

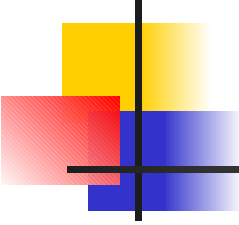


Industrial Sector Employer Panel Presentation

ACCD Workforce Literacy Summit

April 22, 2008





ACCD Workforce Literacy Summit

Employer Panel: Industrial Sector

- David Lindsay – Texas LEARNS State Advisory Committee - Business Rep; LyondellBasell Industries – retired
- Wayne Oswald – Houston Business Roundtable - Executive Director
- Janell Baker – HCDE - Director of Adult Education; Texas LEARNS



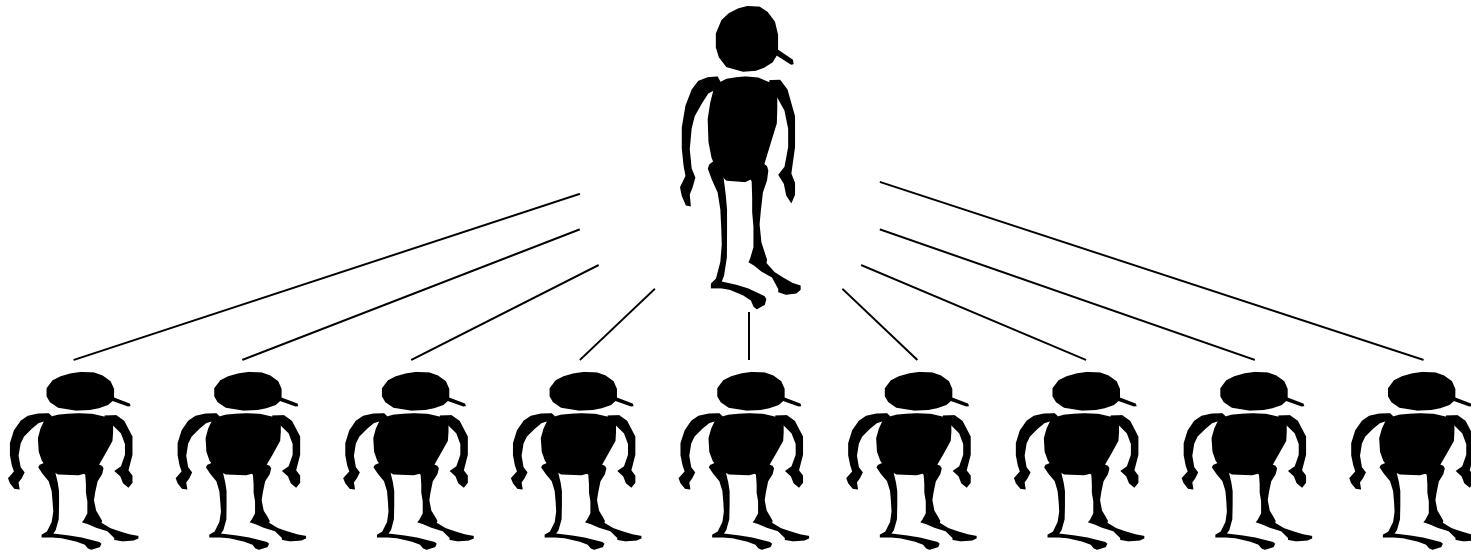
Industrial/Construction Sector - Background

- Large Owner company manufacturing sites
 - English speaking employees
 - Work together in associations (HBR, GBRIA)
- Medium – Large Contractors provide maintenance and construction support
 - Primarily English-only since 1995
 - Work together in associations (ABC)



Industrial: People Facts – the Focus is on the “9”

Many jobs are outsourced to contractor and supplier roles to support direct industrial jobs.



Texas Gulf Coast Multiplier is 9X1



Industrial: Driving Forces for Use of English in Workplace

- Safety
 - Effective two-way communication within area and adjacent areas “of work place hazards”
 - Understand messages broadcast on plant PA systems that warn of releases, upsets, emergency instructions, etc.
 - Controlled access sites, Must pass OSHA & site safety tests given in English





Industrial: Drivers for Addressing Language & Literacy Needs

- OSHA 1910, Process Safety Management (PSM)
- SAFETY (No harm to people)
- Environmental Compliance / Respect Neighbors
- Quality/Asset Integrity - we expect/require craftsman like work
- Labor demands - we need skilled labor and lots of it to meet current and projected workload demand





NCCER Created to Address Workforce Shortage & Training

- NCCER (National Center for Construction Education & Research) founded in 1996 & affiliated with University of Florida
- Not-for profit education foundation governed by owner companies, contractors and partner associations
- Funded by cents/hour funding agreement





Industrial: NCCER Developed Contren[®] Learning Series

- Standardized, competency-based curricula/training guides and assessment program built on industry standards by construction industry experts and educators
 - 45 Craft Professional Areas
 - Construction Management Academy (3 Areas)
- Portable credentials via National Registry
- Published by Pearson, including web-based Contren[®] Connect



Industrial: Resources/Partners for Addressing NEF/LEP Needs

- National level
 - NCCER (<http://www.nccer.org/>)

- Local level
 - Harris County Dept of Education (HCDE)
 - Local Community Colleges
 - Area Safety Councils
 - Construction Maintenance Education Foundation (CMEF)





Industrial: Expectations from Education and Training Providers

- Assess worker's literacy/ESL level
- Coordinate/Conduct ESL courses - incumbent workers, new hires
- Tie ESL courses to industry skills training
- Require English competency to graduate high school
- Raise adult learner knowledge to minimum 8th-grade level



Industrial: Actions to Address Workplace Literacy Issues

- Non English Fluent Worker Guidelines (refer to GNOBR/GBRIA guidelines)
- NCCER Spanish-language initiatives
- HCDE partnership initiatives





Industrial: Actions – GBRIA NEF (Non English Fluent) Guidelines

- Initial guidelines & current practices for allowance of NEF workers in plants
 - Developed by joint task force - GNOBR & GBRIA (Jan 1, 2008, Rev 1)
- Workers must still meet US legal status, substance abuse testing & criminal background requirements



Industrial: Actions – Examples of GBRIA NEF Guidelines & Practices

- General Management
 - Specific policies & plans
 - Community Response
 - Cultural issues
 - Which language- Spanish
 - Bi-lingual employees & supervision
 - Scope of NEF workers
 - PSM Compliance
- Mngt / Communication
 - Identification of NEFs
 - NEF/Bi-lingual ratio
 - Translations:
 - Permits
 - Signage
 - Work instructions
 - Emergency actions
 - Skills verification



Industrial: Actions - NCCER

Spanish-language Initiatives

- Translating selected construction craft assessment & curricula materials (\$0.5 MM effort)
 - Industry driven language using conversational “Span-
glish” supported by word variations in parenthesis
 - Utilization of SME teams (i.e. Zachry, Austin Industrial)
 - Standardized translation process
 - Training process documents for bi-lingual instructors
- Partnership with cNI (Construct Net International) to produce web-based Construction English & Spanish & computer use courses



Industrial: Actions - NCCER

Spanish Translation Process

- Translation of Assessment (most levels)
- SME Workshop to validate Assessment
 - Identify problem words, solutions and accuracy
- Release of the Assessment
 - Pass/Cut score varies according to SME committee
- Development of technical glossary
- Translation of the book (only Level 1 curricula)





Industrial: Actions - NCCER

Spanish Translations Completed

■ Assessments

- Core Curriculum
- Concrete Finisher
- Industrial Insulator
- Industrial Pipefitting
- Masonry, Level 1
- Reinforcing Ironwork
- Rigging Fundamentals
- Scaffold Builder

■ Curriculum/Guide

- Core Curriculum
- Field Safety
- Sprinkler Fitting
- Scaffolding
- 7 others currently in production



Industrial: Actions -HCDE

Workplace Literacy Initiatives

- ESL classes for incumbent workers – flexible locations and hours
- Reading/Math/Writing skills classes
- Utilization of I-BEST training model to teach NCCER Core Curriculum (TWC grant)
- VESL Safety classes
- Technology classes





Industrial: Actions -HCDE

- Modification of industry material for the LEP individual
- English support for industry specific classes
- Identify Scholarship/Intern Resources
- Job Readiness Classes – Soft Skills
 - Cultural Issues
 - On-Line Application



Industrial: Obstacles/ Challenges to Addressing Workforce Literacy Needs

- Must meet Safety requirements
- Regional vocabulary differences & limitations of written communication
- Lack/use of literacy/language assessment tools & embarrassment of low literacy employees to voice reading comprehension issues
- Lack of audio-visual training & audio testing
- Cost of education & time to go to class





Industrial: Learnings

- NEF workers are resourceful and willing to work, but language barriers are limiting their usefulness
 - More effective training processes needed to utilize them in more technical crafts (i.e. Electricians, Pipe fitters, Instrument Techs, Millwrights due to requirements to read instructions, blueprints, schematics, code rules - all in ENGLISH)
- Must address cultural factors (i.e. establish relationship, gain trust , family priorities)
- **Goal - Solve VESL challenges and create English proficient workforce**

