Multimedia Development

60 Inservice Points

Component No. 3 003 002

General Objective

Be introduced to multimedia and the use of equipment and software for multimedia production; author multimedia presentations incorporating computers, CD-ROM, and videodiscs using appropriate tools.

Specific Objectives

- Converse using common terminology related to multimedia. 1.
- 2. Identify current trends in multimedia.
- 3. Identify skills necessary to use a video still-image.
- 4. Identify parts of a laser disk player and software and its interface with a monitor.
- 5. Identify and explain the parts of a CD-ROM drive and software and its interface with a computer.
- Use a laser disc player, remote control, and bar code reader. 6.
- 7. Re-purpose a laser disc using the remote control.
- 8. Re-purpose a laser videodisc using bar codes.
- 9. Apply new knowledge from questions 7 and 8 to the classroom.
- 10. Develop Level III interactive videodisc programs.
- 11. Identify current audio technology and its application to multimedia.
- 12. Compare CD-ROM interactive technology and laser disc technology.
- 13. Develop presentations incorporating digitized images.
- 14. Identify current trends in digital video.

Activities

Be involved in multimedia related activities as follows:

Multimedia Productions

- Working in cooperative learning groups, participants will access the definition/meaning of assigned terms using a CD-ROM based enclyclopedia/dictionary.
- 2. Learning groups will transfer these definitions/explanations to a shared electronic file.
- 3. All members of the class will make a personal copy of this file for reference purposes.
- 4. Participants will review a journal article of their choice dealing with multimedia.
- Participants will provide a five (5) minute review of the article for the class. 5.

Digital Camera

- 1. Each participant will use a video camera.
- 2. Each participant will record on a common VHS tape a narrated segment of the component, identifying themselves via audio at the beginning of the segment.
- Each participant will use a still image digital camera. 3.
- 4. Each participant will display digital images on a monitor.
- 5. Each participant will record on a common disk, a still of their school and school sign using a digital camera.
- 6. Working as a unit the class will produce a diskette of school images.
- 7. Each participant will disassemble and reassemble the interface between a laser disc player and monitor.

Laser Disc Technology

- Working in cooperative learning groups, each participant will have a "hands-on" opportunity to 1. operate a laser disc player, using the remote control and bar code reader.
- 2. Each participant will post their reaction to this experience (#1) in a common computer database file.
- 3. Each participant will copy the file to their floppy disk.
- 4. Working in cooperative learning groups, participants will re-purpose a laser disc of their choosing using the remote control. The product must be suitable for classroom use.
- 5. Each participant will generate bar codes using a computer and printer.



- 6. Working in cooperative learning groups, participants will re-purpose a laser disc of their choosing using bar codes. The product must be suitable for classroom use.
- 7. Each participant will develop a lesson for use in their classroom incorporating a re-purposed laser video-disc.
- 8. Each participant will teach the lesson.
- 9. Each participant will record a lesson on VHS tape.

Multimedia Presentations

- 1. Participants will participate in multimedia presentations using both videodisc and CD-ROM.
- 2. Participants will rate several Level I programs using class generated criteria.
- 3. Participants will describe advantages and disadvantages of each system.
- 4. Participants will "troubleshoot" problem hardware configurations.
- 5. Participants will become familiar with authoring systems such as HyperCard (Mac), HyperStudio(Mac), Linkway(MS-DOS), PLUS (Mac & MS-DOS Windows), ToolBook (Ms-DOS/Winows) and TutorTech(Apple IIe).
- 6. Participants will develop a Level III interactive videodisc program.
- 7. Participants will incorporate audio into Level III interactive laser videodisc presentations.
- 8. Participants will recognize proper hardware configuration.
- 9. Participants will develop an interactive program using CD-ROM.
- 10. Participants will incorporate digitized images into a multimedia presentation.

Evaluation

Participants will

- 1. Note in an on-line checklist the date and provide documenting eveidence upon completion of Objectives 1-7 of the component.
- 2. Submit a copy of the lesson plan and any other supporting evidence (e.g. bar codes) wherein the repurposed laser videodisc was used.
- 3. Submit a videotape of the lesson utilizing the re-purposed laser videodisc.
- 4. Develop multimedia presentations using videodiscs, CD-ROM, digital audio, digitized images and digital video.

Manatee County, July 1996

