

Early Childhood Workshop - March 19 and 20, 2001

UOP Title: Teaching with the Instructional Tools of the Digital Age

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Time Frame (# of days; min./day): 3 hours

Subject:

<input checked="" type="checkbox"/> Any Subjects	<input checked="" type="checkbox"/> English/Language Arts	<input type="checkbox"/> Special Education
<input type="checkbox"/> Literature	<input type="checkbox"/> Philosophy/Psychology	<input type="checkbox"/> Gifted
<input type="checkbox"/> Languages	<input type="checkbox"/> Art/Music	<input type="checkbox"/> BLE/ESL
<input checked="" type="checkbox"/> Math	<input type="checkbox"/> Career/Vocational	
<input checked="" type="checkbox"/> Science	<input type="checkbox"/> Sports/Games/PE	
<input checked="" type="checkbox"/> Social Studies	<input checked="" type="checkbox"/> Technology	

Level:

<input checked="" type="checkbox"/> Preschool	<input checked="" type="checkbox"/> Primary	<input type="checkbox"/> Intermediate	<input type="checkbox"/> Middle School
<input type="checkbox"/> High School	<input type="checkbox"/> College	<input type="checkbox"/> Adult	<input type="checkbox"/> Professional Dev.

Adaptation: BLE/ESL Gifted Special Education

Abstract/Snapshot/Summary:

This unit of practice is designed as a professional development tool. The content of the workshop is on the variety of ways technology can be used in the early childhood classroom setting. A variety of instructional strategies are experienced by the learner followed by time to reflect on the possible uses for the technique in their own classroom. The unit can be used with university faculty and pre-service teachers. The design of the workshop is meant to model a Unit of Practice, but does not explicitly teach the "Unit of Practice" framework.

Standards

National Educational Technology Standards for Teachers (NETS-T)

Listed below are the standards addressed in multiple tasks within this unit. If a standard is addressed only once or twice, it is listed under the task(s).

II. PLANNING AND DESIGNING LEARNING ENVIRONMENTS AND EXPERIENCES

Teachers plan and design effective learning environments and experiences supported by technology. Teachers:

- A. design developmentally appropriate learning opportunities that apply technology-enhanced instructional strategies to support the diverse needs of learners.
- B. apply current research on teaching and learning with technology when planning learning environments and experiences.
- D. plan for the management of technology resources within the context of learning activities.
- E. plan strategies to manage student learning in a technology-enhanced environment.

III. TEACHING, LEARNING, AND THE CURRICULUM

Teachers implement curriculum plans that include methods and strategies for applying technology to maximize student learning. Teachers:

- A. facilitate technology-enhanced experiences that address content standards and student technology standards.
- B. use technology to support learner-centered strategies that address the diverse needs of students.
- D. manage student learning activities in a technology-enhanced environment.

IV. ASSESSMENT AND EVALUATION

Teachers apply technology to facilitate a variety of effective assessment and evaluation strategies. Teachers:

- A. apply technology in assessing student learning of subject matter using a variety of assessment techniques.
- C. apply multiple methods of evaluation to determine students' appropriate use of technology resources for learning, communication, and productivity.

Arizona Content Standards

Task 1 and 2 - Creating Graphs

2M-R2 Collect, organize and describe simple data

2M-R3 Construct concrete displays of data, read and interpret elementary tables, graphs and charts

Task 3 & 4 - Sequencing

R-R1. Identify characters in a story and retell stories in sequence after listening to a selection:

R-F4. Identify facts and the main idea, sequence events, define and differentiate characters, and determine an author's purpose in a range of traditional and contemporary literature

Task 5 - Large Group Instructional Strategies

NETS Only

Task 6 - Initial Consonant -- Reading

R-R4. Use phonetic skills to decode simple words

R-F1. Use phonetic skills to decode words

Task 7 - Initial Consonants - Writing

W-R2. Spell simple words

PO 1. Apply letter/sound relationships as emergent writers

Task 8 - Patterns and Technology

Math

3M-F1 Create, describe, and extend a variety of patterns using shapes, events, designs and numbers.

Science

3SC-F4. Identify and describe how technology contributes to solving problems

PO 1. Identify various technologies (e.g., zipper, paper clips, computers)

PO 2. Describe how various technologies contribute to solving problems

Task 9 - Selecting Software

NETS

II. PLANNING AND DESIGNING LEARNING ENVIRONMENTS AND EXPERIENCES.

Teachers plan and design effective learning environments and experiences supported by technology. Teachers:

C. identify and locate technology resources and evaluate them for accuracy and suitability.

VI. SOCIAL, ETHICAL, LEGAL, AND HUMAN ISSUES.

Teachers understand the social, ethical, legal, and human issues surrounding the use of technology in PK-12 schools and apply those principles in practice. Teachers:

C. identify and use technology resources that affirm diversity

Invitation/Essential Question:

For students now in preschool through the third grade what we consider technology, computers, digital cameras, the Internet, has always existed. The generation to which they belong is a digital one. As educators we must provide a safe learning environment that embraces the tools that are available. As educators we must ask ourselves "What does instruction look like in the Digital Age? How can I employ the tools of the Digital Age to provide my students with the most effective learning opportunities and environment?"

Situations/Learning Environments:

The unit will be conducted in a computer lab on the campus of ASU-West. The workshop participants are familiar with this lab. It is a three-hour workshop divided into six mini lessons that vary from 15 minutes to 30 minutes in length.

Interactions:

Participants will be engaged in whole class instruction, interaction, and discussion, small group lessons, collaborative work groups, and independent tasks.

Tasks/Procedures/Activities:

1) Whole Class Graphing--Participate in the creation of a real graph and a picture graph in a large group setting. **Record your ideas and comments on the Software/Instruction Matrix.**

2) Small Group Graphing - In a small group create two graphs based on the class picture graph. Write three number sentences about the graph. Share these number sentences with the class. **Record your ideas and comments on the Software/Instruction Matrix.**

3) Whole Class Nursery Rhyme Sequencing --Interact with a SmartBoard in the reading and retelling of nursery rhymes. Place the nursery rhyme in the correct sequence. **Record your ideas and comments on the Software/Instruction Matrix.**

4) Independent Sequencing of a Nursery Rhyme -- Create a book by placing a set of nursery rhyme cards in the correct sequence. **Record your ideas and comments on the Software/Instruction Matrix.**

5) Brainstorming Whole Group Instructional Strategies--Participate in the brainstorming of techniques for using digital content in whole group instructional activities. **Record your ideas and reactions on the Software/Instruction Matrix.**

6) Small Group Skill Lesson -After viewing the "t" page on *Dr. Seuss' ABCs*, the teacher will record all words the group can remember that begin with the letter "t". Share with the group other words that begin with "t". Locate at least two words in your book that begin with the letter "t". **Record your ideas and reactions on the Software/Instruction Matrix.**

7) Independent Skill Practice --Listen to the story *Chicka Chicka Boom Boom* on the CD. Listen to the letter "t" rhyme in the rhyming section on the CD. Write your own "t" rhyme that includes at least three words that begin with "t". Be prepared to recite or read your rhyme to your small group. **Record your ideas and reactions on the Software/Instruction Matrix.**

8) Independent Center Work --Complete the three center activities cards and hand in the record sheets.

9) Note Taking on Group Discussion Using a Graphic Organizer --As you participate in a discussion on selecting appropriate software, take notes using the graphic organizer provided to you. **Record your ideas and reactions on the Software/Instruction Matrix.**

Tools and Resources:

Task 1) Floor graph, *The Graph Club*, a variety of fruit (1 piece per student), teacher computer, projection device, printer

Task 2) Individual Computers, *The Graph Club*, printer, paper and pencil

Task 3) SmartBoard, *HyperStudio*

Task 4) Handouts of Nursery Rhyme Sequence Activity blank books and envelopes containing nursery rhyme cards

Task 5) *Inspiration*

Task 6) *Dr. Seuss' ABCs*, chart paper, markers, small books with at least 3 "T" words

Task 7) *Chicka Chicka Boom Boom* CD, paper, and pencil

Task 8) Center Activity Cards for *Millie's Math House*, *My First Amazing Science Explorer*, and *Reader Rabbit Reading Development Library - Level 2*, record sheet for each center.

Task 9) Copies of graphic organizer for selecting and evaluating appropriate software, pencils, and *Inspiration*

Assessment:

Task 1 - Whole Class Graphing

The teacher will record the participation level in the class activity and discussion.

Task 2 - Small Group Graphing

The class will provide feedback on the accuracy of sentences describing the graph. Graphs created in the small groups will be reviewed by the teacher to determine their accuracy. Written feedback will be provided to each group member.

Task 3 - Whole Class Nursery Rhyme Sequencing

The teacher will record the participation level in the whole class effort to place the nursery rhyme in the correct sequence.

Task 4 - Independent Sequencing of a Nursery Rhyme

The teacher will meet with each student. They will read his or her nursery rhyme book together and decide if the story is in the right order. If the nursery rhyme is not in the correct sequence, the student will have an opportunity to place a new set of the nursery rhyme cards in the correct order.

Task 5 - Brainstorming Whole Group Instructional Strategies

The teacher will note the level of participation in the group discussion.

Task 6 - Small Group Skill Lesson

The teacher will note how many words with an initial "t" each student was able to recall. Each student will be asked to share with the class two words that begin with the letter "t". If a student has difficulty, support will be provided until each student has been successful.

Task 7 -Independent Skill Practice

The teacher will make note of the number of words beginning with the letter "t" each student included in their rhyme.

Task 8 - Independent Center Work

The teacher will provide written feedback on the record sheet for each center activity.

Task 9 - Note Taking on Group Discussion Using a Graphic Organizer

No assessment