Design 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

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<thead>
<tr>
<th>Comments</th>
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<td><strong>An authentic situation allows students to demonstrate management skills, effective communication skills and to develop productive relationships with clients (Syllabus section 1).</strong></td>
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As part of a senior role for an independent education firm, edMedia, an interactive learning object must be created for children aged four to five, across a time span of eight weeks. In order to effectively execute this project the interactive learning object is required to be well researched, designed and developed, as well as specifically focusing on either literacy or numeracy skills. The newly designed interactive learning object will be trialed through visiting a local childcare centre at a negotiated, convenient time. During this visit, the children will be observed and evaluated while they engage with the developed interactive learning object.

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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.
Dear Child Care Centre Director,

I am seeking the opportunity to conduct observation at your centre for a project produced by Year 12 Information and Technology Studies (I.T.S.) students. The project involves researching, investigating and developing educational games for young students that will look at foundational numeracy and literacy skills. It is a requirement of the I.T.S. syllabus that the students assess the user suitability of their learning objects in an authentic, real world situation. In order to fulfill this requirement, would appreciate trialing the learning objects in a visit to your centre at a negotiated, convenient time. During the visit, the I.T.S students will observe children using the educational games that they have designed and developed.

We can assure you that the students will undertake this observation and evaluation with minimal disruption to your classroom program. Ideally, small teams of students would visit the centre over several sessions under the direct supervision of an I.T.S teacher. All resources that are vital for this assessment, such as portable laptops, will be provided by B.G.G.S.

It would be much appreciated if you could support the I.T.S. students in this project with one or more of your early childhood groups. Please contact the teacher responsible for this course, at your earliest convenience, by phone or email should you wish to discuss this request further. In the near future, will follow-up this call with your centre.

In anticipation of your interest in networking with B.G.G.S. in this meaningful and mutually beneficial initiative, I offer my sincere thanks.

Kind Regards,
Comments

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

comprehensive and discerning analysis of early childhood client needs and purpose to inform the design plan of the interactive learning object

Design Phase

May 13

What you have to include/consider/decide on:
- Short attention span → games need to be varied.
- Games can consist of drag & drop mainly
  → also consider including colouring, setting sound
  interactivity, shapes, classifying
- Literacy or numeracy?
  → which particular skills?
  → no printing object
  → what kind of epic character?
  → setting?
  → students aged 4-5 years → refer to item H research

LITERACY OR NUMERACY?

I've decided to create a numeracy learning object as I feel that games with numerical skills are perhaps more straightforward for coupling into this project than such a broad subject such as literacy. For instance, smart-first-graders.com outlines that numbers ranging from 1-10 are perfect for the target age group I'm working with, whereas with literacy there are no handy limits on which words to include or not to include. I will focus my game on learning how to get a "feel" for numbers, with concepts such as ordering and teaching students different representations of numbers (e.g. quantities, word numbers).
CHARACTER.

Love owls and as the briefsheet suggests that baby animals are very popular with the kids I'll make my own baby owl.

I feel an owl is a good choice as they are made up of relatively simple shapes - mainly circles!

Three owl images were inserted here as part of the response.

Snowy Owl  Barn Owl  Screech Owl

But which type of owl should I use? I selected these three distinct looking owls to choose from as they all have very different shapes and features. I like the snowy owl for its simplistic feather colour but I don't want the learning object to remind the students of Harry Potter! The Barn owl has a very easy to replicate face - two circles, one large triangle - but I feel as if its too intimidating for young - not quite cute enough. I am going to go with the Screech owl as my main gameplay character as the little 'ears' give the owl a very menacing, cute quality and its facial structure is a lot less intimidating than that of the Barn owl.

An image of a Screech owl was inserted here as part of the response.
coherent and clear communication of multimedia concepts, principles and design processes using mode, genre and language conventions discerningly

I felt that the next step in designing the character would be to look at different ways of turning the Screech image into a cartoon image.

I love the simple shapes used to create the clipart image of a Screech Owl — it's very basic, cute and easy to recreate. The only reservations I have about this design are the style of eye. The combination of yellow and the flower shape makes it a bit more friendly than loveable!

I love the eyes that have been used in this clip art Screech Owl example! They are much more friendly and ‘approachable’. I'll definitely recreate these owl eyes when I create my own Screech Owl vector.

I really like how the wings were done in these vector images in comparison to the above two. They're small, yet clearly defined and visible which I feel adds to the overall cuteness factor — which will hopefully appeal more to the students. I also like the simple nose as a beak.

Sources:
1 = broodnestsilhouette.wiki.spaces.com
2 = pamsclipart.com
3 = loc.gov/TAOP

A clip art image of a Screech owl was inserted here as part of the response.

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**Name?** → Research into Famous Owl Characters...

Cowl from Winnie the Pooh

Archimedes from The Sword in the Stone

Extremely popular at the moment with young children who watch ABC Kids.

Giggles and Hoot → TV presenters on ABC Kids.

An image was inserted here as part of the response.

Hedwig from Harry Potter and the Philosopher’s Stone.

- Harry Potter is worldwide popular and the owl, Hedwig is instantly recognisable.

An image was inserted here as part of the response.
Comments

comprehensive development and thorough testing of components to refine the interactive learning object.

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

Possible Text Options:

Hi, my name is Ollie! (Tekton Pro Ext)

Hi, my name is Ollie! (Century Gothic)

Hi, my name is Ollie! (Comic Sans MS)

Hi, my name is Ollie! (Arial Black)

Hi, my name is Ollie! (Bradley Hand ITC)

Hi, my name is Ollie! (Segoe Print)

I feel that while Arial Black and Segoe Print are relatively easy to read, simple fonts they unfortunately break the WebAIM rule of limiting font variations. Arial Black is too bold and Segoe Print is too italic.

Bradley Hand ITC despite looking like handwriting is far too faint - almost to the point where it’s no longer basic and easy to read - to use in this LO project.

While Comic Sans MS meets all of the suggested WebAIM criteria I feel it is far too au courante as a “children’s font” and I’d like my name to be individual and look different to the competition.

Which leaves Tekton Pro Ext and Century Gothic.

Both fonts exceed all of the WebAIM criteria so I’m going to base the choice purely on preference. I really like the smooth, roundness of Century Gothic compared to Tekton’s harsh edges, so I am going to use it.
Comments

comprehensive and discerning analysis of early childhood client needs and purpose to inform the design plan of the interactive learning object.

Learning Object Research

- An image was inserted here as part of the response.
- I really liked the opening sequence of the worm emerging from the cocoon.
- I think it makes the game more entertaining for the child if there's a bit of a storyline they can be involved in alongside the educational games.

- An image was inserted here as part of the response.
- Very helpful alongside the voice over.

- An image was inserted here as part of the response.
- When the mouse hovers over various on-screen elements, a fun animation would occur.
- Adds a sense of surprise for the child, which makes the game more engaging with something new every time.

- An image was inserted here as part of the response.
- The sound effects that went with these animations also added to their overall entertainment - a different sound for each surprise - I really liked this particular element.

- I also really like the animation of the worm when an answer was correct.
- The animation reward reinforces the whole notion of a fun storyline the child can engage with.

- I also love the use of bright colours and simple outlines. Great game!
Comments

A thorough and systematic synthesis of information to design an interactive learning object.

Three butterfly images were inserted here as part of the response.

I chose these designs to work from because they all have a face - makes the character more personal. I feel that butterfly graphic 2 is too large in the face and the antennae are much too prominent. I do like the simplicity of 2's wings though, especially in comparison to the more complex wings of 3 and especially 4. The body of 4 is real - I prefer it to the three part body of 3. However, I feel that 3's antennae and eyes are best suited to my character especially the eyes as they are most similar to Ollie's.

Two images were inserted here as part of the response.

A net will be used to make the numbered butterflies (in place of 1). I will definitely use a design similar to 1 as I like the black culture and simple style.

The numbered butterflies will be very simple - without faces as they won't be talking and are much smaller.

Bella the Butterfly

Side view

Front view
Comments

A comprehensive and discerning analysis of early childhood client needs and purpose to inform the design plan of the interactive learning object.

Accurate and comprehensive definitions, explanations, and use of multimedia terms, concepts and principles.

As the LC is set in a forest I obviously needed to set my colour scheme around green. I will obviously use the colours for visual elements such as the tree leaves and grass as well as the yellows for flower centres. When ‘wood’ is selected instead of ‘topology’, the following colours are used:

- #8E1424
- #300A00

These images offer me inspiration on how I should convert my hand drawn forest into a cartoon one.

Two forest images were inserted as part of the response.
thorough and systematic synthesis of information to design an interactive learning object

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

Annotated Introduction:

- *Opens in a forest*
- Forest sounds (bird calls, bubbling streams, rustling leaves)
- Screen zooms in on an owl that jumps out from behind a tree

Font: Century Gothic

Sounds: owl + voiceover

"Use the keyboard letters to type your own name"

The child can type his/her name in the box to make the owl more personal [I’ll include a voice over “bing” to direct the child to the keyboard]
Comments

**thorough** and **systematic synthesis** of information to design an interactive learning object.

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

**Final Storyboard**

- This will repeat 3 times with 3 different sets of numbers.

**YOU HAVE 5 FLOWERS**

**PLACE 2 IN THE BASKET**

**Prompts**: will replace instructors

“**Well done!**” when completed, where on the number will count down.

**6 → 2** when 1 flower picked

**An animated tutorial with a picture of the mouse** will demonstrate the drag and drop action of the game. This will be equipped with a **skip button**.

- **Return to converse #1 frame.**

  **Following dialogue will take place**:  

  **Fred**: Thanks for helping out guys!
  
  **Ollie**: No problem Fred. Have you seen my mother?
  
  **Fred**: Sorry Ollie, I haven’t.

  **Ollie**: That’s okay, we’ll just have to keep looking!

  **Bye Fred!**

  **Fred**: Goodbye guys!

- **Return to walking frame until reaching converse #2 frame...**

  **Speech bubbles will be included to provide the text of the conversation!**