How can a Document Camera Help in my Classroom?

In the simplest terms, a document camera or visual presenter is the next-generation, digital replacement of an overhead projector. However, a document camera goes far beyond the simple functions of an overhead by allowing users to display not only transparencies, but documents, 3-D objects, microscopic images, moving objects, x-rays, slides, and more. With the ability to connect to a multimedia projector, monitor or TV, a document camera is able to display the presenter's thoughts, ideas, lessons and examples on a large screen format, live in vivid color and detail.

Especially beneficial for teachers and administrators, a document camera provides a large visual element to lessons and demonstrations. Showing documents and objects on a large screen format also reduces or even eliminates the need for multiple copies, illustrations or even textbooks. Some examples of document camera classroom lessons are:

- Demonstrating actual pen strokes of a writing lesson
- Solving a mathematical equation
- Showing how to sculpt clay
- Demonstrating a live dissection
- Displaying important book or textbook passages
- Displaying microscopic images
- Showcasing historical artifacts
- Much more!

By displaying these demonstrations on a large screen in one central classroom locations, students are better able to not only understand and visualize the content, but it also inspires interactivity and even helps students improve their own presentation skills.

Sustainable Technology

Implementing document cameras and other classroom technologies are an investment in not only progressive teaching standards, but they must represent longevity and sustainability to avoid continuous replacement and cost. Educational Service District 112 in Vancouver, Washington has realized this, and in turn created a cutting-edge standard for sustainable classroom technologies. Within the Sustainable Classroom Model, document cameras play an intricate role in the proven effectiveness of increased classroom technology.

A comprehensive White Paper developed entirely by ESD 112 (Tschirgi, Debbie 2006) describes not only the benefits of document cameras in the classroom, but specifically describes the successful integration of the AVerMedia AVerVision300p Portable Document Camera in the Sustainable Classroom Model.

Definition of Sustainable Technology:

"Sustainable solutions will stand the test of time. In five to seven years (or more), they will still be doing what they were meant to do at the time of their original implementation. This applies to both instructional practices and technological solutions.

Sustainable Instruction

Instructionally, there are some sound, practical teaching strategies that are research-based and proven to increase student achievement. Nine of them are identified in the book Classroom Instruction That Works (Marzano, Pickering, and Pollock, 2001):

- Identifying similarities and differences
- Summarizing and note taking
- Reinforcing effort and providing recognition
- Incorporating homework and practice
- Using nonlinguistic representations
- Involving students in cooperative learning
- Setting objectives and providing feedback
- Generating and testing hypotheses
- Using questions, cues, and advance organizers

Teachers are already using several of the strategies above to some degree in their classrooms, and are likely to continue because they are familiar and because of the results they get with their use.

Sustainable Technology

Schools that invest in sustainable technology solutions maximize their technology budgets and reduce their budgets for replacement cycles. In talking to several district technology directors in the state of Washington, it was learned that collectively, they define "sustainability" by using the following criteria:

Broad in scope:

This is technology that can be used in a wide range of settings: general classrooms, professional development, board presentations, and general meetings, such as PTA, community and staff meetings.

Applicable to most classrooms:

Sustainable hardware can be used in most, if not all, content and subject areas: math & science, language arts, social studies, health, technology, etc.

Easy to use:

The ease with which a piece of technology can be connected to something else and set up is a major indicator of sustainability in a classroom. For instance, document cameras are easy to connect to a projector and computer, easy to switch between itself and the computer, easy to zoom focus and reposition, and easily achieve high end results!

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Easy to integrate:

A technology solution that is easy to integrate into lessons and activities is very sustainable, as it is likely to be used more than a piece of equipment that takes preparation. Technologies that allow students and teachers to use actual documents and 3-D items and engage in real time learning are solutions that teachers will naturally embrace and use.

Minimal training and support:

Setup of a sustainable solution is less than an hour; training takes less than four hours; annual support takes less than an hour; and teachers can trouble-shoot easily.

Stands the test of time:

Five or more years from now, a sustainable solution will still be used to meet its original purpose, because it is intended to help achieve higher educational goals. Software upgrades can be downloaded off the Internet with ease.

Document cameras are sustainable solutions. They support research-based instructional strategies that teachers are

AVerVision Document Cameras are not only versatile and functional, but are easy to use for both teacher and student.

already using in their classrooms. In addition, their versatility and ease of use make them sure winners. Key decision-makers for educational organizations and institutions should consider the document camera as a standard technology solution that will provide visually-rich learning experiences for their students.

When compared against its competitors, the AVerMedia AVerVision300p digital document camera is superior in performance, durability, features and warranty. Its high-resolution lens, as well as its ability to capture, store and play back images, make it a useful multimedia tool for any classroom. Teachers will become comfortable using it in a very short period of time, and it will become the piece of equipment in their classroom that they simply can not live without. 🅱🅿

Tschirgi, Debbie (2006). White Paper, Sustainable Classroom Technology; Increasing Student Achievement with the AVerMedia AVerVision300p Document Camera. Retrieved October 23, 2006, from ESD 112: Educational Technology Support Center (ETSC) White Paper Archives Web site: http://www.esd112.org/ edtech/whitepapers/AVerMedia300p_whitepaper.pdf

Marzano, R.J., Pickering, D.J., & Pollock, J.E. (2001). Classroom instruction that works: Research-based strategies for increasing student achievement. Alexandria, VA: Association for Supervision and Curriculum Development.