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2012 Regional Conference San Francisco | Skyline College | December 10 - 14, 2012



HABITAT X REGIONAL CONFERENCE AT SKYLINE COLLEGE

SAN FRANCISCO, CALIFORNIA DECEMBER 10-14, 2012

Welcome to the Habitat X Regional Conference. We're looking forward to a productive and fulfilling four days together. We've developed a focused agenda that we believe will meet your needs and expectations. But we've also built in ample opportunities for feedback, sharing, and collaboration. We know that there's a lot of expertise in this group, and we don't want that to go to waste. Please take every opportunity to tell us what you hope to accomplish this week, and we'll work with you to craft the most productive event possible.

Opening Session and Roundtable Discussion

During the opening session, we'll lay groundwork for the entire week. We'll answer any questions you have about the schedule, agenda, food, transportation, and other logistics. We'll conduct a roundtable discussion during this time, identifying areas of interest and expertise within our group, and facilitating a discussion about what subjects are most important to everyone in the room.

Daily Group Sessions: Morning and Wrap-Up

We have an industrious schedule planned this week, with much of our time spent in small groups. But we'll all meet in the corner conference room each morning to make a plan for the day, summarize our work to date, and adjust the agenda as needed. And every afternoon we'll meet as a group to wrap up, answer your questions, and make plans for the evening.

Social Events

We're hosting optional social events in the evenings on Monday and Wednesday. We hope you can get out, relax, and see some of the town with us.

-- Chris Dorsi, Amy Sheppard, J West, and Ben Cichowski for Habitat X

-- Bruce Greenstein for Skyline College



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CORE CONFERNCE SCHEDULE All events at Skyline College, Building 6, Room 6202, except as noted.

| 11:45 | Shuttles leave hotels. | |
|--------------|--|--|
| 12:00 - 1:00 | Registration and conversation. | |
| 1:00 - 3:00 | Opening Session. | Building the Framework: introductions and roundtable discussion. |
| | | Opening remarks by Ann Edminster. Plus a review of Learning to Create Award-Winning Home Performance Projects. |
| 3:00 - 3:15 | Break, beverages, and snacks. | |
| 3:15 - 4:30 | Group Workshop | Principles of Learning. |
| | | Wrap-up and debrief. |
| 4:45 | Shuttles travel to Best Western Lighthouse Hotel and Moonraker Restaurant in Pacifica. | |
| 5:00 - 7:00 | Hosted reception at Moonraker. | |
| 7:00 | Dinner on your own. | |

Monday December 10

| Tuesday December 11 | | | |
|---------------------|--------------------------------|--|--|
| 7:30 | Shuttles leave hotels. | | |
| 7:45 – 8:30 | Registration and conversation. | | |
| 8:30 - 9:45 | Group session. | Daily review. More on Principles of Learning. Flash presentations. | |
| 9:45 – 10:00 | Break, beverages, and snacks. | | |
| 10:00 - 11:30 | Small Groups. | Better Communication Skills, with Chris Dorsi an J West. | |
| 11:30 - 12:30 | Lunch, in Room 6207. | | |
| 12:30 - 2:00 | Small Groups. | Better Training Tools, with Ben Cichowski and Bruce Greenstein. | |
| 2:00 - 2:30 | Break, beverages, and snacks. | | |
| 2:30 - 4:00 | Group Session. | Panel discussion and Q&A with Tiger Adolf (Building Performance Institute), Conrad Asper (Efficiency First California), and Kevin Beck (Building Performance Center, Inc.). | |
| 4:00 - 4:10 | Break | | |
| 4:10 - 4:30 | Group Session. | Wrap-up and debrief. | |
| 4:45 | Shuttles return to hotels. | | |
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Tuesday December 11

| | - | | |
|---------------|-------------------------------------|---|--|
| 7:30 | Shuttles leave hotels. | | |
| 7:45 – 8:30 | Registration and conversation. | | |
| 8:30 - 9:45 | Group session. | Daily review and flash presentations. | |
| | | Presentation by Tom White, publisher of Home | |
| | | Energy Magazine, on the history and trajectory of the | |
| | | home performance industry. | |
| 9:45 - 10:00 | Break, beverages, and snacks. | | |
| 10:00 - 11:30 | Small Groups. | Conveying Visual Information, with Ben | |
| | | Cichowski. | |
| 11:30 - 12:30 | Lunch, in Room 6207. | | |
| 12:30 - 2:00 | Small Groups. | Excellent Instructional Design, with J West. | |
| 2:00 - 2:30 | Break, beverages, and snacks. | | |
| 2:30 - 4:00 | Small Groups. | Relevant Continuing Education, with Chris Dorsi | |
| | | and Bruce Greenstein. | |
| 4:00 - 4:10 | Break. | | |
| 4:10 - 4:30 | Group Session. | Wrap- up and debrief. | |
| 4:45 | Shuttles travel to hotels. | | |
| 5:45 | Shuttles leave hotels for Barolo in | | |
| | Pacifica. | | |
| 6:00 - 8:30 | Hosted dinner at Barolo. | | |
| 8:30 | Shuttles return to hotels. | | |

Wednesday December 12

| 7:30 | Shuttles leave hotels. | |
|---------------|--------------------------------|---|
| 7:45 – 8:30 | Registration and conversation. | |
| 8:30 - 9:45 | Group session. | Daily review. Flash presentations. |
| | | Remote presentation with Bill Spohn of TruTech |
| | | Tools on Teaching Science to Non-Scientists. |
| 9:45 - 10:00 | Break, beverages, and snacks. | |
| 10:00 - 11:30 | Group Workshop. | Polishing Your Presentation Skills, with Chris |
| | | Dorsi, Ben Cichowski, and J West. |
| 11:30 - 12:30 | Lunch, in Room 6207. | |
| 12:30 - 2:00 | Group Session. | Emerging Tools and Techniques, with Chris Dorsi |
| | | Flash presentations by a variety of presenters. |
| 2:00 - 2:30 | Break, beverages, and snacks. | |
| 2:30 - 4:00 | Group Session. | Summary exercises and discussion. Wrap-up and |
| | | debrief. Adjourn. |
| 4:15 | Shuttles return to hotels. | |

Thursday December 13

SHORT COURSE SCHEDULE

All sessions at Skyline College Building 19. Lunch at Building 6 Room 6207.

| Friday | December | 14 |
|----------|----------|-----|
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| 7:45 – 8:30 | Registration, beverages, and conversation. | | |
|---------------|--|--|--|
| 8:30 - 10:00 | Group Session. | Principles of Learning, with Chris Dorsi and Bruce Greenstein. | |
| 10:00 - 10:15 | Break, beverages, and snacks. | | |
| 10:15 - 11:30 | Group Session. | Mastering Tough Topics, with Chris Dorsi and Bruce Greenstein. | |
| 11:30 - 12:30 | Lunch, in Room 6207. | | |
| 12:30 - 2:00 | Group Session. | Practice on Tough Topics, with Chris Dorsi and Bruce Greenstein | |
| 2:00 - 2:15 | Break, beverages, and snacks. | | |
| 2:15 - 4:00 | Group Session. | Emerging Truths of Building Science, with Chris Dorsi and Bruce Greenstein. Wrap-up and adjourn. | |

SPEAKERS AND PANELISTS

Ann Edminster

Ann V. Edminster, M.Arch., LEED AP, is a leading international expert on green home design and

construction. A central focus of her consulting practice is assisting design and building professional firms in developing their capacity to create better buildings, with or without labels attached. She is a principal author of the LEED for Homes Rating System and author of the award-winning book, *Energy Free: Homes for a Small Planet*, a comprehensive guide for those seeking to design and build zero net energy homes. An acclaimed speaker, teacher, and writer, Ann advises a wide range of building industry clients.

Tiger Adolf - Building Performance Institute

Tiger has been with BPI since 2010, and is currently the Program Design and Market Development Director. She's spent more than 20 years working with federal and state agencies, as well as investor-owned,

cooperative, and municipal utilities. Tiger specializes in program design and development of contractor networks that provide profitable opportunities for contractors, with verifiable results to meet other partner's goals. Prior to joining the BPI team, Tiger was the Executive Director of the Wyoming Energy Council, Inc., a non-profit corporation focused on nonrenewable energy resource conservation through the deployment of retrofit services. She was responsible for administering the Weatherization Assistance Program in southeastern Wyoming and also for launching a Home Performance with ENERGY STAR Program.

Tom White - Home Energy Magazine

Tom White is the publisher of Home Energy magazine, online at HomeEnergy.org. The preeminent trade

magazine for home performance professionals since 1984, Home Energy disseminates objective and practical information on residential energy efficiency, performance, comfort and affordability. Tom has over thirty years of experience in publishing, including Whole Earth Review, Greater Good Magazine, the University of California Press, and the Social Enterprise Reporter. With his domestic partner, Tom also has restored and retrofitted award-winning historic homes in San Francisco and Berkeley, California.









Conrad Asper - Efficiency First California

Conrad Asper is the Executive Director of the Efficiency First California, formerly known as California Building Performance Contractors Association (CBPCA). The non-profit

trade organization advocates on behalf of home performance contractors, and delivers integrated training and certification programs in comprehensive retrofit topics that include building shell integrity, systembased HVAC upgrades, business, marketing, and sales. CBPCA also participates in the program implementation of the Energy Upgrade California Programs, and Conrad sits on its Energy Upgrade Steering Committee.

Kevin Beck – Building Performance Center, Inc.

Kevin has been involved in the residential construction industry in California for over thirty years, working

as a licensed General Contractor for the last 25. A believer in high quality workmanship and performance, Kevin has been and continues to be a lifelong student of building science and building performance. Most recently Kevin joined CalCERTS, Inc. to help develop and maintain the Contractor Services Division, and direct the training department. Kevin is also a Principal and the Director of Training and Operations for the Building Performance Center, Inc., a newly formed company to help fill the needs of creating the new Clean Energy Workforce utilizing a standardized system to ensure competencies and skills.



Bill Spohn

Bill is the president and CEO of TruTech Tools. He holds degrees from the University Of Rochester, and is a Registered Professional Engineer in Pennsylvania.

Bill has designed and marketed a wide array of test and measurement products in the last twenty-five years. He has presented to a variety of audiences on the applications of testing and measurement instrumentation in building science, weatherization, and HVAC. He has worked on technical committees for BPI, RESNET, GAMA, AHRI, OMA, RSES, NATE, and ACCA. Bill holds three US patents.





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HABITAT X STAFF MEMBERS

Chris Dorsi

Chris Dorsi is the founder of Habitat X. He lives in Helena, Montana, where he's spent the last 40 years developing best practices for the housing industry. He's run a successful construction company, worked as a real estate developer, and delivered training for a variety of North American housing organizations. Chris is a co-author of *Residential Energy: Cost Savings and Comfort for Existing Buildings*, the *Homeowner's Handbook to Energy Efficiency*, and other respected titles on sustainable design and construction that are available from Saturn Resource Management. Chris' upcoming book, *Human Habitat*, is due on the shelves in 2014, and reports from the intersection of housing, culture, and environment.

Ben Cichowski

Ben lives in Bozeman, Montana, where he's well known for bringing weatherization and home performance to the masses as the current host and one of the scriptwriters for WxTV. Ben expands on this success at the Habitat X conferences by leading tracks that focus on filmmaking, instructional design, and field training methods. Ben holds Bachelors degrees in Biology and Conservation Ecology, and a Masters in Civil and Environmental Engineering.

J West

J West lives in Chicago, Illinois, where he trains technicians and teachers, writes curriculum, performs research, and develops process-improvement strategies for home performance organizations. He's been a training supervisor for the Community and Economic Development Association (CEDA) in Chicago since 2009, and in recent years he has trained hundreds of instructors and crew members from around North America. J holds two Bachelors of Science degrees from Illinois State University.

Amy Sheppard

Amy is the operations manager for the Habitat X Conferences. She's managed people and events for the last twenty-five years, working with organizations as diverse as science centers, guest ranches, and eco-tourism companies. She's also the co-author of the acclaimed cookbook New West Cuisine. When you attend a Habitat X Conference, it's Amy who'll assure that your registration is handled smoothly, the event runs on time, and the food is very, very good.









SPONSORS

Our sponsors provide critical financial and technical support for the Habitat X Conferences. Thanks to the generous individuals in these organizations who share the Habitat X vision of fostering a highly evolved and collaborative professional conference for the housing industry.

Efficiency First California – formerly known as the California Building Performance Contractors

Association – has for years been one of California's premier home performance advocates, and a leader of the industry's growth. **Efficiency**FirstCalifornia They train contractors, provide access to a

vibrant home performance contractor community, and offer valuable industry knowledge. Their stated mission is to create "a California where a sustainable, ever-expanding home performance industry is responsible for producing energy efficient, healthy, safe and comfortable homes."

www.cbpca.org

The Home Performance Guild of Oregon is a trade association of dedicated, highly qualified

companies who endeavor to influence policymakers, program developers, and the broader home performance industry. Their goal is to ensure that all Oregonians have access to whole-house energy retrofits, and, to make business as a home performance contractor in Oregon more profitable

through strategic relationships with distributors, manufacturers, training facilities, insurance brokers, and financial institutions.

www.oregonhpcg.org

The Building Performance Center, Inc. envisions comfortable, safe, healthy, and energy-efficient

homes and buildings for current and future generations. They spearhead revolutionary thinking in the building performance industry through broad advocacy, use of new technologies, training, and collaborative partnerships. In doing so, they enable their

customers to transform the ways in which the improve the quality of life in the built environment.

www.thebpcinc.com







TruTech Tools was founded in 2007 with the stated goal of "making measurement science work"

for the professionals who use their equipment. They carry a handpicked selection of tools and instruments, and they provide technical support that helps technicians understand what, when, where, why, and how to measure and evaluate the

built environment. TruTech offers ongoing training opportunities by web and by phone.

www.trutechtools.com

InspectorTools has been a leading provider of weatherization related test equipment and supplies

for 14 years. They offer special unpublished discounts Habitat X Conference attendees on Alnor, Bacharach, BW Instruments, Delmhorst, FLIR, Fluke, Minneapolis,

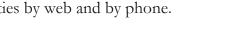
Retrotec, and Testo equipment. Please call David Brown at (800) 895-4916 for special pricing and incentives.

www.inspectortools.com

The Energy Conservation Institute (ECI) is the leading manufacturer of mobile training labs

developed specifically for weatherization training providers. Each custom designed lab is built from the ground up and features multiple CAZ zones, pressure testing rooms, numerous heating systems, full size residential A/C system, PV solar system, HRV, large attic spaces, choice of mechanical equipment, and much more.

www.EnergyConservationInstitute.com



BUILDING PERFORMANCE TOOLS AND SUPP

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MONDAY PROGRAM

Opening Address by Ann V. Edminster, based upon her soon-to-be published article.

LEARNING TO CREATE AWARD-WINNING HOME PROJECTS

Call me a slow learner – I've got about 20 years of green building under my belt, and it's finally dawned on me that the way most of us approach green building is backwards.

I consult on projects ranging from affordable multi-family buildings to custom single-family homes. This variety notwithstanding, the common theme is, "We'd like to earn a LEED rating" – or Energy Star, Living Building Challenge, Passive House, or another label recognizing the project for its green cred. All these teams are eager to delve into what makes a project green – what features, materials, and equipment should they use to make sure the building meets their chosen standard of performance?

I get as excited about this as my clients do. After all, who doesn't love earning gold stars? These are not lowachiever types; they are folks who are continually striving for better, to create a new "personal best." And they're very successful.

However, the process isn't without its hiccups. And the reason for that, I've come to believe, is misplaced focus. Back in school, a few outstanding teachers understood that the best way to learn something new was first to create the right mindset about it. That mindset then enabled us to progress effectively, driving the process of creation through the acquisition of knowledge and skills, and mastery of appropriate tools.

But many of us, for whom school is pretty far in the rear-view mirror, now jump over these steps and zero in on stuff – the new products and technologies that dominate the discourse of green building. This is the part that's backwards.

I need to back up and explain the backdrop for my observations. Fundamentally, green building is about change; shifting the status quo to a new, better way of building.

In 1999, Donella Meadows, a brilliant systems analyst, wrote, "Leverage Points: Places to Intervene in a System." She named nine – and then later 12 – places to intervene in a system, in increasing order of effectiveness. Everyone interested in change should read this paper. However, I can't remember nine things, let alone 12, so it was a wonderful moment when Bill Reed (Regenesis Group) reframed this for me as a hierarchy of four steps.

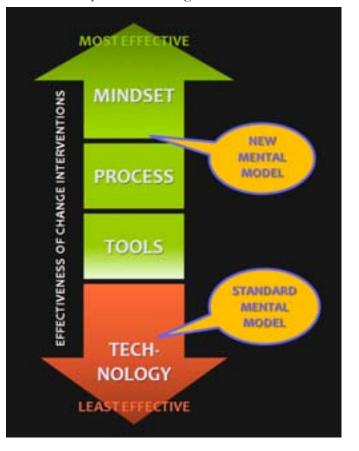
Reed's distillation of Meadows's seminal paper holds that the most effective way to create change is to alter mindset – i.e., how we think about something. In green building, this means we need to rethink the way we go about design. More specifically, it means clearly articulating – and quantifying – goals and priorities. So rather than settling on LEED Gold, for example, we dig deeper to find out what drives the desire for Gold; what performance objectives for the project are most meaningful to the owner or developer. Is it concern about climate change? A desire to provide healthy, high-quality housing for an under-served community? Or

simply a drive to innovate, or to demonstrate leadership? This information is crucial to informing the process of creating greener buildings.

The second most effective means of creating change is via processes. The way we go about designing and building must also be scrutinized and, in all likelihood changed, in order to create the better buildings we desire. Arguably the most significant process shift needed is away from the design-bid-build model to one of

integrated project delivery (IPD). One of the foremost proponents of IPD, Attorney Howard Ashcroft at Hanson Bridgett LLP in San Francisco, recently told me he has yet to find any evidence that the conventional design-bidbuild approach either saves money or produces better buildings.1 That's a powerful statement, and a whole lot more could be said about this, but I'll save that for another day.

After processes, we have tools. Tools are essential, but unless implemented via effective design and construction processes, won't yield much of value. A great example is energy modeling. Its greatest power is in shaping early design decisions, and yet it is used more frequently to demonstrate code compliance after key design decisions have already been made – missing the benefit of the insights a good energy model can convey.



At the bottom of the heap in terms of effectiveness are technologies. We love new products, trade shows are full of them – more every year – and yet we haven't made nearly the progress we should have on building performance. This is because we're ignoring our most powerful levers: mindset, process, and tools. It's time to rethink, go back to school. Technologies, like tools, require a well-calibrated mindset and effective processes to yield good results.

-- Ann Edminster

www.annedminster.com

This article copyright 2012

¹ Reference: Howard Ashcroft, Hanson Bridgett LLP, personal communication, October 2012.

Monday Session: Principles of Learning.

In this workshop we'll explore the use of the *Blended Learning Matrix*, a curriculum design tool used to choose learning venues and optimize delivery methods. This basic process of assembling educational elements should be a core skill for all educators, and it's one that we'll return to throughout the week.

Objectives

- Practice sorting learning objectives into tasks based upon knowledge, skills, and abilities.
- Identify the best combination of venues for teaching different objectives.
- Learn how to create crossover training venues that combine self-study, classroom, and field training.
- Practice using the Blended Learning Matrix to develop and manage lesson plans across different venues.

Relevance

This lesson will help you improve the effectiveness of your educational offerings by delivering each type of information in the most appropriate combination of venues. This can improve learners' knowledge retention, increase relevance of lessons, and reduce course delivery time.

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Blended Learning Matrix

| | Self-study: online and books. | Guided training: classroom and lab. | Hands-on training: field trips and on-the-job. |
|--|--|--|---|
| Knowledge : A body of information that can be applied to the performance of a task. Testable with written exams. | Learn about components of a water heater, combustion principles, and gas safety. Learn about water heater inspection procedures. Learn about water heater blanket installation guidelines. | Confirm and clarify understanding of self- study knowledge. | Confirm and clarify understanding of self-study, classroom, and lab knowledge. |
| Skills : The observed competence to perform a task in a controlled setting. Testable through both written means and observation. | | Inspect a variety of model water heaters. Identify typical components. Identify mocked-up safety hazards. Practice installing blankets. | Confirm and clarify understanding of classroom and lab skills. |
| Abilities: Competence to perform a task that results in an observable product or service. Observable in the work environment and testable through observation. | | | Install water heater blankets on a variety of equipment and in a variety of settings. Clarify and confirm performance until student attains job-ready abilities. |

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TUESDAY PROGRAM

Tuesday Session: Better Communication Skills

In this session, we'll practice both written and spoken communication skills that emphasize succinct and technically accurate language. This session leverages the principles established in the Federal Plain Language Guidelines to bridge grammar and composition. These exercises are guaranteed to make you a more effective speaker and writer of all types of writing.

Objectives

Attending this session will help you:

- Recognize the components of plain-language writing and speaking.
- Appreciate the benefits of plain language in your workplace.
- Adapt and refine the way you write and speak to reflect plain-language principles.
- Locate resources for plain language study and teaching.

Relevance

By using plain language in the classroom and workplace, you'll communicate more effectively. You and your organization will benefit from time-savings, reduced frustration, and a strengthened message.

Media

These media links are all hyperlinked in our digital resource center located at <u>www.HabitatX.com</u>.

Martin Cutts's Plain English Guide: http://www.amazon.com/Plain-English-Guide-Martin-Cutts/dp/0198600496

The Plain English Campaign: http://www.abebooks.com/Plain-English-Diane-Collinson-Gillian-Kirkup/7886560834/bd

Lee John's The Writing Coach: http://www.amazon.com/The-Writing-Coach-Clark-Johns/dp/1401833284

U.S. Citizenship and Immigration Services four video playlist on YouTube. They give a great explanation of active voice, acronym use, table use and the need for final proofs: http://www.youtube.com

Plain Language Day: http://youtu.be/MlrkHh5XoRU

Essential of Plain Language on the Howtogov YouTube page: http://youtu.be/ofZ-HOgv9gg

Plain Language Magazine: http://www.plainenglish.co.uk/plain-english-magazine.html

http://www.plainlanguage.gov/

Resource: Quick Guide To Plain English Writing

Writing in Plain English means creating a document that has these traits.

- It's visually inviting.
- It's logically organized.
- It's understandable on the first reading.

You can improve your written documents by following these guidelines.

Identify Your Audience

Think about why the reader needs to read the document. Also identify people who will be interested in the document, even if they are not directly affected. Write to everyone who is interested, not just to technical or legal experts. And keep in mind the average reader's level of technical expertise.

Write in an Active Voice

Voice is the form a verb takes to indicate whether its subject acts or is acted upon. When the subject of a verb does something (acts), the verb is in the active voice. When the subject of a verb receives the action (is acted upon), the verb is in the passive voice.

Because the active voice emphasizes the doer of an action, it is usually briefer, clearer, and more emphatic than the passive voice. Whenever possible, use active voice in your writings.

Keep it Short

You will communicate more clearly if you keep sentences and sections short. Aim for an average sentence length of 20 words, with no one sentence running over 40 words. Cover only one subject in each paragraph, and keep paragraphs under 10 or 12 lines.

Use Personal Pronouns

Help users picture themselves in the text. Pronouns help readers relate better to documents. When you address the reader as "you", he or she feels directly addressed and is more likely to understand what his or her responsibility is. When your writing reflects this, it is more economical and has a greater impact on the reader.

Design Your Documents to be Visually Enticing

- Use lots of informative headings: Make sure each heading has enough information to help your reader understand the content of the paragraph or section.
- Write short sections: Short sections break up the material into easily understood segments. They also look easier to read and understand.
- Use vertical lists: Vertical lists highlight a series of items in a visually clear way. Use vertical lists to help your reader focus on important material.



Simplify Your Language

Re-write these sentences so they are unambiguous and easy to read.

Avoid general instructions if you can provide specifics. *Try and get to the source of leaks and correct them.*

Avoid long clusters of nouns. *The window trim flashing caulk joint should be inspected carefully.*

Use one term only to describe and object or operation. *Insulation should installed so the batt fits the framing closely and the wood touches the blankets.*

Use the active voice whenever possible. *If you think the shingles are curled, they could be replaced.*

Avoid using excessive adjectives and adverbs. *The slowly leaking warm or cold air that escapes from many ducts can cause large loss of efficiency.*

Write sentences that have fewer than 25 words.

Be sure when wrapping water heaters that the blanket is securely installed so it doesn't hang down, and that the straps are tight enough to hold it firmly without compressing the insulation and causing a thin place in the thermal boundary.

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Repeat nouns instead of using a pronouns that refers back to a previous nouns *If the roofing leaks around the flashing, check first to be sure that its edges are properly fastened.*

Hyphenate phrases that change or qualify other words. *Re-stock the sheet metal screw pail every night.*

Avoid using noun as adjectives when the possessive could have the same meaning. *The drainage system outflow pipe should not be obstructed by vegetation.*

Use articles before nouns. *Cut joists to fit rim. Fasten joists with approved nails.*

Avoid using the gerund. *The testing of homes can be part of creating safer households.*

Use imperatives to describe instructions.

Testing of the water heater should be performed. Smoke should be used to check for draft. Gas sniffing can help identify leaks.

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Tuesday Session: Better Training Tools.

We'll delve into strategies and means for facilitating learning in the classroom with technological tools. The emphasis will be on adapting simple, commonly available equipment and processes that accelerate learning without requiring large expenditures or advanced training.

Objectives

- Reduce instructor prep time.
- Increase knowledge retention.
- Decrease stress in the classroom.
- Increase student participation.
- Make connections to prior knowledge.

Relevance

Your choice of training tools will have a broad impact on your training organization. Effective tools can help you meet your training goals in a timely and reliable fashion. Your students will be more engaged and productive if you employ techniques and technologies that both hold their interest, and provide accessible and relevant knowledge at an appropriate pace.

Good training tools can also help bridge the venues of self-study, classroom sessions, and field training, giving students access to more educational materials more of the time.

Media

Prezi: http://prezi.com GoSoapbox: http://gosoapbox.com YouTube: http://www.youtube.com Vimeo: http://vimeo.com Google+ and Google Drive: http://google.com

Resource: Story-Based Instruction

"The shortest distance between two people is a story." "If a picture is worth a thousand words a story is worth a thousand pictures." -- Terrence Gargiulo

Story has a natural connecting power. Let's try on some different storytelling hats. Have you considered these ideas?

- A learning event is an unfolding story.
- People craft a story to make sense of what they are learning.
- Stories are at the intersection of people's synthesis of learning.
- Stories are tools for thinking.
- You can move through complex information more efficiently through story devices than through standard forms of discourse.
- Breaking a story or a group of stories up into a bunch of smaller pieces throughout a learning event will help you anchor your learning and hold people's attention.
- Scenarios can be used as mini virtual reality simulators to engage people in stimulating conversation.

As you design conversationally driven web-based live online learning programs, keep in mind what we call the "Triple Threat of Storytelling:"

- Telling stories.
- Listening to stories.
- Triggering stories.

Telling stories is the tip of the iceberg.

We need to be able to listen for the stories, look for patterns that are emerging, and explore the contours of this terrain as meaning emerges. Search for context and the story behind the story being shared.

And perhaps most central to our discussion:

"Learning events need to trigger and elicit stories from participants."

by Terrence Gargiulo, MMHS President.

www.makingstories.net

WEDNESDAY PROGRAM

Wednesday Session: Conveying Visual Information.

Well examine and practice some ways to step-up production value for video and photo training pieces. This session leverages Ben Cichowski's years of lessons-learned through both success and failure in the online training environment. With a few simple principles, you will be able to significantly step up your production value in the areas of scene, lighting, audio, and overall audience enjoyment.

Objectives

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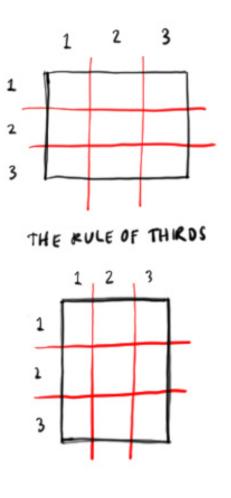
- Identify the appropriate medium for conveying information
- Identify your audience
- Study successful projects
- Determine the level of quality expected by the audience in video and photos
- Identify and select the appropriate tools to facilitate video and photo production

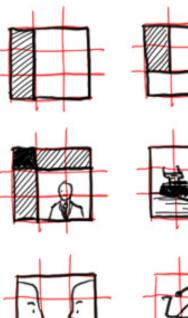
Relevance

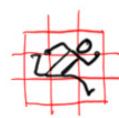
Conveying information through video and photos does not have one formula that works for all audiences and for all types of information. There are rules, techniques, and tools you must use, but they must be applied appropriately. The key is to use your visual communication skills to encourage curiosity and enjoyment, thus capitalizing on a more natural knowledge-retention process. By following the guidelines in this session, you will better connect with your audience through photos and video, resulting in a better learning experience for the student and a better teaching experience for you.

Media and Resources

- Photo Tips: http://www.kodak.com/global/en/corp/top10tips/index.jhtml
- Video Tips: <u>http://vimeo.com/videoschool/101</u>
- Lighting: <u>http://www.youtube.com/watch?v=gkUqBJoxZ-I</u>
- Web: Convert!: Designing Websites to Increase Traffic and Conversion (it's a book, folks...)
- Accessories: <u>http://www.hondogarage.com/</u>
- Available Videos: <u>http://wxtvonline.org</u>











Wednesday Session: Excellent Instructional Design

In this session, we'll study a set of tools and techniques you can use to build an effective and adaptable curriculum. We'll show you how to design instruction that's supported by proven adult learning methods, and to deliver course content that has maximum impact and efficiency. We'll also show you how to implement the commonly-accepted five-step ADDIE process of instructional design: analysis, design, development, implementation, and evaluation. You'll have a chance to apply this process to your own instructional materials before you leave.

Objectives

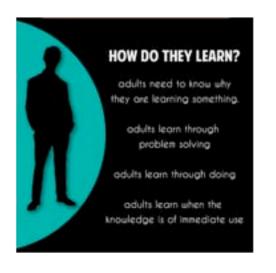
Attending this session will help you:

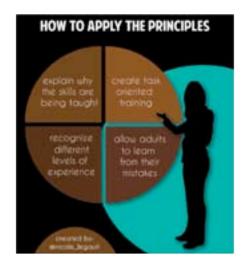
- Recognize the critical elements of a well-designed curriculum.
- Implement instructional design processes in your workplace.
- Identify areas for potential improvement in your existing instructional elements.
- Locate additional resources for instructional system development.

Relevance

Instructional system design (ISD) is a process that helps you find the right tools to create the best course materials for your students. The ISD process will give you a roadmap to learning, and it'll help you adapt and improve your curriculum. And that's the how you provide your students with an effective learning experience.

It doesn't matter if you are planning for a single learning event or assembling an exhaustive curriculum – you'll do a better job if you know the fundamentals of instructional system design.





THURSDAY PROGRAM

Thursday Session: Teaching Science to Non-Scientists

Chris Dorsi and J West will moderate this discussion with Bill Spohn on the challenges of explaining complicated products and selling non-tangible benefits to people who say they don't understand or care about science. We use a remote hook-up to Bill's office to demonstrate some of the collaborative tools we studied during the week. You'll have plenty of time to get your questions answered by one of the most seasoned technical trainers around.



Objectives

In this session, you'll gain these types of knowledge.

- Identify some new ways to use web-based tools for collaborative meeting and training.
- Use web-based tools to incorporate multiple learning domains into your training.
- Learn how one very successful trainer has learned to penetrate the "science barrier" with his customers.
- Use distance collaboration in your organization in ways that are easy and efficient.

Relevance

This session is designed to illustrate how, with proper planning, you can use a variety of delivery methods to communicate with and educate the people in your organization. If you haven't yet used distance collaboration tools, this session will help you get started. If you're already using these tools, we'll show you some advanced tricks. As a bonus for those attending this session, one of our facilitators will donate an hour of time to your next remote meeting using one of these tools.

Thursday Session: Polishing Your Skills

We take this time to learn more about the skills of public speaking, group moderation, and classroom management. We'll study this both from the angle of personal skill development, but also as a set of tools that support those in a position of leadership – trainers, supervisors, and business owners.

We'll study the proven psychology of learning and relate it to the work you do. Then we use the week's lessons as case studies. And we'll help you develop a personal continuing education plan that's sustainable and tuned to your needs and interests.

Objectives

When you take part in this session you'll gain these skills.

- Identify ways in which you can improve your speaking skills.
- Identify ways in which you can improve your skills of leadership, group management, and teaching.
- Learn to find and create situations in which you can practice your these skills.
- Learn to select instructional methods that leverage your innate skills and interests.

Relevance

This session will help you to transfer the skills from the preceding days into practice. Our goal is to help you improve your ability to synthesize ideas, think on your feet, and pass your knowledge onto others in a clear, relaxed, and efficient manner.

Friday Session: Optimized Learning Principles

We start the day by comparing the ways in which we've all learned things in the classroom and in the field. We'll identify the different types of learning styles, and consider the best ways to learn, and teach others, the distinctly different tasks that require knowledge, skills, and abilities.

Objectives

- Practice sorting learning objectives into tasks based upon knowledge, skills, and abilities.
- Identify the best combination of venues for learning different objectives.
- Learn how to create crossover training opportunities that combine self-study, classroom, and field training.

Relevance

This lesson will help you improve the effectiveness of your own learning process by studying in the most appropriate combination of venues.

Friday Session: Mastering Tough Topics

In this workshop, we address difficult technical topics in the building construction and home performance industries. We focus on procedures that are both commonly required, but difficult enough that they are often executed incorrectly: combustion testing, blower door testing, and zone pressure diagnostics. But this approach can improve the quality and consistency of relatively non-technical procedures as well.

We take a building-block approach to understanding, teaching, and performing these procedures. We break each procedure down into separate concepts or sub-procedures that are grouped either by 1) the order in which procedures must be performed, 2) the tools used for the procedure, or 3) the materials that are applied by the procedure. In any case, whether you're an instructor or a technician, you're more likely to understand and reliably perform the task at hand once you understand the concepts and sub-procedures, and their relationship to one another.

Objectives

Attending this session will help you:

- Convert complex procedures or concepts into logical smaller components.
- Recognize the functional relationships among sub-procedures or concepts.
- Develop an ability to understand and expand your knowledge of tough topics.
- Discover how you can best learn about, remember, and execute difficult technical procedures.

Relevance

This session should help you develop new methods of learning and teaching, a useful lifelong skill for both instructors and technicians.

Friday Session: Practicing Tough Topics

In this session, we apply what we learned in the Mastering Tough Topics session by working with tools and props in the Solar and Building Science Learning Center . We'll do a quick evaluation of your individual skills, then set up a collaborative hands-on practice session in which we'll show you how to understand, perform, or teach a specific procedure or concept.

Objectives

Attending this session will help you:

- Create building block concepts for learning and teaching specific hands-on procedures in the classroom and field
- Learn, and truly understand, a new procedure or concept.
- Demonstrate the use of tools and props for teaching tough topics

Relevance

This session is relevant for technicians who need to learn new skills, teach new skills to co-workers, or explain procedures to customers. It's relevant for trainers who want to utilize a wider range of learning domains when teaching technical topics.

Friday Session: Emerging Truths of Building Science

In this closing session, we delve into the big questions of the day in the housing industry. We'll develop a vision of how the current evolution of materials and techniques affect our livelihoods, and we'll summarize our day's work with exercises that are linked to Habitat X worksheets and support your ongoing education.

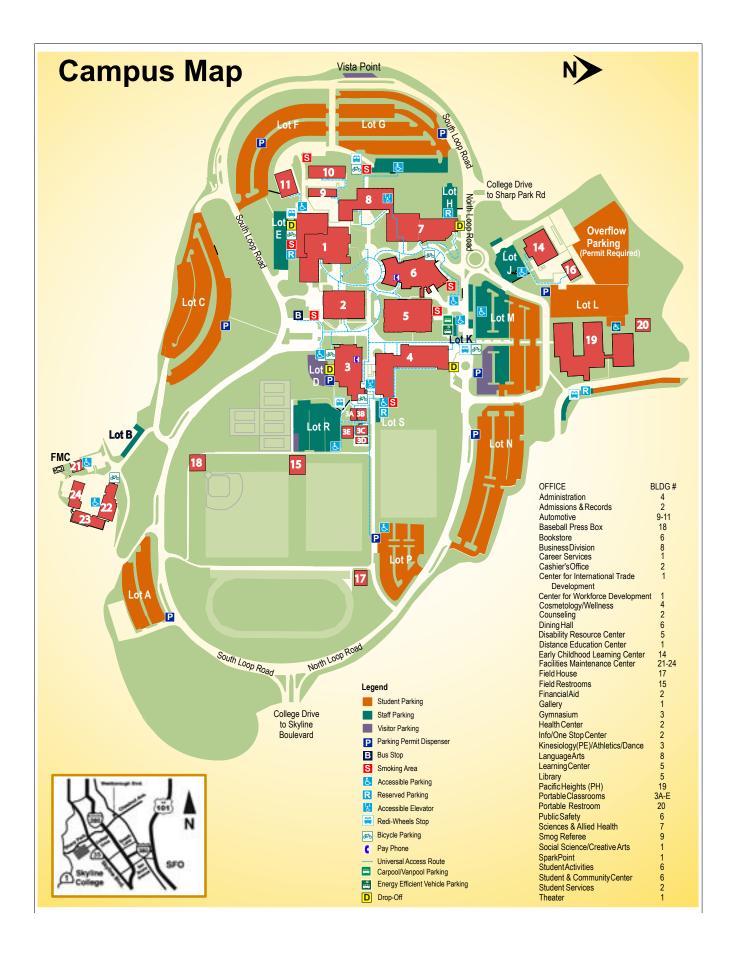
Objectives

Attending this session will help you gain awareness and make plans for your career or business.

- Recognize some likely evolutions in the building performance industry.
- Identify industry trends that apply to your professional development.
- Develop plans to take advantage of evolving opportunities in the building performance industry.

Relevance

To meet our professional goals, we all need to plan for the future. In this session, you'll have an opportunity to develop a shared vision of where the building performance industry is going, and to build long-term relationships with other people in the room.



SAVE THE DATE

9

Habitat X Summer National Conference

July 22-25, 2013

Join us for four days of focused collaboration and summertime fun.

On the campus of Carroll College in Helena, Montana.

Optional three-day guided tour of Glacier National Park.

Early bird discounts for registration are now available.

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Hosted by Skyline College and sponsored by TruTech Tools, Efficiency First California, Building Performance Center, and the Home Performance Contractors Guild of Oregon.

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