

INFOCOMM PREVIEW

Beyond Education...



by Alan C. Brawn, CTIS
Most of you are aware that the good folks at InfoComm offer much more than the annual tradeshow that we attend each year punctuated along the way with a few regional events for professional development. In fact they offer numerous tangible services to the industry that can have a positive and profitable effect on our everyday lives. Nowhere is this more evident than in the areas of market research and educational development. For those of you who have not seen the newest InfoComm Market Forecast for 2006, I strongly urge you to do so. For those who do not take this advice and get the "full Monty" version please permit me to give you the bottom line of this excellent report.

The vast majority of respondents to the InfoComm survey reported that the next three years in the industry will be periods of growth and opportunity. In fact 65 percent of the

respondents reported that the number of full time employees for manufacturers and dealer/integrators will expand beyond 2005 levels for small, medium, and large companies in order to meet the expected increase in market demand. It will come as no surprise that they forecast the areas of collaboration and conferencing along with digital signage as two of the most significant growth areas.

On the "negative" side of the equation the report uncovered concerns for stagnant profit margins, too much parity in the industry, and concerns about the availability of qualified employees to meet the expanded market demands. I for one hope to enjoy the growth but realize this cannot be done by ignoring the concerns that might impede our prosperity.

If the ultimate concern is the possibility of stagnant profit margins, we can see that parity at all levels in the business is the culprit and tends to reduce the client's decision to one of price. In short, if all

Brawn Classes To Catch At InfoComm

S13 - Advanced Display Technologies

2-hour seminar, Wednesday, June 7, 10:30 a.m. - 12:30 p.m.

S68 - Display Technology Fundamentals

2-hour seminar, Thursday, June 8, 1:30 p.m. - 3:30 p.m.

S76 - Selling Design Build

2-hour seminar, Friday, June 9, 2006 8:00 a.m. - 10:00 a.m.

else is equal, the price becomes the differentiator. One real world solution to this dilemma is to create differentiation more profound than a "simple" lower price. One way to separate yourselves from the proverbial heard is to employ a step by step educational development plan which adheres to industry standards, and in the process become certified as an industry provider similar to the AIA in the architectural community and PMI for project management. The critical issue is the need for widespread recognition of the certification and the educational development process. This is one of many areas where InfoComm can make a differ-

ence if you avail yourselves of what is at your fingertips.

As an educator I may be just a little bit prejudiced but I think the training and education process for a company can be invaluable from several perspectives if we look outside of our personal paradigms.

1. First of all, the process of creating an internal and external educational development program "forces" a company to think out each detail of their policies and procedures, as well as their products/services and how they are handled inside and outside the company. People speak of reviews like this but they seldom take place un-

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Can You Hear Me Now?

Acoustics In Architecture



by Steve Thorburn
It seems as if every video teleconference always starts out with five famous words: "Can you hear me now?" However, technology is not always the culprit—the acoustics within the facility can often be just as guilty.

Acoustics is a science, not magic—it is the science of sound including its production, transmission, and effects. The term "sound" implies not only the phenomena in air responsible for the sensation of hearing, but also those disturbances with frequencies too low or too high to be heard by a normal person's hearing; infrasound and ultrasound respectively. While the concept of acoustics originated with Pythagoras' study of music over 2,500 years ago, today's scientific application of architectural acoustics originated with Wallace Sabine, a physicist and teacher at

Harvard University. From 1895 to 1898 Sabine "dedicated himself to coaxing from science a logical 'quantifiable' answer to the age-old problem of why the acoustics of some rooms are good and in others mediocre, or really impossible as were speech intelligibility conditions at the Fogg Lecture Hall." From Sabine's work, specific methods and formulas were developed to determine, in advance, the success of the acoustical environment. Or, as is often the case, the best way to fix the acoustics after construction is completed.

Architectural acoustics addresses three main concepts:

Room Acoustics is the selection and location of room finishes (such as absorptive or reflective materials) to promote natural acoustics, enhance speech intelligibility, control excess reverberation, and reduce unwanted echoes. Adjustments to the room layout can also

Thorburn Classes To Catch At InfoComm

W1 - Introduction to Acoustics

4-hour workshop, Wednesday, June 7, 8:00 a.m. - 12:00 p.m.

W5 - Advanced Acoustics

4-hour workshop, Thursday, June 8, 8:00 a.m. - 12:00 p.m.

LSIW - Loudspeaker and Speech Intelligibility Workshop

1-day session, Friday, June 9, 8:00 a.m. - 4:00 p.m.

be recommended to help improve the acoustical environment.

Sound Isolation involves recommendations for wall and ceiling systems between adjacent spaces to control the transfer of noise. This also helps provide the required level of acoustical privacy.

Mechanical System Noise and Vibration Control includes HVAC, plumbing, and other mechanical systems to minimize their noise impact.

Acoustics can have a significant impact on the success of a facility. This applies to more than just teleconferencing facilities—any presentation space from large conference rooms to lecture halls to churches can benefit from paying attention to the acoustical environment.

That may be why InfoComm 2006 includes two 4-hour sessions on acoustics. The first is "Acoustics in Architecture: Introduction to Acoustics" on June 7. The second session is "Acoustics in Architecture: Advanced Acoustics" on June 8.

The Introduction to Acoustics is a basic level session which will provide participants with a basic knowledge of essential acoustical concepts. We will begin with the basics and work up to some of the common issues a sales person or designer should be able to address in the rooms that they will be working in. This includes:

- Definitions for common acoustical terms such as Sound Power Level, Frequency and Level,

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and Weighting Curves (A-weighting versus C-weighting)

- A chance to put this knowledge to use making basic measurements and calculations such as measuring background noise, calculating reverberation times, and determining the location of echoes/reflections

- Sound isolation methods to "keep noise out" of a room and ways manufacturers classify construction methods

- Components affecting room acoustics including absorption coefficients of various materials and mounting conditions, suggested reverberation times, and background noise criteria

Throughout the session, participants get hands-on practice with worksheets and checklists for future reference.

The Advanced Acoustics class builds on the knowledge learned in the Introduction class and provides a deeper understanding of acoustical design through the hands-on evaluation of a large boardroom and

a 300-seat auditorium/lecture room. The first class is not required, but a very good working knowledge of the basics of sound and acoustical measurements is recommended—there will be only a very brief review. Participants explore topics such as the even distribution of low frequency room modes, wall constructions to control noise, absorption, echo control, HVAC noise and vibration control, and why some room finish materials are more efficient at reverberation and echo control than others. Common problems associated with curved surfaces, sound shadows, or excessive background noise are explored. Worksheets and checklists are also included in this session.

Having been active in both NSCA and InfoComm for almost 20 years, it is really scary to see and hear what individuals in our industry believe is true and keep passing on to their clients and peers. One of my favorites is the recommendation to add batt insulation on top of acoustical tile. It helps improve one of the three topics outlined above but not the one most people use it for. Care to guess which one? Need

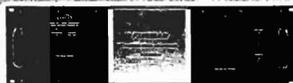
Power Play

MT32 - AC Power—The Foundation Of Every System
2-hour seminar, Wednesday,
June 7, 1:30 p.m. - 3:30 p.m.

Presented by Garth Powell, an engineer with Furman Sound for the past 10

years, this two-hour seminar provides an overview of AC power fundamentals and the technologies that can allow an installer to avoid pitfalls that compromise AV systems.

Powell will cover topics including AC power regulation and the various means to create it, offer an in-depth explanation about AC conditioning and symmetrical power, and review easy-to-understand dos



Furman's Balanced Power Conditioner IT-20 Series II

and don'ts of uninterruptible power supplies. He will also discuss various surge-suppression technologies and their importance, the demands of AC current, and the source of current compression and how it can be minimized. Powell has been responsible for the design of Furman's Reference and Elite Series of home theater AC power products.

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the answer? Find me at InfoComm!

So, in the spirit of the session and InfoComm, the first person attending InfoComm 2006 that emails the correct answer to the following question will be treated to a beverage of their choice. Send your email to GotNoise@TA-Inc.com. The question is: "If a tree falls in the woods

and there is nobody there to hear it does it make a noise?"

Steven J. Thorburn, PE, (SJT@TA-Inc.com) is co-founder of Thorburn Associates, Inc., an acoustic and audiovisual system design and engineering firm with offices in Northern and Southern California and North Carolina.

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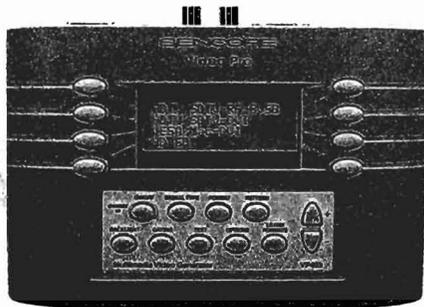
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