schedule below:

- Day 1 Instructions and description of the project. Get approval of your chosen photograph. Have a backup photograph in case the one you choose is not approved.
- Day 2 Begin your project and scan in your photograph, if necessary. You will have the entire class period to work on your project and the teacher will be available for help and questions.
- Day 3 You will continue working on your project for the entire class period and the teacher will be available for help and questions. Project is due at the end of the class period. All Flash (.fla) and Flash Movie (.swf) files must be posted to the class directory by the end of class.

Due Date: _____

Assessment

This project is worth 64 points and is 20% of your grade. It will be assessed by the criteria outlined in the attached rubric. Please follow all directions, turn it in on time, and ask questions if you don't understand or are having any difficulties.

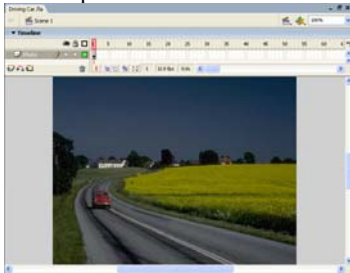
Procedures for Project

Begin by choosing a photograph and receiving approval from the teacher. Next, if a hardcopy version, scan the photograph. Save all electronic files to the class directory.

****Remember to save your work often! It is your responsibility and not an excuse for late assignments!****

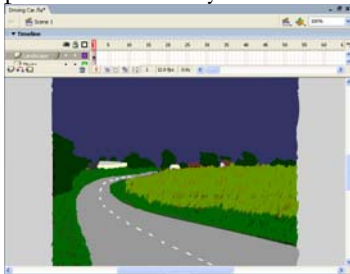
Getting Started

1. Open Macromedia Flash and Import your photo (File >> Import >> To Stage).
2. Rename the layer of your photo so you don't get it confused with other layers.
3. Adjust the size of the photo and size of the canvas to fit exactly. Keep your dimensions relatively small to keep the file size down. A good size would be 550 pixels x 350 pixels.



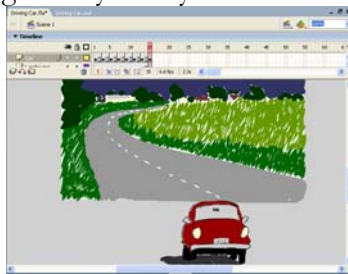
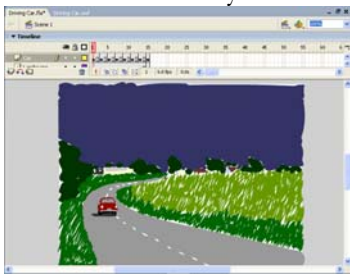
Static Elements

4. Create a New Layer, rename it, and draw the static (non-animated) elements of the photograph. You may choose your own colors if you don't like the original colors from the photograph. Just be sure all parts are still easy to see and your text doesn't blend into the background.



Animated Object

5. Create a New Layer, rename it, and draw the object to be animated.
6. Insert a Key Frame on the animated object layer.
7. Make a slight change in the object to create the animation.
8. Repeat Steps 2 and 3 until you are satisfied with the number of movements for your object. Test your animation to verify it is working exactly how you want it to (Control >> Test Movie).



Animated Text

9. Create a New Layer, rename it, and insert text.
10. Insert a Key Frame on the text layer.
11. Make a slight change in the text to create the animation.
12. Repeat Steps 2 and 3 until you are satisfied with the number of movements for your text. Test your animation to verify it is working exactly how you want it to (Control >> Test Movie).



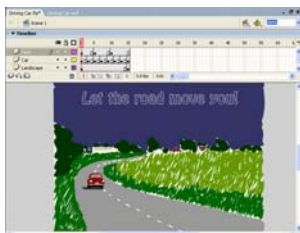
Finishing Up

13. Delete the photograph layer, but be sure the original file is saved in the classroom directory.
14. Save your final document as a Flash File (.fla).
15. Export your document as a Flash Movie (.swf) and do not change the default settings (File >> Export >> Export Movie).
16. Save both files to the class directory.

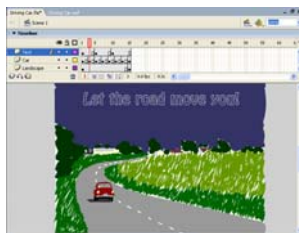
Sample Frame Sequence

Below are the completed frames of the animation. For any animation to appear to “drive” off the screen, simply keep moving the object off the canvas and onto the work area. You can see the text only has a slight variation, but it is still animated. To see the animated version, please look on the class directory.

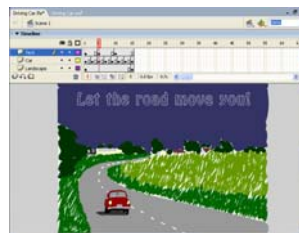
Frame 1



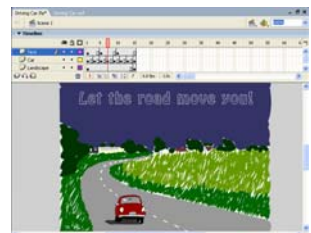
Frame 3



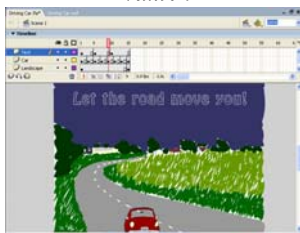
Frame 5



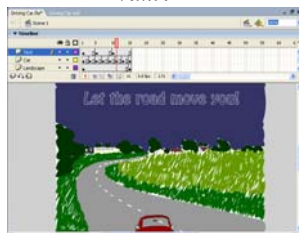
Frame 7



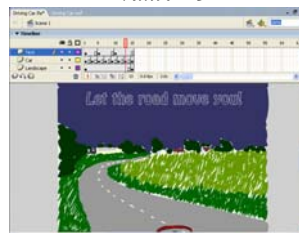
Frame 9



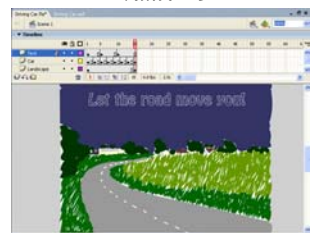
Frame 11



Frame 13



Frame 15



Flash Animation Project

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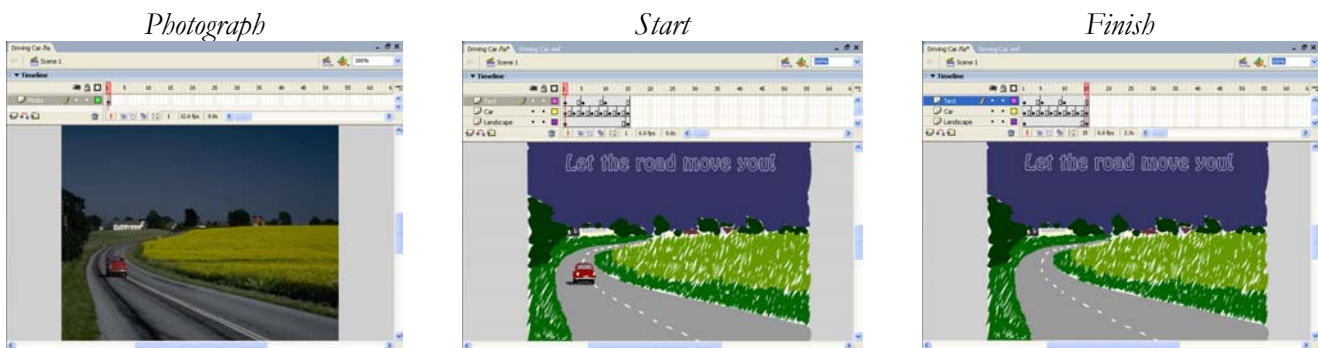
Outcomes

1. How to draw using a PC tablet in Macromedia Flash.
2. How to use the pressure-sensitive pen to adjust line thickness.
3. How to create separate layers for static and animated objects.
4. How to animate an object in multiple frames.
5. How to animate text in multiple frames.
6. How to export a Flash movie and save to class directory.

Specifically: Using a PC tablet, design a Flash animation from a photograph and include at least one animated object and animated text.

Final Product

The final product will consist of an animated drawing completed using Macromedia Flash and a PC tablet with a pressure-sensitive pen. This is completed by starting with an approved photograph and replicating it on the computer. A static sample is shown below.



Specific Tasks to be Complete and Person Responsible

1. Teacher Pass out student instruction sheets and rubric.
2. Student Choose photograph that can be animated.
3. Teacher Approve the student chosen photograph.
4. Student Scan hardcopy photographs, if necessary.
5. Student Use computer with Macromedia Flash and a PC tablet to complete project.
6. Student Post both .fla and .swf files to class directory.

Necessary Prior Knowledge

1. How to use a computer and the computer file structure.
2. How to scan a photograph and save it to the class directory.
3. Working knowledge of Macromedia Flash.
4. Working knowledge of a PC tablet with a pressure-sensitive grip pen.
5. How to post completed files to the class directory.

Degree of Student Involvement

1. Students will choose their own photograph, but receive approval from the teacher.
2. If not an electronic file, the student will scan the hardcopy photograph.
3. Each student will recreate their chosen photograph in Macromedia Flash and use only a PC tablet.
4. Project will be completed during class time in the computer classroom.
5. If class time is not sufficient for completing the project, the student is responsible for finding an alternate time (before or after school or during lunch) to complete the project.
6. Students will post two files (.fla and .swf) to class directory by the deadline.

Special Arrangements and Permissions Needed

No special permissions are required, except students will need approval of their photograph by the teacher.

Group/Individual Structure

This is an individual assignment. If students have trouble with a feature in Flash or need assistance, classmates may be consulted for explanation, but not to actually complete the work. The teacher will be available for help and questions and also observing each student for the duration of the project.

Time Schedule

Project will be due on the third day once assigned.

Due Date: _____

- Day 1 Handout of instructions and description of the project. Students will get approval of their chosen photograph if not already done. Students will begin their project and scan in their photograph, if necessary.
- Day 2 Students that did not already scan their photograph should do so at the beginning of class. They will have the entire class period to work and the teacher will be available for help and questions.
- Day 3 Students will continue working on their project for the entire class period and the teacher will be available for help and questions. Project is due at the end of the class period. All Flash (.fla) and Flash Movie (.swf) files must be posted to the class directory by the end of class.

Resources Needed

1. Computer classroom.
2. Network access to classroom directory.
3. Available computer for each individual student.
4. Macromedia Flash installed on every computer.
5. PC tablet with pressure-sensitive pen installed and available for each student.

Any Additional Information

No additional information necessary.

Flash Animation Project

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Adaptations

Prerequisite knowledge, skills, and procedures that are needed for the assessment and the adaptations if the students do not have the prerequisites.

Prerequisite Knowledge

1. Working knowledge of Macromedia Flash.
2. Working knowledge of a PC tablet with a pressure-sensitive grip pen.

Adaptation

1. Student will be responsible for completing the lessons leading up to this project. This will give them the knowledge needed for this project. This can be done partially in-class, but will require outside class time as well.
2. Student will need to take one class period or outside class time to become familiar with the PC tablet and pen before working on the project.

Prerequisite Skills

1. How to use a computer and the computer file structure.
2. How to scan a photograph and save it to the class directory.
3. How to post completed files to the class directory.

Adaptation

1. Teacher can give the student a brief tutorial on the structure of a computer
2. Classmates can assist in scanning the photograph and saving it to the class directory.
3. Classmates can assist in posting files to the class directory.

Prerequisite Procedures

1. How to take the necessary steps to complete a project from start to finish.
2. Be able to turn in the document on time.

Adaptation

1. Teacher will detail any additional steps not outlined in the student direction worksheet.
2. Given the nature of the circumstances, a longer timeframe will be given with an alternate deadline.

Flash Animation Project

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Name: _____

Point Total: _____

Rubric	Excellent	Good	Fair	Poor
On time assignments	<i>4 points</i> Assignments turned in by due date.	<i>3 points</i> Assignments turned in late, but with teacher approval.	<i>2 points</i> Assignments turned in one day late without teacher approval.	<i>1 point</i> Assignments at least two days late without teacher approval.
Approved photo	<i>4 points</i> Photo received teacher approval.	n/a	n/a	<i>1 point</i> Photo did not receive teacher approval.
Animation timing	<i>4 points</i> 2 – 4 sec.	<i>3 points</i> 4 – 5 sec.	<i>2 points</i> 5 – 6 sec.	<i>1 point</i> 1 – 2 or 6+ s.
Appropriate file size for document (.fla)	<i>4 points</i> 500k and under.	<i>3 points</i> 501k – 600k	<i>2 points</i> 601k – 700k	<i>1 point</i> 701k and over.
Appropriate file size for movie (.swf)	<i>4 points</i> 150k and under.	<i>3 points</i> 151k – 200k	<i>2 points</i> 201k – 250k	<i>1 point</i> 251k and over.
Replication of photo	<i>12 points</i> Drawing is an accurate depiction of photo, but may have varying color. It is easy to match the drawing to the photograph.	<i>9 points</i> Drawing is close to the original photo, but minor background features were added or missing.	<i>6 points</i> Drawing is not close to the original photo because major features were added or missing.	<i>3 point</i> Drawing looks nothing like the original photo.
Layers	<i>4 points</i> Has at least three separate layers (background, object, and text). They are all appropriately named.	<i>3 points</i> Has at least three separate layers (background, object, and text). They are not named appropriately.	<i>2 points</i> Has two layers and they are named appropriately.	<i>1 point</i> Has one or two layers and they are not name appropriately.
Animated object	<i>12 points</i> Created a smooth animation of at least 5 different frame movements.	<i>9 points</i> Created a smooth animation and had less than 5 different frame movements.	<i>6 points</i> Animation was not smooth, but had at least 5 different frame movements.	<i>3 points</i> Animation was not smooth and had less than 5 different frame movements.
Animated text	<i>8 points</i> Text is appropriate for the drawing and has a smooth animation.	<i>6 points</i> Text is appropriate for the drawing, but does not have a smooth animation.	<i>4 points</i> Text is not appropriate, but has a smooth animation.	<i>2 points</i> Text is not appropriate and does not have a smooth animation or speed is too fast to be readable.
PC tablet and pen drawing ability	<i>8 points</i> Use of different brushes with a clear variation of stroke thickness.	<i>6 points</i> Use of different brushes, but does not show variation of stroke thickness.	<i>4 points</i> Does not use different brushes, but does show a clear variation of stroke thickness.	<i>2 points</i> Does not use different brushes or show variation of stroke thickness.

Grading Scale: A (58 – 64) B (52 – 57) C (45 – 51) D (39 – 44) E (38 and below)