Shaking the Etch-a-Sketch:
Drawing a New Path to Efficiency Education for the Mass Market

Mark Jewell and Rachel Christenson, EEFG, Inc.

ABSTRACT

When properly designed and executed, education and training can turbocharge successful market transformation. This session will reveal lessons learned from teaching thousands of energy industry professionals and influencing the decision-making practices of more than three billion square feet of commercial buildings. Here are four of several questions that need be asked and answered correctly in order to get the best results:

1. **Which market actors matter the most?** The path to a more efficiently built environment requires many market actors to make the right decisions. Owners, tenants, architects, engineers, brokers, vendors, service providers, building operators, utility account reps, green job seekers, and others each need specific, relevant, and motivating messaging to change the way they think and work.
2. **Who do you really need to reach?** All too often, those who could benefit the most from training don't take the time to attend. Education and training have to be conveniently and compellingly delivered to reach the critical mass of people necessary to accomplish a proverbial "tipping point" in the marketplace.
3. **What gets people fired up and ready to take action?** Leveraging various media and adult education best practices leads to better learning outcomes and viral growth.
4. **What needs to be done to turn concepts into practice?** Training is just recreation unless it changes how people think and act when they return to the workplace.

What Got Us Here Won't Get Us There

EEFG was founded in 1993 as Energy Efficiency Funding Group, Inc. with a business model of raising capital to offer to building owners who lacked the capital to pursue energy efficiency improvements. In its first seven years of operation, EEFG didn't dispense a single dollar of capital. Why? Upon closer inspection of market conditions, it became apparent that the reason that building owners were not pursuing energy efficiency was not because they lacked capital. The overwhelming majority of building owners were simply not convinced that investments in energy efficiency were the best use of their capital. In other words, they had plenty of money; energy efficiency was simply not a compelling value proposition.

Over the years, EEFG's business model morphed into pioneering and promoting new ways for framing energy efficiency as a path toward competitiveness, profitability, and value in the built environment. Early on, we helped the US EPA create and deploy the ENERGY STAR Buildings for Commercial Real Estate program, recruiting building owners and managers representing two billion square feet of commercial real estate. We then conducted about a thousand energy efficiency audits over the course of fifteen years, which offered great visibility into how energy efficiency decision-making really occurs and what techniques were most useful in convincing the decision-makers to allocate a precious sliver of their finite management bandwidth and capital to efficiency upgrades. After accumulating all of this knowledge and seeing a need in our industry to have all stakeholders informed on how decisions are made and how to effectively frame efficiency opportunities for key stakeholders, the business morphed once again into focusing primarily on education and training.

Last year we taught 5,000 people. Recently, we set an ambitious goal of teaching 50,000 people per year and creating a critical mass of inspired and fired-up people ready to take action. In the course of delivering and witnessing countless energy efficiency-related presentations, and based on feedback we have received from attendees along the way, we have come to the conclusion that we can't accomplish this while continuing to do "business as usual." So we set out on a journey to "shake the Etch A Sketch" and draw a new path to energy efficiency education for the mass market, maximizing its potential for being used as a tool to effectively transform the market and change the world. We began with self-reflection, asking a lot of questions, looking to other industries for successful approaches, having conversations with key stakeholders, and soliciting and listening to feedback from attendees. We certainly don't have all the answers, but we are moving forward with an open mind and a keen focus on the goals and we are remembering that "what got us here won't get us there."

We Must Reach a Critical Mass of the "Right" People

Which Market Actors Matter the Most?

Effectively transforming the market requires more than having the necessary topics taught in an effective way with the appropriate delivery mechanisms. The message needs to reach the right people, and enough of them to have a critical mass for change. While we don't know how many energy efficiency "ninjas" are needed to reach this proverbial "tipping point," we are certain that the path to a more efficient built environment requires many market actors to make the right decisions. Owners, tenants, architects, engineers, brokers, vendors, service providers, building operators, utility account reps, green job seekers, and others each need specific, relevant, and motivating messaging in order to change the way they think and work.

How Do We Reach a Critical Mass of Stakeholders?

All too often, those who could benefit the most from training (and those who could have the greatest influence over the market) can't or don't take the time to attend. The majority of course attendees are entry-level or are just getting into the field. In order to most effectively spread knowledge and have the broadest impact, we need to reach a critical mass of senior-level influencers. We have found that there are several reasons why the key influencers who we need to reach are not voluntarily attending energy efficiency trainings. In order to overcome these barriers, we need to tailor our marketing and delivery strategies to reach them, attract their interest, and capture their attention.

What is Missing from the Messaging?

Course advertisements are focused on *what* you will learn and not *why* it is important or valuable to the potential attendee or their organization. While conducting our market research, only a select few advertisements clearly identified the benefit of attending. The connection was left to the reader to make. In order to capture the attention of key stakeholders, we must clearly draw the connection between the topics covered and the benefits of attending. Advertisements should answer the prospect's ever-present question, "What about me, what do I get?"

How Should We Advertise the Courses?

It is uncommon for a speaker's agreement to include a budget for course promotion, and utility staff is often short-handed and have restrictions on their own budgets. As a result, the primary methods for outreach involve distributing information—the *what*—to past attendees, resulting in familiar faces, and posting information online, which draws those who are proactively interested in the topic. In order to broaden the scope of potential attendees reached, more effort needs to be placed on drawing new blood.

Draw on the instructor's "fan base" and reputation. Many courses are taught by instructors who are prominent experts in their field. They speak at national conferences and many have even written books. Leverage their fan base and reputation by highlighting them as the instructor. Most education and training catalogs found online focus on the topic and location rather than the speaker. Even the largest organizations don't have a mechanism for searching by instructor. If the instructor is prominent on Twitter or has a newsletter or blog, provide budget for the instructor to advertise there as well, or provide a bonus for recruiting "butts in seats".

Leverage existing networks. Start with professional organizations to which your target attendees belong. These organizations have email lists already assembled. After a relatively small number of strategically placed phone calls, you can quickly reach hundreds, if not thousands, of people who would be a good fit for your class. Taking the time to reach them by phone will allow you to fully express the relevance of your event to them and to their members.

Next, make it easy for them to deliver your message to their members by providing an article or summary about your learning event that can be distributed via email or a regularly scheduled newsletter. Officers of these local chapters are likely to be respected industry leaders, and an invitation directly from them gives your event extra credibility. Once an organization agrees to promote the class to its members, ask if they have recommendations of other organizations or individuals to contact—it's amazing how many leads can be uncovered this way. As EEFG was conducting outreach for a recent workshop series, some of our strongest leads were the result of asking who else should know about the series.

If you don't know which organizations to target, a little research on LinkedIn or Facebook for groups or individuals should do the trick. Before long, you'll have a long list of relationships with networks and groups that are likely candidates for your offering.

Target influencers. When it comes to reaching out to individuals, start with the influencers who can help you spread the word. Leverage social media sites such as Facebook, LinkedIn, and Twitter to determine which people in your target attendee base have the most connections and which are the most active posters of news to their peers. Individuals who are active social media users may help spread the word about the event by re-posting invitations on LinkedIn forums, Facebook, or Twitter. You can also use this information to determine the leaders or most outgoing people at the organizations you are trying to reach.

Mine data. The Internet provides a lot of free and readily available data. Conference attendee lists, employee profiles, and other information is easily obtainable. Other tools such as online sales generation websites (e.g., www.data.com, www.salesgenie.com, www.onesource.com) help you determine key companies and individuals to target.

Use incentives to lure in "new blood". Many licenses and accreditations require continuing education classes in order to maintain professional credentials. Offering continuing education units (CEUs) may be a powerful lure, especially when attracting individuals for whom energy efficiency is not top-of-mind but whose decisions affect the efficiency of buildings (e.g., "brown architects"). During a recent Learning to S.E.E. (Sell Efficiency Effectively)TM training, we offered American Institute of Architects (AIA) learning units to students who attended our course. One student, a principal of an architecture firm, initially admitted to attending only to receive the continuing education credit. By the end of the day, he commented that he would like to get his entire staff of 100 architects trained, as knowing how to get the owner to say "Yes!" to more efficient recommendations could not only make discussions with owners easier, it could also lead to potential revenue growth for his firm.

Enlist support from past attendees. No one is a better salesperson than a happy customer. Satisfied customers can be your strongest advocates and can spread the word through their professional networks like an unofficial street team. In order to leverage the power of peer-to-peer marketing, you need to build in ways for the message to spread. We have found that utilizing "forward to a friend" features, group discount codes, online forums for people to leave comments and feedback about your offerings, and even just asking people to spread the word can all boost enrollment. For a recent course, we had an extremely short lead time for recruitment. When we surveyed attendees about how they heard about the course, nearly half of the people selected an option indicating that they heard about it from someone other than us or our client.

Think outside the box. Think outside the box in terms of who your audience may be. For example, while the class being offered may most likely benefit individuals in the lighting industry, it may still be of benefit to an HVAC sales representative. Perhaps he wants to be able to better serve his customers, or possibly network with lighting professionals or contractors to build relationships that may lead to qualified leads in the future. Energy efficiency classes, when structured properly, may also attract individuals seeking networking possibilities. Marketing classes as such may draw a wider audience than just professionals with a specific need to hear about the energy efficiency topic at hand.

We Can't Educate with a Fire Hose

Most audiences come to a session interested in the topic and eager to learn, however before long they find themselves "drinking from a fire hose"—perhaps all fired up, but saturated with so much new information at such a fast pace that the likelihood of remembering and applying what they have learned is slim.

How Can We Get Away from One-Size-Fits-All Courses?

Courses are not always targeted and/or marketed towards attendees' skill levels, and most don't pre-screen attendees. The result is a major gap in skill level among students (i.e., experts are bored while novices are overwhelmed). We must clearly identify what skills and background are required before a course and provide pre-learning materials to narrow the gap in understanding the basics. In addition, we can create beginning, intermediate, and advanced courses to build on concepts, rather than compressing all of the potential information about a topic into one six-hour course.

How Can We Effectively Transfer Knowledge?

One of the keys to a successful training initiative is to ensure that attendees learn what they hear/read and retain what they learn. Many attendees are what we call "lazy learners"—they come expecting to have a transfer of knowledge without doing any work. Most multi-task, believing in the myth that they can successfully do two things at the same time, and some even come unprepared without even a pencil and paper. Through effectively conveying the value of the training to the attendee and creating presentations that are interactive and engaging, we hope to overcome the "lazy-learner syndrome". We are also starting to wrap the basics of adult learning into every presentation:

- Multi-tasking is a myth, so pay attention. If you need to step away from the class to take an urgent call, that is ok; otherwise, be fully present.
- You won't get the slides later, so pay attention. They were designed to support the class rather than provide a summary of everything I say. (When was the last time you went to the movies and then got a DVD in the mail so you could remember the plot line?)
- You need to take enough notes that you never have to refer to them, since taking notes helps you retain what you hear (and ensures that you don't space out).

In addition to overcoming "lazy-learner syndrome," as instructors, we need to up our game and become masters of our own craft. We should spend as much time improving our course materials, educational approach, slide quality, and presentation skills as we do thinking about the content we are teaching. Courses should be designed with the audience in mind, with PowerPoint presentations being used as a tool to support the content being delivered rather than a teleprompter. The course should allow for networking, class interaction, and exercises.

How Can We Teach for Different Types of Learners?

The adage "everything I need to know I learned in kindergarten" might be a little simplistic, but adult education can certainly take a cue from the strategies used by elementary and high school teachers. Teachers responsible for engaging children from ages four to eighteen know that they can't stand at the front of the classroom lecturing for six hours a day—their students would at best stop paying attention, and at worst fail to learn at all. The theory of Multiple Intelligences (the idea that different students learn through different modalities, such as auditory, visual, and kinesthetic) is a staple of most current curriculum design. One principle of adult educational best practices is to incorporate as many learning modalities as possible. As

Louis Phillips points out in *The Continuing Education Guide: The CEU and Other Professional Development Criteria*,

> When an instructor lectures (auditory), information is potentially stored in a single pattern in the learner's brain. When he uses two modalities—lecture and visuals—information is potentially stored in two patterns in the brain. When three modalities are used, information is potentially stored in three different patterns. The more modalities used, the more likely the learner is to recall what has been learned. (2009) In interrogating our current practice, we felt we were strongest in the auditory category.

Mark Jewell has a reputation for being a humorous, interesting, and motivational instructor, which naturally increases student engagement. And although not everyone is a natural-born speaker, we've found that even a few simple jokes and anecdotes sprinkled throughout a presentation can go a long way. For example, Mark might begin his training session with a story about his flight, hotel room, or newborn daughter. Adding these human elements, related or unrelated to the topic, may actually help students stay focused on the material. John J. Medina, developmental molecular biologist and author of *Brain Rules*, suggests that presenters do something emotionally relevant (telling a story, asking students to conjure a personal memory, etc.) every 10 minutes during a presentation (2008a). Not only will this keep students engaged, it may actually help them retain information better. In fact, Dr. Medina's article, "Why Emotional Memories are Unforgettable" (2008b), cites studies that link emotional experiences to stronger recall of information. Engaging students emotionally doesn't necessarily mean delving deep into your or their personal lives; emotions such as excitement, fear, competitiveness, and admiration can all be tapped with a few pointed questions or industry anecdotes.

Feeling confident about our lectures, our next task was to incorporate more visual, interpersonal, and kinesthetic elements into our trainings. We started with a major overhaul of our slide decks. In partnership with our graphic design firm, our in-house designer and curriculum developer created an entirely new look and feel for our slide shows. Although we wanted our slides to be attractive, we focused our redesign in a way that was supportive to learning and not merely decorative. In fact, Lawrence J. Najjar's "Principles of Educational Multimedia User Interface Design" (1998) summarizes the results of several studies in this way:

> …adding closely related, supportive illustrations to textual or auditory verbal information improves learning performance. For example, pictures improved the recall of textual words (Paivio & Csapo 1973), recall and comprehension of textual passages (Levie & Lentz 1982), recall of auditory passages (Levin & Lesgold 1978), and comprehension of auditory passages (Bransford & Johnson 1972).

Related research shows that a moderate amount of stimulation (visual, auditory, or otherwise), can boost memory and performance, while too much can inhibit them (Wallis 2006). Accordingly, we made a point of including design elements that brought attention to the most important facts, figures, and concepts (e.g., using a larger font to emphasize a statistic, or using call-outs to explain difficult concepts), without overwhelming attendees with excessive images, text, and bullet points. When choosing images, we invested in up-to-date, industry-specific stock photography that reflected the experiences of our students. Finally, we incorporated visual metaphors (e.g., a brick wall to symbolize barriers to implementation) to help make material more emotionally resonant. We suggest taking cues from presentation design books, such as Garr Reynolds' *Presentation Zen* or Nancy Duarte's *Slide:ology* and *Resonate*. The advice offered in these guides is based on sound design theory and years of industry experience.

How Can We Keep Students with Short Attention Spans Engaged?

One of the biggest challenges we have faced is keeping our learners engaged during trainings that can last anywhere from 30 minutes to six hours. No matter how excited our students might be about energy efficiency, the bottom line is that they are human, and the human brain has a remarkable tendency to tune out—and quickly. Several studies suggest that adults cannot focus their attention on a lecture for more than 15 to 20 minutes at a time (Middendorf & Kalish 1996). In reality, most people will become disengaged with a class or presentation within minutes if the material has not been designed to capture their attention. Add to the equation the fact that people retain more when learning through multiple modalities, and the case for lecture-centric trainings appears fairly weak. Switch up the rhythm and pace of the class by switching between the following:

- Lecture, story, audience questions, breakout groups, jokes
- Images, words, videos, blank slides
- Fast or slow pace, breaks
- Food and handouts

Even the most entertaining instructor armed with a slick deck of slides can only do the proverbial "song and dance" for so long. Ultimately, learners need to feel challenged in order to stay engaged. When an adult feels dissatisfied with a course, it is not necessarily because the subject matter is dull or too elementary. Rather, the level of mental involvement required by the instructor is too basic. In order to keep learners engaged, course designers must create learning objectives that challenge students to engage in higher-order thinking (Phillips 2009). Our course developers consult Bloom's Taxonomy, a hierarchy of thinking skills ranging from the basic *knowledge* level to the higher levels of *evaluation* and *synthesis*. Developed by Benjamin Bloom and a committee at the University of Chicago in 1956, the taxonomy is a standard guide used by educators at all levels of education, from preschool to college and beyond. It is an excellent standard against which to measure our goals for our students and a way to ensure that we are challenging them in a way that will keep them engaged, even during all-day trainings.

By simply interrogating our established learning objectives for our class *Learning to S.E.E. (Sell Efficiency Effectively)™*, for example, we were able to revise our class material in a way that truly challenged our students. Initially, the class was modeled on the idea that efficiency sales professionals needed to understand the importance of having a value proposition that their prospects could understand (i.e., the "elevator pitch"). The change was simple; our new objective read: *Students will create a unique and compelling value proposition that can be easily communicated to prospects.* Resting at the top of Bloom's taxonomy, the verb *create* not only required students to understand and repeat a new concept, but also to demonstrate their ability to incorporate it into their lives. Revising our objective meant creating a new class exercise in which students used a template to write their own personal "pitch"—that is, a summary of their company, product, and value—and practice delivering it to a partner. This exercise not only challenged students to demonstrate their understanding of a concept, it also got them up and out of their seats, engaged in conversations (even debates!) with their peers, and most importantly, excited about using their pitches in the real world as soon as possible.

Our students' enthusiastic response highlighted their need for opportunities to speak, discuss, and share their collective knowledge. Our trainings now include structured group work as well as designated networking time in which students are encouraged to introduce themselves to one another, learn more about each other's industries, share insights, exchange business cards, and so on. We have incorporated more hands-on exercises and plan to develop long-term projects that students can complete as part of our online Efficiency Sales Professional course.

How Can We Narrow the Knowledge Gap of Our Varied Attendees?

All too often continuing education courses fail to address the varied knowledge and experience levels of their students—in fact, only recently has the approach gained recognition in adult education (Corley 2005). At EEFG, we frequently found ourselves teaching courses that were too advanced for some of our students and too elementary for others. Not only did this decrease engagement and satisfaction levels, it also hindered capable students from understanding and retaining concepts that were essential to their job function. One solution to this problem, of course, was to create different levels of courses (introductory, intermediate, and advanced) and include prerequisites for the more advanced classes. Often, however, our clients had neither the resources to support nor the number of students to necessitate several classes.

Instead, we found ways to differentiate instruction within the same course and support students of varying skill levels. Pre-reading activities help students feel prepared to learn, and can include exercises such as a journal entry, assigned reading with questions, or a structured partner or group discussion. At the suggestion of one of our clients, we began assigning pre-reading for *Learning to S.E.E.*, which included a brief article on the topic and a series of questions that students should be prepared to discuss at the beginning of class. The purpose of this exercise was two-fold: it activated the students' prior knowledge by requiring them to assess their current understanding of the topic, while the article provided background information that helped even the playing field between novice and expert students.

How Can We Offer Delivery Mechanisms that Work for Everyone, from "Green Collar" Job Seekers to Chief Executive Officers?

We have learned that courses must be conveniently and compellingly delivered in order to reach the critical mass of people necessary to accomplish a proverbial "tipping point" in the marketplace, and in some cases you need to sneak the training in. Below is a summary of our findings, which have led us to the conclusion that delivery mechanisms need to be altered in order to get the message out to a cross section of influencers across all segments.

- **The traditional full-day, in-person training doesn't work for everyone.** All-day, in-person trainings do a great job of providing focused training during the workday to people who want the face-to-face experience; however this delivery type doesn't work for everyone. Many influencers need to be doing work and don't have the time to sit in a classroom all day.
- **Delivery methods are often developed for the convenience of the instructor or institution rather than the target audience.** Alternative delivery methods and

scheduling could attract a larger group of key influencers, such as evening and weekend events.

- **No-show rates are high, especially for free trainings.** Potential attendees are often turned away due to registration capacity limits, while on the day of the training empty seats remain due to "no-shows." This results in people who can benefit from the trainings being turned away and a higher cost per person for those who do attend.
- **Trainings are focused in metropolitan areas.** Trainings need to occur anywhere there are decision makers. However, in-person trainings to small rural groups can be cost-prohibitive and expert instructors may have limited availability to reach all audiences.
- **Attendees get blown away by the fire hose.** Even with integrating educational best practices and operating the courses at a slower pace, attendees inevitably can't absorb all that was taught in the course. Delivery mechanisms must be structured with post-training support to reinforce the concepts. This could be in the form of re-watching on-demand trainings, support groups, or post-class readings.
- **Some people think they already know everything.** When we come across this situation, we like to "sneak the training in" through informal discussions at networking and other events that pique the interest of the listener and encourage them to continue learning more.

Utilize the Appropriate Delivery Mechanisms for the Target Attendee

Structure the delivery of the content in a way that best fits the needs of the target attendee. If the target attendees are HVAC contractors, consider a breakfast event that wraps up before they have to get to the job site. Will a PowerPoint resonate with your audience or will it be too formal? How much time can they dedicate to the message without infringing on their core business? What is their motivation for attending? Do they need to network with others, get continuing education credits, understand a technology, or pick up useful tips they can integrate into their work the very next day? Would business professionals or executives pay a premium for a more personalized approach? Are sales professionals wary of sitting next to their competitors, much less having an interactive discussion with them? Where do target attendees currently obtain new information – college, The New York Times while standing in the TSA line, during windshield time, or Facebook on the weekends? There are a variety of different delivery methods for spreading your message. By understanding your target audiences' needs, you can utilize one (or more) that may be just the right fit.

In-person trainings. If you determine that in-person training sessions are the best approach, structure the training so you get the most out of the delivery method. Maximize the opportunity for interaction and discussion, allowing ample time for networking, group exercises, and peer-to-peer knowledge sharing. In addition to the standard six-hour weekday trainings, consider offering alternative time frames, such as shorter lunch or evening workshops or even weekend classes. These time slots are less likely to interfere with professional duties, provide a great alternative to daytime trainings, and hold the potential to draw a wider audience. Short keynote talks with built-in networking opportunities can serve as a low-risk introduction to the concepts, especially for first-time attendees, before they dedicate a more significant chunk of time.

Don't forget to give adequate attention to the learning environment. While it may be assumed that a room is sufficient if there are enough seats, the details really do matter. You want the environment to support a positive experience and facilitate effective learning and comprehension of the course materials without unnecessary distractions. Is the room capable of adequate temperature control (our most common complaint)? Is the room acoustically sound, or is it next to the noisy kitchen? Do the chairs squeak uncontrollably? Is there a quiet space for attendees to make phone calls? Does the room provide adequate power and WiFi access? Is there adequate networking space? Are the restrooms adequate for the size of your group? Are the chairs comfortable? Is the food memorable and are there healthy options? Will there be an adequate supply of water and coffee throughout the day? Is the layout conducive to your needs? Are there snacks available when blood sugar levels typically drop? Is the location easy to find and accessible via public transportation and driving? Are attendees welcomed as they arrive? Is there a coat check for rainy days? Are the acoustics sufficient for everyone to hear the speaker? Can everyone see the screen? Can you read people's name badges?

Distance learning. In-person trainings may not meet the needs of all desired attendees all of the time. That's where alternative training formats such as webinars, on-demand modules, and other distance learning tools come in. Providing energy efficiency trainings in a variety of formats allows your message to reach a much wider audience. There are many pros and cons to distance learning (in fact, too many to cover here). EEFG's philosophy is to leverage distance learning best practices and provide it as an option to those who don't have the opportunity for in-person training, but we believe that it should not replace in-person training when it is available. Given the alternative of no training at all, distance learning is a viable alternative.

Pre-recorded, on-demand, web-based training sessions allow students to gain important professional knowledge and skills on a schedule that works for them, be it busy executives who can watch an 8-minute podcast while waiting for a plane to take off or the working mom who has some personal time in the evening after the kids are in bed. On-demand trainings are also a great strategy for teaching complex topics (e.g., our *Financial Analysis for Energy Efficiency Projects*). This allows attendees to revisit topics they didn't understand fully the first time (or later when they need a refresher on a relevant project).

Both live webinars and on-demand trainings are vital to supporting remote areas where in-person trainings may be cost-prohibitive. For longer events, voice-over-slides may not be sufficient and a more structured, concurrent, interactive, learning environment may be a good fit.

Learning Management Systems can create interactive experiences for remote learners, as they allow for two-way communication with instructors and other students, online assessments with immediate feedback on learning progress, and more interactive tools to aid in retention.

Teaching Is Not Enough. We Need to Turn Concepts into Practice.

Training is just recreation unless it changes how people think and act when they return to the workplace. We need to pair high-quality training with elements that will encourage attendees to turn the concepts they learn into practice.

Incorporate Interdisciplinary Content

One of the first ways we empower students in our Learning to S.E.E. course, for example, is by combining training in highly technical subjects (e.g., financial analysis) with "soft" skills, such as professional writing, presentation, speaking, and networking. A strong argument for interdisciplinary content is the theory that varying the type of content that a student studies can improve retention. Two separate studies conducted in 2010 suggest that studying a variety of skills in a single session—vocabulary, reading, and conversing, for example—results in higher performance and better retention (Taylor & Roher 2010; Kornel et al. 2010). This research is important to keep in mind when planning a training session, as it suggests that focusing an entire training on a highly specialized topic (industrial lighting, for example), may not aid in retention nearly as much as an interdisciplinary approach. An added benefit of this approach is that attendees leave not only informed, but with the practical skills necessary to apply what they have learned.

Providing Post-Training Support

On our post-class evaluations, we ask "What additional support do you need in order to act on what you learned." Since we started doing this, we have been surprised at the feedback we have received. Most people feel like they need extra information or support to turn the concepts into practice. Here are the most common requests that we are working to integrate into our offerings:

1. Where to go to learn more – post-class readings, online resources, advanced courses
2. Tools and templates to use to apply the training elements – financial spreadsheets, sample wordings for proposals, etc.
3. "Phone a friend" – a number to call to get support on a specific project or issue related to the class
4. Connecting with others – providing ongoing networking opportunities for people to discuss projects and best practices
5. Workshops – to get advice on actual projects
6. Reminders and refreshers – to reinforce key concepts

Draw a Path for Taking the Next Step

A common message that we hear from attendees is "This course was amazing; now what do I do?" As we evolve, we continue to find new ways to support attendees in taking the next step. For some clients/courses this may be a sheet on additional resources they can use to dig deeper (e.g., books and online resources).

We are also migrating towards a structure where there is a clear educational path and certification approach. A lot of students take every class we offer, but the courses were initially designed as one-off classes without the repeat attendee in mind. Another option is for utilities to offer an entry-level course (e.g. a "pasta sampler" of the Efficiency Sales Professional Certification curriculum) at no cost to attendees, and if they want to take it to the next level, they could pay for their own advanced courses, with or without an incentive from the utility.

Develop a Supportive Community

We feel very strongly about the need for a physical space for like-minded people to gather and share ideas. That is why we opened the Efficiency Sales Professional Institute in downtown San Francisco. By offering a library with the same resources we recommend to our students, we make it easy for them to obtain a deeper knowledge of the topics covered in class. By hosting non-training events, we provide opportunities for students to better retain their learning through repetition, discussion, and application. For organizations that don't have the space or resources to provide a physical learning community, online communities can be equally effective. Creating a LinkedIn group, Facebook page, discussion forum, blog, or other online community encourages thoughtful discussion and debates long after training has ended, and in fact provides an excellent way for the more reserved students (e.g., those who are terrified by networking events) to make their voices and opinions heard.

Physical and online learning communities encourage independent, self-paced learning as well as the formation of mentor/mentee relationships. By providing students with resources they might not find on their own, organizations empower students to fill the gaps in their own understanding and take control of their learning. By creating designated, organized social events, we can encourage novices and experts to interact and disperse the wealth of knowledge that various efficiency professionals have amassed.

Get People Fired Up and Ready to Take Action

Helping the learner understand how the information being taught can support their success and how they may use the information to advance their own initiatives, as well as getting them goal-oriented and drawing the connection between what they are learning and how it can support their goal, can get attendees motivated and fired up to take action.

We Need to Figure Out What Is and Is Not Working

As you may notice, most of our findings thus far are based on gut instinct and conversations rather than hard scientific data. As an industry, we struggle to adequately determine what is and is not working, as current structures and processes employed within the industry often fail to meet the requirements necessary to do so.

Class surveys are typically conducted at the conclusion of a training, making it challenging, if not impossible, to adequately capture pre- and post-knowledge, or know how and when the increase in knowledge will be used to advance efficiency initiatives in the market. Having this information would be particularly useful for justifying the cost of non-resource education and training initiatives in ratepayer-funded environments and, in an ideal world, for documenting specific influences for moving efficiency projects forward.

In order to maximize the effectiveness of trainings for attendees and justify the cost of the courses to stakeholders, we need to build in feedback loops that provide relevant and timely feedback and use them consistently. Adequately determining what is and is not working will also enable us to focus often-limited human capital on what matters most. In order to do this, we will:

- Engage experts in surveying and testing to develop methods and questions that produce responses that can effectively influence future courses or prove the success of past courses.
- Develop a modular survey structure in order to consistently survey attendees, regardless of the course or implementation manager.
- Use consistent questioning approaches across offerings in order to combine results across courses and attendees.

- Track attendee feedback in a centralized database in order to analyze participation and feedback over time and across offerings.
- Distribute feedback to the instructor in a format that can be used to continually improve the course that is being offered. This includes a download session with the organizer immediately following the course to document what worked and what did not work.
- Develop mechanisms for ensuring a high survey response rate.

Then We Need to Proceed with "Laser-Like Focus"

Why Do We Do What We Do? How Can We Tailor Our Offerings so that We Provide the Best Trainings Possible? The *what* is easy; it is the *why* that takes all the effort. Like many projects, it is easy to jump into things too quickly without stopping to consider why you are doing what you are doing. As we evaluated the 16(!) different course titles that we were offering, it became clear that our courses had evolved along the lines of the *what* and not the *why*. A client would request a specific title; we would do the research, package it into a PowerPoint and, voilà!, we would deliver "Class X". The client was satisfied, the attendees provided positive feedback, but we felt as if we had missed the mark.

Inspired by Simon Sinek's TED Talk, "How Great Leaders Inspire Action," we wanted to start with more than just the *what* and consider the *why*. Why is this course needed? Who should the target audience be? Is an existing offering failing to have the impact that it's supposed to? Why? Where do target attendees currently receive information related to this topic? Why? What do they need to get out of the day in order to do their jobs more effectively? Why? What topics do we need to be covering and why?

Conducting trainings in an existing framework with little funding for the development of new courses makes the above approach challenging, particularly if you offer a variety of courses and aren't just focused on one particular technology or segment. There are formal ways to go about getting the answers to the questions above. For example, you could conduct a needs assessment/gap analysis/etc. with key stakeholders. The process of involving stakeholders during the development stage of classes delivers benefits beyond shaping the content of the class; it also results in obtaining the stakeholders' buy-in.

Our approach thus far has been to utilize informal discussions with people we cross paths with who could be a potential target for our course offerings. Given that our core training offerings focus on instilling business acumen and sales skills into the efficiency market, our informal conversations have led to very productive outcomes about what is and is not working within organizations and for individuals.

Conclusion

There is no doubt that education and training are key components of effective market transformation. As an industry, we need to "shake the Etch A Sketch" and break free of the old paradigm of lecture-based instruction. Incorporating adult education best practices and understanding and leveraging the science behind why professionals can stay glued to Angry Birds for hours but struggle to maintain focus in career-critical trainings will ensure people stay engaged and excited about the topic at hand, leaving them more likely to retain information and apply what they learned to make a positive change in the built environment.

Expanding our outreach efforts and modulating our delivery mechanisms to fit the needs of our target attendees will bring in new blood, allow us to reach key market influencers, and improve our cost per attendee. Lastly, always keeping an eye on continuous improvement will help ensure that we are on target, even if the target changes over time.

As we continue on this self-charted journey, we will ask ourselves how we can best reach the right people, at the right time, with the right message, in the right way. We look forward to learning together and sharing lessons learned along the way with you.

References

Bransford, John and Marcia Johnson. 1972. "Contextual Prerequisites for Understanding: Some Investigations of Comprehension and Recall." *Journal of Verbal Learning and Verbal Behavior* 11: 717-726.

Corley, Mary Ann. 2005. "Differentiated Instruction: Adjusting to the Needs of All Learners." *Focus on Basics: Connecting Research and Practice* 7 (March): 13-16.

Kornell, Nate, Robert A. Bjork, Alan D. Castel, and Teal S. Eich. 2010. "Spacing as the Friend of Both Memory and Induction in Young and Older Adults." *Psychology and Aging* 25 (2): 498-503.

Levie, W. Howard and Richard Lentz. 1982. "Effects of Text Illustrations: A Review of Research." *Educational Communication and Technology* 30 (4): 195-232.

Levin, J.R. and A.M. Lesgold 1978. "On Pictures in Prose." *Educational Communication and Technology* 26: 233-243.

Medina, John J. 2008a. *Brain Rules: 12 Principles for Surviving and Thriving at Work, Home, and School.* Seattle, WA: Pear Press.

———. 2008b. "Why Emotional Memories are Unforgettable." *Psychiatric Times* (May): 14-17.

Middendorf, Joan and Alan Kalish. 1996. "The 'Change-Up' in Lectures." *The National Teaching and Learning Forum* 5 (2): 1-7.

Najjar, Lawrence J. 1998. "Principles of Educational Multimedia User Interface Design." *Human Factors* 40 (2): 311-323.

O'Neill, Geraldine and Tim McMahon. 2005. "Student-Centered Learning: What Does it Mean for Students and Lecturers?" *Emerging Issues in the Practice of University Learning and Teaching: AISHE Readings* (1): 28-29.

Paivio, Allan and Kalman Csapo. 1973. "Picture Superiority in Free Recall: Imagery or Dual Coding?" *Cognitive Psychology*, 5 (2): 176-206.

Phillips, Louis Ed.D. 2009. *The Continuing Education Guide: The CEU and Other Professional Development Criteria, Second Edition.* Hong Kong: Regal Printing.

Taylor, Kelli and Doug Rohrer. 2010. "The Effects of Interleaved Practice." *Applied Cognitive Psychology* 24: 837-848.

Wallis, Claudia 2006. "genM: The Multitasking Generation." *Time*, March 27, 2006, http://www.time.com/time/magazine/article/0,9171,1174696,00.html