

## **Document Camera Use in the Classroom**

### ***What is a document camera and why use one in your classroom?***

A document camera is a camera that is primarily for projecting documents or objects from the computer onto a Projector Screen or Interactive Display Panel. All of the document cameras except one that the PreK Program has in Inventory for use are dual function document cameras. That means that the camera can be used as a document camera and as a WEBCam. A WEBCam is simply a camera that allows the computer to display content from the Internet onto a Projector Screen or Interactive Display Panel, or display live content from the classroom during a collaborative WEBinar.

As a document camera the camera is positioned over the document or page in a book, magazine, or other print media so that the content can be displayed to the whole group of students. If projected on to a projection screen the document is not interactive for the students. If it is projected onto an Interactive Display Panel the students can interact with the document and make notations or add content via the Display Panel. This is also true of the document is displayed on one of the Whiteboards in the classroom. Students can write on the document being displayed on the Whiteboard, and the teachers can annotate as well.

The document camera can also be used to display objects since all document cameras have a magnification feature that allows the image of the object to be enhanced for greater detail to be seen. Objects should not be larger than an 8.5 inch by 11 inch page since this is the standard size of the display for all document cameras.

As a WEBCam the document camera lens is turned toward the students in the classroom and the teacher so that the instructor who is presenting the content can be seen by the whole class. This is used only when there is an interactive collaborative WEBinar session being presented, since the instructor is on the Internet and would not be able to see the classroom participants without the aid of a WEBCam.

All document cameras come with controlling software. Some of our Interactive Display panels have generic software that can detect the document camera automatically and display the image from the document camera. Some of the boards may not have this functionality and then the document camera must be attached to a laptop computer that is attached to the Interactive Display Panel.

***Below I will list the type of document cameras we have available for classroom use.***

## **Document Cameras Available for use in the PreK program.**

We have three IPEVO document/webcam units. These work well with a laptop on which the IPEVO software can be installed. Since IPEVO is not a common document camera I am not certain these will work with the Interactive Display Panel.

We have two Hovercam document/webcam units. One is the Hovercam One and the other is the Hovercam Pro. While Hovercam software is available for these units, because Hovercam is a popular document camera maker, these camera should connect to an Interactive Display Panel without needing additional software. In some cases they may connect to a laptop without needing additional software as well.

We have an Epson Document/WEBcam which is the oldest of our document camera devices. It is primarily for use with a laptop or desktop computer. I have not tested it directly with our Interactive Display Panels but will do so prior to the start of the 2023-2024 school year. To use the camera as a document camera simply point the camera to a document or object you want to display. For the WEBcam function simply tilt the camera up and point it toward the students in the classroom.

We have a Qomo Document Camera that is not a WEBcam. The camera is designed just for use as a document camera and is what we call a flatbed document camera display. It can display objects larger than 8.5 x 11 inches because of the larger flat bed for the display. It can be controlled remotely and can be connected to a laptop. This camera is usually located in the PreK 4A classroom.

We also have at least one WEBcam the Logitech 9000 WEBcam that can be used as both a document and WEBcam since there is a special stand for this WEBcam that allows it to be used as both. Since it is a WEBcam it can connect directly to a laptop or to the Interactive Display Panel.

The best way to use a document camera in the classroom is to display a workbook page or worksheet you want the students to work on, so the whole class can see how you want them to complete the workbook page or worksheet. While you demonstrate this, you can also have the students come up to the Interactive display or whiteboard and demonstrate their understanding of your instruction. Another use is to display the pages of a Read Aloud book so that all the students can see the content of the pages easily. Lastly if you are doing some type of science or show and tell activity where someone has very small objects, you can use the camera's magnification features to enhance the object so all the children in the classroom can see the object clearly.

For WEBinars do the following: NOTE: While we have not done many WEBinars since reopening the PreK program following COVID, we have done many of these previously and they can greatly enhance and add to the Instructional experience for the children. While many of these WEBinars are sometimes scheduled at times that may not always fit the daily schedule, I am hoping to encourage some flexibility in that schedule for the next school year that allows for more opportunities for WEBinars to be held. While many WEBinars are free, some do have fees so we will need to see what we can do to either raise money for these or build some into our school year budget.

For the WEBinar, we connect the laptop to the Interactive Display Panel, and then connect the WEBcam or Document Camera directly to the laptop or display panel via a USB port. With the cameras connected we will log into the WEBSITE for the WEBinar and wait for the host (the online instructor) to start the WEBinar. When the WEBinar is started the host will be able to see the class participants through the WEBcam. Some WEBinars enable classes to see each other and work on projects together. I am hoping to do at least one of these next year. I will demonstrate the procedures for connecting a laptop to the Interactive Display Panels and How to connect the document camera/WEBcam to the Display Panel or laptop as well during the training at the start of the 2023-2024 school year.