Talk the Talk-Multimedia Terminology  
By Janie S. Torain

Introduction

Students will use Quia activities and Alice Programming software to interactively learn multimedia terminology while creating multimedia files in a “FUN-damentally” different and more enjoyable way than ever before. Alice lets students be the director of a movie or the creator of a video game, where 3D objects is an on-screen virtual world move around according to the directions they give them. Students will explore multimedia production terminology using Quia and Alice programming software.

Learning Outcomes ~ What Will Students Learn?

Students will:
1. Choose and complete one or more of the Quia activities to pre-assess multimedia terminology.
2. Review multimedia terminology terms completing notes handout
3. Demonstrate multimedia terminology by completing virtual worlds in Alice

Curriculum alignment

Business & Information Technology Course: 6412 Computer Applications II Grades 9-12

1. Unit C. Integrating Technology and Internet Use
   a. Competency 6 Utilize multimedia production
      i. Objective 6.01 Investigate and explore the uses and terminology of multimedia production
      ii. Perquisite-Keyboarding skills

Other BITE Courses this lesson may be utilized:

6421 Computer Programming I Grades 9-12
1. Unit A. Overview in Programming
   a. Competency 1 Investigate history & evolution of programming
   b. Competency 2 Identify the concepts of object oriented programming
   c. Competency 4 Explain solution development process
   d. Competency 5 Recognize proper programming style
      iii. Perquisite-Algebra I recommended

6400 Business Computer Technology Grades 7-8
2. Unit B. Application Software
   a. Competency 7 Utilize multimedia/presentation graphics software
      i. Objective CT07.02 Identify and explain multimedia presentation graphics terminology.
      ii. Perquisite-Keyboarding skills
Classroom time required

One 90-minute Block

Materials needed

1. Quia activities:
3. LTPWA¹
   - Chapter 1: Introduction to Alice pp 3-13
   - Page 18 Summary & Important Concepts
   - Exercise 1-1 pages 16-17
4. CD software with Program and files
5. Multimedia Terminology *Alice Notes Handout*: Online
6. PowerPoint:
   - AliceStartPartOne.ppt
   - AliceStartPartTwo.ppt

Technology resources

1. Computer
2. Alice Program v2.0
   - Alice v2.0 is a free download at www.alice.org. There are Alice 2.0 versions for Microsoft Windows (ME, NT, 2000, XP, and Vista). Additionally, there are Alice 2.0 releases for Mac OSX and Linux
3. Internet access
4. E-mail
5. Netscape, Firefox, or Internet Explorer Web browser.
6. Microsoft PowerPoint

Pre-activities

Students should already know how to:
   - Start and maneuver through PowerPoint
   - Cornell note taking skills
   - How to access Quia activities
   - How to screen capture (print screen) and paste in Word scores of Quia Activities.

¹ Learning to Program with Alice
Activities

Quia Activities
Teacher will demonstrate how to get access to the Quia review terminology activities. Students will choose a terminology to complete. Upon completion, student will screen capture (print screen) their final score, paste it in a word processing document, properly title work and submit for 10 points.

Notes Handout
Teacher will highlight the key points of Chapter 1 while students complete the notes handout. Teacher can highlight the entire chapter or start and allow the students to finish independently.

Interactive Tutorial
Teacher will demonstrate how to start Alice and the IceSkaterWorld.a2w tutorial. After guided practice, students will complete the tutorial.

Hands-on Activities
Teacher will start Alice and work along with students to begin exploring the Alice program with the AliceStartPartOne ppt. Students will then choose Exercise 1-1 or Appendix A Part 1 for independent practice. Students will screen capture (print screen) final world coding, paste into a word processing document, identify work and submit (hard copy or as an attachment).

Assessment
1. Printed screen capture of Quia Activity 10 points
2. Completed Notes handout 15 points
3. Screen Capture of final world coding 75 points
4. Quia Quiz 6.01 Multimedia Terminology 100 points

Modifications
Students with learning disabilities and/or English language learners
AliceStartPartOne ppt. Guided practice to satisfy requirements.
Quia Activities can be altered to 5 or 10 items.
Worlds can be set and student can add some coding

Gifted and talented students
Complete in addition class assignments Appendix A Part 2
Give a choice of other activities from:

Alternative assessments
Quia Activities and Quiz can be altered to 5 or 10 items.

Supplemental information
Critical vocabulary

CAP II 6.01 Hangman: http://www.quia.com/hm/51549.html
- CAP II 6.01 Rags to Riches: http://www.quia.com/rr/12790.html

Websites

Alice
Adventures in Alice Programming K-12 Outreach .PDF by Professor Susan Rodger
Business & Information Technology Education – NC Public Schools CTE Homepage
Adventures in Alice Programming—Durham Region
Alice Educational Software – Carnegie Mellon

Comments

This lesson plan was produced as part of the Alice Programming Workshop at Duke University, June 16 through July 18, 2008 under the directions of Professor Susan Rodger. Each of the first two weeks was a mix of learning and experimenting with Alice, and developing Alice curriculum materials that fit best with the way teachers planned to integrate Alice into their courses. For some teachers, this will be Alice modules, and for others it may be an entire Alice course. Duke Faculty and students provided support in this development.

Author Information

Janie S. Torain, NBCT EdS
torainj@person.k12.nc.us
Person High School

Janie Torain is a National Board Certified Teacher at Person High School in Roxboro, NC. She has been teaching middle and high school Business and Information Technology Education Courses since 1988. She received her BS in Business Education and an MA in Education Technology from North Carolina Central University. She received her EdS in Educational Leadership-Curriculum & Instruction from Liberty University. She is currently pursuing an EdD in Educational Leadership from Liberty University.
Lesson Plan
VOCATS Objective: CZ06.01 Investigate and explore the uses and terminology of multimedia production.

**Instructional Presentation**

<table>
<thead>
<tr>
<th>Time:</th>
<th>90 min block</th>
<th>Explanation of Activity</th>
</tr>
</thead>
</table>
| Focus & Review Alice & CAPP II Terminology | 10 minutes (bell ringer) | Students will review multimedia terminology by playing their choice of these Quia Activities:  
  - CAP II 6.01 Rags to Riches: http://www.quia.com/rr/12790.html  
| Lesson Objective | 5 minutes | CZ06.01 Investigate and explore the uses and terminology of multimedia production. |
| Teacher Input Demonstration | 10 minutes | Review Chapter –Getting Started With Alice terminology & page 18 Summary & important Concepts. Students prepare Notes Terminology Chapter |
| Guided Practice Alice Tutorial | 15 minutes | Demonstrate and guide Students as they start Alice and the IceSkaterWorld.a2w Tutorial  
  - Tour the Alice Interface  
  - Learn to Play a World |
| Independent Practice | 45 minutes | Finish IceSkaterWorld.a2w Tutorial. (ongoing)  
AliceStartPartOne.ppt (Modified)  
Exercises 1-5 pages 16-17 LTPWA² (Reinforcement)  
Appendix A. Part 1: Using Alice pages 283-296 (Enhancement) |
| Closure | 5 minutes | Students will answer the question What is term learned from today’s exploring project management terminology? |

Adaptations and Modifications
Students are given a choice of an activity to study 6.01 terminologies. Hard copies of notes. Hard copy of AliceStartPartOne.ppt for Independent Practice

Infuse Technology
Focus and review activities are interactive online games  
Alice Programming software will be used to prepare the multimedia presentations with graphics

Infuse Cultural Diversity
Objects in Gallery and People Builder in Alice allows students to view and utilize items conducive to their culture

Infuse Working w/ Families
Students are requested to share one neat feature wit family members each day.

Reflections:
Submit all materials used for the lesson (i.e. slide shows as handouts, worksheets, other activities).

---

² ibid
CZ06.01 Investigate and explore the uses and terminology of multimedia production.

Chapter 1: Getting Started with Alice Notes

Learning to produce multimedia programs in Alice means that you will create virtual worlds on your computer and populate them with some really cool objects in creative scenes. As we review Chapter 1, complete this handout. 15 points.

1. Why is the program called Alice?

2. All computer programs are made from very simple ideas. Name and Describe 4:
   a. 
   b. 
   c. 
   d. 

3. Explain these Alice concepts:
   a. Virtual world-
   b. Alice objects-
   c. 3D models
   d. Three dimensions and size directions-
   e. Center of an object-
   f. Distance-
   g. Position-
   h. Animation

Submit this completed handout to receive the 15 points. Keep the returned handout to review these notes as often as needed.
CZ06.01 Investigate and explore the uses and terminology of multimedia production.

Chapter 1: Getting Started with Alice Notes

Learning to produce multimedia programs in Alice means that you will create virtual worlds on your computer and populate them with some really cool objects in creative scenes. As we review Chapter 1, complete this handout. 15 points.

1. Why is the program called Alice? Answers may vary. The program is named Alice in honor of Charles Lutwidge Dodson, and English mathematician and logician who wrote under the name Lewis Carroll, author of Alice’s Adventures in Wonderland and Through the Looking Glass.

2. All computer programs are made from very simple ideas. Name and Describe 4:
   a. List of instruction-a set of directions that tells the computer what to do
   b. Repeating behavior-doing an activity over and over
   c. Breaking things up into smaller parts-sequencing what needs to be done first, second, etc.
   d. Compute a result-perform the sequence of steps to obtain a result that is an answer to a question

3. Explain these Alice concepts:
   a. Virtual world-a video game or simulation implemented in 3D
   b. Alice objects –items or things you can actually see
   c. 3D models-objects having width, height and depth so objects give a sense of being real
   d. Three dimensions and six directions-object having width, height, and dept as well as up, down, left, right, forward and backward.
   e. Center of an object-in Alice, the feature of each object that is set by a graphic artist when the 3D model is first created. Center point is not calculated.
   f. Distance-space of one object to another measured from the object’s center
   g. Position-Location of an object in the Alice world according to its center point
   h. Animation-illusion of motion given to objects, text, etc.

Submit this completed handout to receive the 15 points. Keep the returned handout to review these notes as often as needed.
Key: Quia Multimedia Screen Captures

Students should paste into a word processing document and then put name, date and period including the title of the quiz to identify the one completed.

<table>
<thead>
<tr>
<th>Name</th>
<th>Date</th>
<th>Period</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alice Multimedia Terminology</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Name</th>
<th>Date</th>
<th>Period</th>
</tr>
</thead>
<tbody>
<tr>
<td>Multimedia Terminology Hangman</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Name</th>
<th>Date</th>
<th>Period</th>
</tr>
</thead>
<tbody>
<tr>
<td>Multimedia Terminology-RR</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Key: Quia Multimedia Screen Captures (continued)
KEY Exercises 1-5

1. Island

2. Winter

3. Snow people Pile (snowman roll right $\frac{1}{4}$ revolution then stack. Move in quad view)

4. Tea Party

5. Soldiers on Deck (Challenging)
Sources

Websites

Quia http://www.quia.com
Alice