Oklahoma GSHP Initiative
Jim Bullington
Trade & Industrial Education
Oklahoma Department of CareerTech
jbull@okcareertech.org
405.743.5424

Objectives for Business and Industry
- Describe the Oklahoma CareerTech GSHP Initiative Model
- Provide my contact information for you to share with your state CareerTech leadership
- Provide contact information for your State Director of Career and Technical Education
- Encourage you to contact them to get an initiative rolling

Who is Oklahoma CareerTech?
- 29 Technology Center districts
- 57 campuses (not including Skills Centers)
- 395 comprehensive school districts with C/T
- 550 Comprehensive High Schools with C/T
- All 77 counties served by CareerTech
- 72 counties served by a Technology Center
- 150,000 secondary (HS) students
- 355,000 adult students

Technology Center Map

Who is Trade and Industrial Education (T&I)?
“Your Workforce Source...For GSHP Technicians”
- Occupational Division of OK CareerTech
- Full-time daytime, accredited programs
- 54 trade areas such as Auto service, Auto collision repair, Cosmetology, Welding, HVAC
- Not Health, Not Ag, Not Business, Not Family/Consumer Sciences
- 19 Full Time, 3 Multi Trade, 2 Skills Centers,
- 1 Career Exploratory, and OSU-Inst of Tech

Who am I?
- Assistant State Program Manager for T&I
- Specialist for HVAC, Electrical, Plumbing
- IGSHPA member
- Former IGSHPA technician
- Happy GSHP owner!
Objectives for the OK Initiative

- HVAC students completing Oklahoma CareerTech Centers will be familiar with all aspects of GSHP system design, installation, troubleshooting and repair including HDPE butt and socket fusion
- Develop a plan to scale the project nationally and share Oklahoma data and resources with CareerTech HVAC centers nationwide

Where We Started

- 1988: Exxon Overcharge Grant-IGSHPA
- Partnered with then “Vo-Tech”
- Seven pilot sites in Oklahoma Vo-Techs
- Drilled wells, installed loops and equipment
- Proved challenging to HVAC teachers
- Little sustained momentum
- Supervision changes
- Resumed in 2009

Goals

- 30-hour capstone course for HVAC students
- Statewide on-line curriculum
- IGSHPA/NATE/HDPE fusion certified instructors
- Consistent workstation equipment
- State-negotiated hardware discounts
- Turnkey equipment list for school purchasing
- Scale to national educators

Timeline

- November 2009 instructor training
- Ongoing training for new instructors
- IGSHPA exhibit October 2011
- Vendor negotiations – Fall 2011
- HDPE fusion training – Spring 2012
- Unified equipment list – Spring 2012
- Purchasing – (currently) – Complete for the most part
- Curriculum rollout and revision – Fall 2012
- IGSHPA presentation—“Selling Initiative in Your State”
- National CareerTech article – Fall 2012
- National HVAC educators’ conferences – Spring 2013

Course Outline

- Introduction to Ground Source Heat Pumps
- Performance of GSHP
- Description of Ground Source Heat Exchanger (GSHEX)
- Pipe Types and Uses
- Selecting the GSHP Equipment
- Installation
- Polyethylene Pipe Fusion
- Commissioning
- Startup Procedures
- Troubleshooting

30-Hour Curriculum
Equipment/Vendor List

Website Resources

- GSHP.OKCareerTech.org
  - 30-Hour GSHP Course Outline
  - Equipment /Vendor/Contact list
  - Links to State C/T State Directors
  - www.careertech.org
  - Click Who We Are
  - Click State Director List
  - Your State CareerTech Director’s Contact Info
Kristian, student, Mike Johnson, Instructor, John and Matthew, Students
Indian Capital Technology Center

Tony and Slaton, students
Jerry Pickering, Instructor
Gordon Cooper Tech Center

Questions?

Thank You
For Your Help
Spreading the
Word!