

STAFF DEVELOPMENT INSERVICE COMPONENT INFORMATION

COMPONENT TITLE: 21st Century Classroom – Digital Still Imaging

IDENTIFIER NUMBER: 3003029

MAXIMUM POINTS: 35

GENERAL OBJECTIVE:

This program of instruction will aid teachers in the usage of digital cameras, document cameras (a.k.a. digital visualizers), digital scanners and digital image editing, publishing and sharing software as part of the classroom curriculum.

Note: Images must not show student names, likeness or work unless you have on-file the appropriate school district forms, signed by the students' parents or legal guardians, permitting the use of the student's name, likeness or work in such a use.

SPECIFIC OBJECTIVES:

Within the duration of the component, participants will:

Digital Cameras

1. Demonstrate basic functions of the digital camera such as turning on and off; changing the recording media; changing and/or recharging the batteries; adjusting the focal length; using the digital stabilizer; mounting to a tripod; switching between camera mode and playback mode; turning the camera's flash on and off; opening the shutter to take a picture; and deleting pictures taken by using the camera's delete function. **(8 points)**
2. Download the pictures to the computer using either the computer's OS or the camera manufacturer's software or other third party software. **(2 points)**

Document Cameras (a.k.a. Digital Visualizers)

1. Demonstrate basic functions of the document camera such as turning on and off; focusing; adjusting white balance and brightness; adjusting focal length; and switching back and forth between PC mode and direct mode. **(2 points)**
2. Explain the functional difference, as it applies to instruction, of using the camera by having the image go through the computer and then to the projector (PC mode), and using the camera by having the image go directly from the camera to the projector thus by-passing the computer (direct mode). State advantages and disadvantages of both. **(3 points)**
3. Demonstrate basic functions of the document camera software such as opening and closing the program, capturing an image to the PC, and annotating the image. **(2 points)**
4. Demonstrate the use of the document camera and the document camera software in conjunction with a digital ink device. **(3 points)**

Digital Scanners

1. Demonstrate basic functions of the digital scanner and its native software such as turning the scanner on and off; opening and closing the software; adjusting the image quality (dpi); adjusting the image mode (color, black/white, grayscale, etc); defining a specific area, that is less than the entire text or image, to be scanned; and scanning an image of a photograph, graphic or text. **(3 points)**
2. Demonstrate the use of Optical Character Recognition (OCR) software or the computer's Operating System software to convert a text image into editable text. **(2 points)**

Digital Image Editing, Publishing and Sharing

(These objectives apply to using computer software to manipulate, present, share the images captured using a digital camera, document camera, or digital scanner.)

1. Open the saved image or import the saved image into a photo editing software. **(1 point)**
2. Modify and correct the captured image by cropping, resizing, adjusting color, brightness, saturation, etc.; and removing red-eye. **(3 points)**
3. Modify and enhance the captured image by adding visual effects or captions. **(2 points)**
4. Publish images in a commonly used digital format such as .jpg, .gif, .bmp, .tiff, .png, etc. **(1 point)**
5. Import the final image into instructional software such as word processing; desktop publishing; a graphic organizer; a curriculum organizer; a slideshow; presentation programs; or digital ink programs. **(3 points)**

DELIVERY PROCEDURES:

Participants will complete the following:

1. Online training
2. Workshops
3. Academies
4. Vendor training
5. Manufacturer's manual
6. Hands-on experience

EVALUATION OF PARTICIPANTS: (MIN 80%)

1. The participants will be expected to take a post-test to measure the skills and knowledge acquired in the learning activities of the program.
2. Participants will need to demonstrate 80% competence in order to be eligible for successful completion of the inservice training component.
3. Participants will be evaluated based on the evidence provided as follow up for each objective.

FOLLOW-UP ACTIVITIES:

Participants will demonstrate implementation of the technology skills as evidenced through the successful creation, publishing and sharing of digital still images.

1. Publish images in print; or on a school or class website, while adhering to all copyright, trademark and applicable laws and school district policies (images must not show student names, likeness or work unless you have on file the appropriate completed school district forms).
2. Share images via e-mail, USB/Firewire drives, CDs, DVDs, other portable storage devices, or the school's computer network with students and other teachers for use in their projects, while adhering to all copyright, trademark and applicable laws and school district policies (images must not show student names, likeness or work unless you have on file the appropriate completed school district forms).

COMPONENT EVALUATION:

Periodically, participants and instructors will assess the degree to which the professional development procedures addressed the specific objectives of the component, and will make recommendations for revisions on the submitted Component Evaluation.