

# Why Classroom Amplification Systems Are "Invisible Heroes" In Our Schools

By Edward S. Lee

It is now commonplace for schools to develop and employ a technology program linked to goals such as improved test scores, increased attentiveness and improved retention of information that is taught in their classrooms.

Technology Directors and other school administration staff members face difficult decisions on what technologies to consider and deploy into their learning environments.

These decisions can be even more difficult based on declining budgets combined with external pressures and influences from the greater educational community. One thing is clear, these individuals or committees need to make the right decision for their schools. These are usually long term decisions that can sometimes be perceived as make or break decisions on many levels.

Tech directors may feel the need to make the "safe choice" and go along with the popular trend; casting aside hard data obtained from reputable studies in real world classrooms. While this topic is not often talked about openly, it is closer to the truth in more cases than you might think.

There are several trends that have developed in the recent past with the focus on hardware such as Interactive Whiteboards (IWB), Projection Systems and Interactive Response Systems. While all of these tools have their benefits, there is one that has not only developed into an "Invisible Hero", but also a forgotten one, which seems to defy logic.

Perhaps classroom amplification systems are too simple, too obvious and lacking the necessary hype and flair to gain any notice on our collective radar, but we're starting to see more decision makers take a step back, look at the facts and to re-embrace the obvious.

By far, the installation of interactive whiteboard systems has been the most popular choice over the last few years. While these systems are effective in many ways, the numbers don't necessarily support the wholesale acceptance of this technology as the logical first choice when prioritizing the deployment of technology to our classrooms.

If we look at six key factors in comparing three popular technologies side-by-side (1)Computers, (2)Interactive Whiteboards and Projectors and (3)Classroom Amplification Systems, it becomes clear that classroom amplification systems should be considered as important if not a more important priority over any other classroom technology.

## **Affordability**

- **Computers** have become fairly affordable, but computer costs rise rapidly as schools develop 1:1 laptop programs or outfit new computer labs with a large number of computers.
- **IWB's and Projectors** are also in better reach of school budgets, but a typical classroom installation can start at a conservative cost estimate of \$2500-\$3500 per classroom. Multiply this

by your total number of classrooms and your tech budget will seem a lot smaller than you thought.

- **Classroom Amplification Systems** are by far the most affordable of the "big three" classroom technology tools. Systems offered by the highest quality manufacturers can start as low as \$900 per classroom.

### Training burden

- **Computers** are now part of our everyday lives and are therefore less of an overall training concern, however there is still a learning curve associated with computers which will increase as you add additional software based tools to your curriculum.
- **IWB's and Projectors** can have steep learning curves associated with them and it is common for school districts to identify and train school or district experts via focused product (software) training classes. The districts can then utilize these internal resources to train all of the necessary staff members within the district. This is an effective strategy for districts that can afford this time and expense. Without this type of disciplined approach, many schools find their boards collecting dust instead of being used, resulting from the lack of a training plan. It should be noted that "self-training" of staff can also be successful, but this will require a high level of focus, organization and self-motivation from each individual user.
- **Classroom Amplification Systems** are inherently simple and require virtually no training; especially if they are well designed. A high quality, well designed system should only require 10-15 minutes of training time.

### Support needs

- **Computers** as we all know, require ongoing support. Those who are more computer savvy can support themselves, but depending on your staff's level of expertise, your support burden could be significant with computers.
- **IWB's and Projectors** are relatively stable once they are installed and tested, but problems do arise occasionally. Even if there are no technical problems over time, you will need to plan for regular maintenance costs associated with replacement projector lamps, spare pens, etc.
- **Classroom Amplification Systems** require almost no support once they are installed. The only real concern is selecting the proper system from a manufacturer that will stand behind their products if problems ever arise.

### Daily active use

- **Computers**, depending on your curriculum will be utilized to varying degrees. In most cases, we see shared "lab" use of computers which tends to be sporadic. If you have a 1:1 program in place, this utilization number will be higher.

- **IWB's and Projectors**, similar to computers are intermixed with other tools, both traditional and technology based. There may be entire classes or even days when the boards are not put into direct use.
- **Classroom Amplification Systems** will be used all day, every day. The more students hear, the more they will learn.

### Academic impact

- **Computers** are here to stay for good reason and have been shown to have positive academic impacts in our classrooms.
- **IWB's and Projectors** have also been shown to be effective technologies and have enhanced the learning environments in thousands of classrooms worldwide.
- **Classroom Amplification Systems** have outperformed both computers and IWB's in several important categories including increasing test scores, classroom attentiveness and overall student achievement.

### Accessible to all students

- **Computers** are generally equally available to students within schools that have integrated computers into their teaching.
- **IWB's and Projectors** are accessible to all students in those classrooms that have a system installed.
- **Classroom Amplification Systems** not only include all students within a classroom, they also provide additional benefits to teachers by reducing voice strain and fatigue from raising their voices frequently over the course of a day. Studies have actually shown reduced teacher absences due to laryngitis when using a classroom amplification system.

With this all taken into account, the success of your classroom amplification installation will depend heavily on the selection of high quality systems from a reputable manufacturer. Do your homework and find a manufacturer who specializes in sound for classrooms.