The Texas Green Corridor Collaborative

Integrating Green Jobs Skills
from
Dallas to San Antonio
Colleges...
Workforce Investment Boards...
Industry...

Green Jobs Business Council participants include:
- Austin Energy
- Air Conditioning Contractors of America (ACCA)
- Beck Group
- Bradco Supply
- Cisco
- Cpower
- CPS Energy
- Dell
- DirectEnergy
- Dow
- Goetting & Associates
- GridPoint / Standard Renewable Energy
- HelloVolt
- Hunt Power
- Image Engineering Group
- International Brotherhood of Electrical Workers (IBEW)
- Iron Workers Union
- Meridian Solar
- National Instruments
- Oncor

- Pedernales Electric Cooperative
- Plumbing-Heating-Cooling Contractors (PHCC)
- Prudent Energy
- Sheet Metal Workers International Union
- Siemens
- Strand Brothers
- TDIndustries
- Techsun Solar
- Texas Association of Builders
- Texas Building & Construction Trades Council
- Texas Energy Service Companies (TESCO)
- Texas Home Energy Rating Organization (TX HERO)
- Texas Renewable Energy Industries Association (TREIA)
- Texas Solar Power
- Trane
- Wal-Mart
- YPS
Research & reports...

Retrofitting the Workforce: Report #1
Commissioning and Retro-Commissioning

Retrofitting the Workforce: Report #2
Geothermal Heat Pumps
(Geothermal Heat Exchangers)

Retrofitting the Workforce: Report #4
Energy Storage

Retrofitting the Workforce: Report #3
Smart Energy Technologies

Texas Foundation for Innovative Communities
Good Company

May 2010
Green
Is a police officer an IT worker?
What we’re really looking for is shades of green…

Existing occupations and coursework need to be greened…
For the subsequent “Greening the Curriculum” project...more industry input!

120+ SMES
SMEetings included...

• Commissioning
• Advanced building controls
• Solar water heating
• Green construction management
• Green sales
• Energy auditing

• Residential HVAC
• Commercial HVAC
• Smart Grid
• Geothermal heat pumps
How did we organize that input?
SkillsNET reports...

**EEERE Training Program**

Detailed Work Activity Data Collection
Detailed Work Activity Performance Measures
Training Recommendation Profiles

Work Group #6 Occupation(s) in this Worksheet:

Energy Auditor (Residential)

SkillsNET Corporation
The following training recommendations were determined during Subject Matter Expert meetings using a vetted list of Detailed Work Activities for one or more occupations. For the purposes of this exercise the DWAs are the Terminal Learning Objectives (TLOs). The instructional designer will need to develop enabling learning objectives (ELOs) (tasks, sub-task, procedures, etc.) that are necessary to accomplish the TLO.

**Training Recommendation 1:**

**Method**
Training is to be done off-site in a classroom setting. The trainer should take a typical classroom approach via lecture and visual displays. However, the trainer can also use Computer-Based Instruction, which uses a computer program as the basis of instruction. Furthermore, self-directed learning, which is defined as a process in which individuals take the initiative, responsibility for, and control of their own learning can also be utilized.

**Time of Practice**
Training should be relatively short in length taking anywhere from a few hours to a couple of days.

**Structure of Practice**
The structure of practice refers to the training conditions necessary for practicing job relevant Learning Objectives. In this case, massed practice should be utilized, which is training that takes place without any or with a few breaks during the training of a Learning Objective. In addition, variable practice should take place, which is training with a variety of context characteristics that learners experience while learning and practicing a specific Learning Objective. Finally, practice should be random which is training several different but related skills during the same practice session.

**Hands-on Practice**
Little amount of hands-on practice is recommended. This means that a small proportion of training should be devoted to hands-on practice. This can range from 0-19%. Please note that if the Learning Objective is a motor Learning Objective a high amount of hands-on practice could be used if the trainer deems necessary.

**Meaningfulness**
*Contextual examples* should be provided to the trainees that are specific to their jobs. This allows the trainees to see how the training will fit into their everyday working world.
Labor market meetings...

- Research
- Collaboration
- Reporting
Collaborative curriculum development...
Possible Extensions of Current Project

• Extend curriculum to other colleges

• Engage high school STEM and CTE programs
  • Create dual credit programs

• Engage universities
  • Create articulation agreements

• Engage NSF and other national entities

• Include other industries
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