Development response: Standard A

Instrument-specific standards

Knowledge and communication

The student work has the following characteristics:

- **accurate** and **comprehensive definitions, explanations** and **use** of multimedia terms, concepts and principles
- **coherent** and **clear communication** of multimedia concepts, principles and design processes using mode, genre and language conventions **discerningly**

Design and development

The student work has the following characteristics:

- **comprehensive and discerning analysis** of early childhood client needs and purpose to inform the design plan of the interactive learning object
- **thorough and systematic synthesis** of information to design an interactive learning object
- **comprehensive development** and **thorough testing** of components to refine the interactive learning object.

Student response — Standard A

Extracts from the complete student response have been selected to demonstrate the match of qualities of student work with the syllabus dimensions and standards descriptors.
Comments

Graphic Development

Replicating the drawn characters using shapes, lines in Illustrator proved relatively easy until it came to colouring them in.

As Ollie was made up of morphed circles he could be filled very simply as seen below.

However, as some of my more complex characters, such as Fred the Fox could not be developed using circles I had to use the pencil and line tools, which can’t be joined to use the simple fill function.
coherent and clear communication of multimedia concepts, principles and design processes using mode, genre and language conventions discerningly.

NAME could also obviously not be incorporated into sound.

I decided to remove Name as it was irrelevant for the rest of the game.

Animated Introduction:
Help me find mother!

Do you want to play?

yes

no

no

yes

Find Muther

Play again?

GAME 1: Danny the Deer

Search Forest

Well Done! Congrats!

GAME 2: Bella the Butterfly

Search Forest

Well Done! Congrats!

GAME 1: Fred the Fox

Search Forest

Try Again

Try Again

Try Again

Try Again

Try Again
I decided that as “countdown” was constantly changing perhaps the game wasn’t playing as because the number of flowers in the basket could not truly equal countdown - random_drag.

In an attempt to overcome this I added a third text box:

Variable name: countup.
_root.countup = 0;

when a flower was dropped into the basket, the countdown counter would not only decrease by 1 but the countup text box would increase by 1 as well. This is shown in the code below:

This meant that when the random variable = “countup”, the game would play on. However, this was also a failure on both frame 1 and the

If the flower is dropped from the basket, count up or count down!
Because of my lack of success I decided I had no choice but to add a button as a checkmark and then continue the chance. I also decided that as it would now be possible for players to go above the random variable amount of dyes, a restart button was needed.

It was also at this stage that I decided Fred's game needed more positive and negative feedback for the children.

If the incorrect number of flowers were dropped and dropped, the cloud would change to display:

Oops! That's not the right number of flowers! Try again.

Accompanied by a negative "bang" sound! If the number was correct however the message would display the following:

Well done! You picked the right number of flowers!
As a result, any numbered paint could colour any numbered area:

I soon realised that this is not what I wanted. In order to actually educate the children, they should just be able to paint anywhere. I needed a code that would only let 3 colour 3, 4 colour 4 and so on. That way the kids would actually be learning to match the different appearances of the numbers – not just going crazy with colour!

I also wanted the Learning Object to play on more all areas had been filled, so to solve these 2 problems I added a tracker and a counter to the coding.

```
fillColor = 0xffffff;
_root.tally=0;
stop();
```

Frame 1

on (release) {
_root.fillcolor = 0x7b99ee
_root.brush.gotoAndStop(2)
_root.tracker = "one"
}

This acts as a “guarantee that area 2 will fill

Achat Script on paint pots.

Achat Script on

When this reaches 13, the game will play (as there are 13 areas)
coherent and clear communication of multimedia concepts, principles and design processes using mode, genre and language conventions discerningly comprehensive development and thorough testing of components to refine the interactive learning object

Sound Development
Audacity was used to record all narration through the use of a microphone.

After completing each recording, I exported the narration as a WAV file, ready to be imported into Flash.

It was very simple to insert sound. After importing it, I created a new layer in each scene called “Sound” clicked on the appropriate frame and used the drop down menu as seen at the left.

My only issue with sound was that while it was very clear in Audacity, it was much lower quality when the learning object as an .swf. However, due to the time constraints I had to leave the sound as is.
Animation Development

While my goal (as outlined in the Storyboard) was to have wings flapping and tails wagging, due to the time constraints I had to alter this goal to be more realistic. As a result, only basic Classic Tweening was used to create blinking and simple movement.

Blinking:

Movement: (walking)

I was relatively pleased that I did manage to include some form of animation, but it was still disappointing.
coherent and clear communication of multimedia concepts, principles and design processes using mode, genre and language conventions discerningly
Comments

coherent and clear communication of multimedia concepts, principles and design processes using mode, genre and language conventions discerningly

TECHNICAL DOCUMENTATION

FOLDER STRUCTURE

The folders containing all necessary files for the development of the interactive learning object will be set out in the following fashion:

Figure 1. Folder Structure.

STORAGE

DEVICES

The following devices will be used for file storage throughout the course of the project development:

- Workplace H:/ Drive
- Home C:/ Drive
- Portable Hard Drive
- Outlook Web App

AVAILABLE SPACE

The maximum amount of available storage space across these devices greatly varies, as illustrated by the figures below.

Workplace H:/ Drive:

Figure 2. Remaining Space in Workplace H:/ Drive.

Home C:/ Drive:

Figure 3. Remaining Space in Home C:/ Drive.

Portable Hard Drive:

Figure 4. Remaining Space in Portable Hard Drive.
Comments

accurate and comprehensive definitions, explanations and use of multimedia terms, concepts and principles

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Outlook Web App:

2.8 MB of mailbox space used. At 14.63 MB you won’t be able to send mail.

Figure 5. Remaining Space in Outlook Web App.

DELIVERY PLATFORM

As the final product will be completely correlated and developed in Flash the .swf file format will automatically be created alongside the working .fla file. While this .swf file will make it possible to view and play the developed interactive learning object, a .swf file cannot be viewed from any device that does not have Adobe Flash Player, such as most mobile phones.

FINAL DELIVERY PLATFORM

To overcome the limitations of a .swf file, the final product will be embedded in DreamWeaver as an .html file to allow for accessibility from a wider range of platforms. This new format allows the interactive learning object to be much more universally compatible and accessible, meaning any computer with Internet Explorer will be able to run and view this file.

USER INSTRUCTIONAL DOCUMENTATION

How to make a button in Adobe Flash CS4.

Step 1: Open Adobe Flash CS4, and create a new ActionScript 2.0 file.

Your screen should look like this:

Figure 21. New Flash File

Step 2: Click on the Brush Tool.

Figure 22. Brush Tool Icon
### DISASTER RECOVERY PLAN

Throughout the development of this project, a disaster recovery plan is essential to ensuring the security of every file associated with the assignment. Brisbane Girls Grammar School provides a wide range of data security methods to ensure safety and recovery should the school's computer system fail. As well as a RAID data storage scheme, a large SAN, a UPS in the event of a power outage and online and offline backup with tapes, the school also provides snapshot technology which automatically backs up any changed data every hour. Project files will also be stored in a multitude of locations, including the Workplace H:/ Drive and the Home C:/ Drive, as well as on a portable hard drive, which will be formatted to act as version controls. Though less powerful than the servers at Brisbane Girls Grammar School, the home computer also offers snapshot technology to recover data from 12 hours prior to loss or corruption. Finally, to prevent data loss during transportation between the workplace and home, files will not only be stored on portable hard drive, put through using the Outlook Web App as well.

### USER TESTING EVIDENCE – TEACHER AID

**August 4:** Fred's Game would not continue to the next scene when script for if countdown = 10 - random_dragon was inserted either on the first frame or within the movie clip of each flower.

This was tested with to no success.

**August 12:** The specific areas in the colouring in game would not fill when clicked on.

This was tested with to reveal that substantial ActionScript was missing.

**August 16:** A third counting variable was created, alongside a button that would check for 'if countup = random_dragon' and gotoAndPlay the correct feedback frames if successful.

This potential solution was tested with and was very successful.

**August 25:** Despite coding for the incorrect message to gotoAndPlay the first frame, the flowers would not return.

This was tested and repaired with

*For Technical Recording Evidence, please refer to the journal.*