Recruiting Your Most Important Asset

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Fundamental Questions

Do you get as many good applicants for your apprenticeship program as you would like?

Are you satisfied with the quality of the apprentice applicants?

Do you believe that a better quality workforce can be obtained?
Why is this important?

What is at stake is very simple -

The survival of this industry!
Workforce Needs

- Current craft workforce: ~ 5,600,000
- 200,000 – 250,000 construction workers/year
- 6200 sheet metal workers/year
- How and where will we find them?
We have a problem

- Societal focus on college
  - We always want our children to do better than we did
  - The way to do this is to go to college
  - Everyone does not have to go to college, but everyone needs education beyond high school

- Poor image of construction work
Jobs Rated Almanac
Evaluation Dimensions

- Environment
- Income
- Outlook
- Physical demands
- Security
- Stress
- Travel opportunities
- Extras, perks, and amenities
Jobs Rated Almanac
250 Jobs

Top 3
1- Biologist
2- Actuary
3- Financial planner

Bottom 3
248 - Cowboy
249 - Fisherman
250 - Lumberjack

Some Others -
51 - Attorney
70 - Mechanical engineer
175 - President of the United States
Jobs Rated Almanac
250 Jobs

- Surveyor – 173
- Const. Fore. – 182
- Carpet Inst. – 205
- Painter – 215
- Glazier – 216
- Drywall fin. – 220
- Plasterer – 222
- Equip. Op. – 224
- Bricklayer – 225
- **Sheet Metal Worker** – 227
- Carpenter – 228
- Roofer – 242
- Laborer – 244
- Ironworker – 247
Workforce 2020

- The pace of technological change continues to accelerate
- The rest of the world matters
- America is getting older
- The US labor force continues its ethnic diversification
Workforce Breakdown 2020

Workforce By Ethnic Heritage - 2020

- Caucasian: 69%
- Asian: 6%
- Latino: 14%
- African American: 11%
- Caucasian: 69%
Changing Workforce
Workforce Participation Rate

Workforce Participation Rate by Gender

- Male 1975: 77.9
- Female 1975: 73.3
- Male 2005: 46.3
- Female 2005: 59.3
Birth Rates

- US birth rate at 13.9/1000 people is the lowest since records have been kept.
- Ratio of males to females – 1.06/1 is dropping as fewer males are being born.
Ellis Island - 1900
How do we attract people?

- Identify qualified and motivated individuals who want to undertake a particular occupation is difficult.
  - Difficult
  - Time consuming

- Process of cultivation that begins with awareness of the occupation
Six Phase Approach

Awareness

Familiarization

Recruitment

Selection

Training

Retention
Awareness

- Knowledge of the industry and occupations
Bob the Builder

Bob

Wendy
Construction Jack

Construction Jack the Carpenter comes equipped with the following:

- Construction Jack figure
- Hard hat
- Work shirt
- Safety glasses
- Tape measure
- Toolbox
- Overalls
- Hammer
- Tool belt
- Handsaw
- Steel toe boots
- Work Jacket
Carpenters make up the largest group of skilled tradesmen in the construction industry. They learn their trade through formal union apprenticeships, informal on-the-job training, or through employer and vocational education programs. This training teaches them how to draft and read blueprints, do layouts, and cut and join wood, fiberglass, drywall and other materials. They learn to saw, nail, join, drill, plane and glue these materials to each other.

Some carpenters only work on homes and other residential structures framing walls, partitions, floors, ceilings and roofs. Others only work on large commercial buildings such as shopping malls, offices, stadiums and bridges. They may do concrete forming for footings and foundations, or even cement finishing. Still others only perform remodeling jobs, or make and mend furniture, or install prefabricated components into structures. They may be finish carpenter's helpers, cabinet installers, home renovators, or all of the above at one point or another. Many carpenters end up being a "Jack of All Trades" during their career, mastering many different skills along the way.
Construction Jack the Carpenter

Carpenters must be experienced in the use of many different power and hand tools, including saws, drills, chisels and sanders. They must know how to use all of the latest safety tools and equipment. Last but not least, they must be very precise in all of this work, measuring the final results with framing squares, levels and plumb bobs. It takes many years of hard work to master the skills necessary to perform these tasks accurately and professionally. Most carpentry work is physically demanding, often involving work on ladders and scaffolding, lifting and carrying heavy loads, and often performed outdoors in extremes of heat and cold.
Kids’ Awareness

Wee Wizards explore
Making Things
How Manufacturing Works and Why It is Important.

For Grades 5 through 7

Reconfigurable Manufacturing Systems
The NSF Engineering Research Center for
Reconfigurable Manufacturing Systems
at the University of Michigan College of Engineering
Hayward and Callie are opening an old-fashioned puppet factory. Connect the dots above to show how early factories powered their machine tools.

When craftsmen work together to produce the same products their shop becomes a **Factory**. Early factories often used water or steam to power rows of machine tools connected with a long rotating beam called a "line shaft." Line shafts helped them work faster but they still could only build things one at a time.
Painting
our way to a better future

Hard Hatted Women presents the “More than just a Coloring Book/Art Book” of contemporary and creative options for working women of today and the future.
Maggie uses powerful tools as a journeylevel carpenter. When she was an apprentice, she learned all the safety rules and how to use her power tools properly.
Modern Icon

Picture yourself in a non-traditional career.
Awareness

Recommendations

- Sheet metal industry needs to develop awareness materials
  - Construction Jack, sheet metal worker
  - Coloring books
- Develop highly sophisticated Web material
- SMWIA/SMACNA need to work with BCTD and other contractor groups to develop awareness
Familiarization

- Knowledge of occupations
- Knowledge of processes and tools
- Knowledge of how to work with the tools
WREN OR CHICKADEE HOUSE

Materials:
- 1" x 8" x 20" board
- 1" x 6" x 18" board
- 4d finishing nails
- Wood screws

Tools:
- Saw
- Drill
- Tape measure
- Sandpaper
- Phillips screwdriver
- Pencil
- Hammer
- 1 1/2" hole bit
- Adult help

Measure:
- 9 1/2"
- 6"
- 5 1/2"
- 5 1/4"
- 4"

Let's see how this board measures up.

See it all come together at: www.craftmanx.com/kitchen
Girls Inc.

inspiring all girls to be
Strong, Smart, and Bold

- Girls – 8 to 20
- Low to middle income
- 50% girls of color
- Girls only website
- Projects
National Programs

- Operation SMART
- Preventing Adolescent Pregnancy
- Economic Literacy
- Sporting Chance
- Friendly PEERSuasion
- Project Bold
- Media Literacy
- Discovery Leadership
Rosie’s Girls

Summer Program for 11 - 13 year old girls
Rosie’s Girls

- Carpentry – hammering and sawing
  - Build toolbox + community project
- Other Trades – electrical wiring, welding, painting
- Arts
- Girls’ World
Open to girls entering 10th, 11th and 12th grades

Summer camp - training in welding, carpentry, and electrical drafts

Other five events explore training and educational opportunities

Events Six Times a Year.
June ... Girls Construction Camp
July ... Making the Leap to Vocational Training
October ... BE&K Craft Olympics
December ... Industry Guest Speaker
February ... Personal Development Day
April ... Girls' Construction Camp Planning Meeting
Boy Scouts of America

- 11 – 17 year old boys
- Six ranks: Tenderfoot, Second Class, First Class, Star, Life, and Eagle
- Merit Badges
Boy Scout Merit Badges

- American Labor
- Communications
- Computers
- Drafting
- Electricity
- Emergency Preparedness
- Engineering
- First Aid
- Home Repairs
- **Metalwork**
- Model Design & Building
- Painting
- Plumbing
- Safety
- Surveying
- Woodwork
Metalwork

- Read, discuss, and explain safety rules for metalwork
- Define terms, name metals, explain processes
- Perform seven different metalworking activities
- Visit sheet metal mechanic to explore occupations and careers
Metalwork cont.

- Complete one of four options –
- Option 1 – Sheet Metal Mechanic
  - Name and describe the use of the basic sheet metalworking tools
  - Create a reasonably accurate sketch of two useful objects to make from sheet metal. Include each component’s dimensions on your sketch.
Using patterns provided either by your counselor or made by you, make at least two tasteful objects out of 24- or 25-gauge metal. Use a metal that is appropriate to the object’s ultimate purpose:

- Must be constructed using cutting, bending, edging, and either soldering or brazing
- Must include at least one riveted component
- If not zinc or tin-plated, protect from oxidation
It is estimated that one out of every four top unit leaders of Cub Scout packs, Boy Scout troops, Varsity Scout teams, and Venturing crews in the United States is a union member. That’s a lot of union Scout leaders. Thousands of other union members serve youth through the Boy Scouts of America in local districts and councils, and on the regional and national levels.
If I Had a Hammer

- Apply classroom concepts in math, science, social studies, and language arts in a real-life context
- Engage in teamwork and communication
- Instruction and tutoring
- Increase math scores 24.5% in some Memphis City public schools
From Crayons to CAD
Exploring
Learning for Life - BSA

- Exploring – career education program
- Men and women – 14 – 20
- Provide experiences to help young people mature and to prepare them to become responsible and caring adults
- Local community organizations initiate an Explorer post by matching their people and program resources to the interests of young people in the community
Suggested Program Ideas

- Career Opportunities
- Life Skills
- Character Education
- Leadership Experience
- Citizenship
Summer Career Camp 7th grade
Delcastle High School, Wilmington, DE

- **7-a  Building America!** – Campers will create products using skills they learn in carpentry framing and woodworking, piping, and electrical trades. Campers rotate through a new trade area each day, making items such as wooden chests.

- **7-b  Computer "Fun"damentals** – Campers will learn about the insides of a computer. What makes computers work, computer parts and construction, setting up network systems, using software applications and digital photo enhancers, and creating personalized calendars are all a part of this camp’s activities.
Summer Career Camp 7th

- **7-g  Sparks & Flames**  – Campers will learn the techniques of basic HVAC (heating, ventilation and air conditioning) and sheet metal fabrication. Campers will work with light gauge metal, piping, and electrical projects, making such items as nameplates and metal toolboxes.

- **7-h  The Apprentice**  – Campers take the first step towards starting their own business based on their talents and interests. Campers will create their own company, choose a product to sell, and design an internet advertising campaign.
Pre-Apprenticeship Training

- High schools
- Vocational-Technical schools
- Charter high schools for the trades
- Community & technical colleges
- Pre-apprenticeship programs
  - Tradeswomen groups
  - Urban League
  - Hispanic organizations such as Congreso de Latinos Unidos
Pre-Apprenticeship Training Issues

- SMWIA & SMACNA need to be involved
  - Partnering
- What involvement and how much?
- Credit for training received in the pre-apprenticeship period
Workforce Development

- As you sow, so shall you reap!
- Workforce development is a long-term process involving cultivation of potential workers that requires a commitment of time and money.
- Requires both management and labor involvement.
- Given the programs identified, how can you get involved?
Outreach Objectives

- Spread awareness of the sheet metal industry, occupations, and careers
- Identify boys, girls, young men, and young women who have the interest and motivation to become sheet metal workers
- Impress upon kids the importance of math and science in school
- *Track these people!*
Recruitment

- The process of identifying and reaching individuals with a potential interest in the sheet metal industry
Recommendation

“That a module on how to establish and operate a systematic recruiting program be included in the training provided to local training directors and appropriate members of the JATC at one of the training venues they now attend. An NTF professional staff representative should serve as a point of contact and resource for this effort.”

When was this written?

1996
Recruiting

- Affirmative action? *Original concept*
- How many?
  - Short term vs. long term
- What characteristics?
- What sources?
- How to reach them efficiently?
- What media are effective?
- Use of the Web
Recruiting Recommendations

- Position of Director of Outreach & Recruiting be created within the JATC
- In-depth recruiter training program be developed by ITI
- Completion of training program is a requirement to hold the position
- Youth to Youth participants should used in outreach activities
Nontraditional Recruiting

- Women’s groups: Tradeswomen, Inc.; Chicago Women in the Trades; Hard Hatted Women; Wider Opportunities for Women

- Community-based Organizations: Urban League; National Council of La Raza; Asian Pacific American Labor Alliance; Legal of United Latin American Citizens; Coalition of Black Trade Unionists
Nontraditional Recruiting

- Ethnic media: newspapers, magazines, radio
- Churches: particularly in the African American and Latino communities
- Cable TV
Application

- Closure of the recruiting process
- Formal submittal of application
- Methods
  - In person
  - By mail
  - By Web
Selection

- Choosing the applicants with the greatest potential to become outstanding sheet metal workers from the pool of applicants
Selection Criteria

- Basic threshold requirements
  - HS diploma or GED
  - Over 18
  - Driver’s license

- Aptitude test

- Interview

- There must be a better way!
Training

- The acquisition of knowledge and development of the skills and abilities necessary to perform as a journey level sheetmetal worker.
On-the-Job apprentice training is haphazard
- Must become more structured and controlled
- Recordkeeping of OJT activities – National guidelines, Section XVII & XVIII

Transition to Trainer
Training

- Sexual harassment prevention
  - Hostile work environment
- The role of the
  - Contractor
  - Foreperson
  - Craft worker
Training

- Cultural Diversity & Awareness
- Quote: “We’re moving from the Old World to the Third World”
- How do we deal with it?
Retention

- Once we have a qualified, capable person, how do we keep them as apprentices and journeylevel workers?
Retention Recommendations

- Minority & women’s caucuses
  - Independent of union
  - Operated as a separate organization
  - IBEW examples
  - Mechanism for the discussion of relevant issues
Retention Recommendations

- Mentoring
  - Particularly important for apprentices
  - Someone an apprentice can talk with
  - The mentor should be someone who has been through the apprenticeship process
  - Does not have to be a woman or minority
  - Must understand the pressures and how to deal with them
Retention Recommendations

- A representative of women and minorities must have a position within the union that allows for direct access to the general president.
- Same at the local level.
- Appropriate language added to union constitution on sexual and racial harassment.
Women In The Trades
Make a Difference

Committee of Women in the Trades

For further information, please contact:
Committee of Women in the Trades Co-Chair Nancy Gentile
at ngentile@iupat.org
Committee of Women in the Trades

MISSION STATEMENT

The Building and Construction Trades Department Committee of Women in the Trades is committed to increasing the number of women in skilled trades careers by promoting strategies for recruitment, retention and leadership advancement. The committee will give voice and visibility to these issues with the Building Trades Department, its affiliates and industry partners.
Retention Recommendations

- Union & contractors
  - Appropriate language added to collective bargaining agreement
  - An office must be established at the national level to develop:
    - Contacts with national organizations
    - Outreach materials
    - Recruiting materials
    - Web design and materials
Retention
Recommendations

- Contractor
  - Need to press for a professional environment on the jobsite
  - Need for coordinated action with other site contractors
  - Role of forepersons – agent of management
Retention
Recommendations

- Need to provide a system whereby workers can get information on child care and transportation – not just a female issue
- Ombuds – need an informal way of settling disputes
Retention Recommendations

- Free up hours for good people –
  - Top Notch Producers – 15%
  - Solid Contributors – 70%
  - Cruise Control - 15%
  - 3 strikes and you are out

- Provide stable employment
And the beat goes on....

- What are your questions? Concerns?