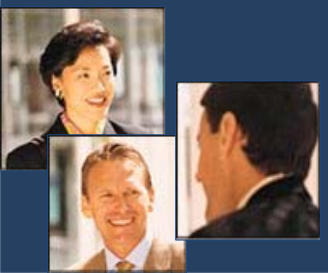
Skillshed Analysis

A Tool for Future Strategies

Factors that Affect the Job Market

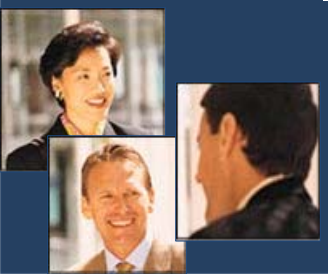
- Turnover Rates
- Wages
- Workforce/Employer Connection
- Skill Mismatch
- High Growth Occupations



Turnover Rates

Overall Industry in Iowa
- 7.7%

- Retail Trade industry
  - 9.4%
- Construction industry
  - 9.3%
- Finance & Insurance industry
  - 4.4%
- Healthcare industry
  - 6.8%



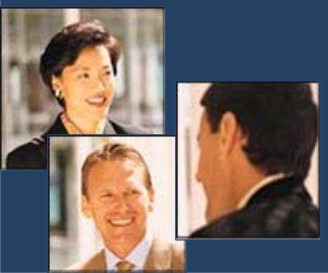
Wages

Registered Nurses

- Median state wage - $21.56/hr
- Employer starting wage - $24.60/hr

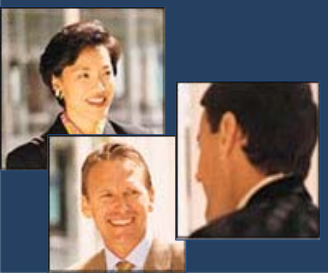
Nursing Aides, Orderlies, & Attendants

- Median state wage - $10.23/hr
- Employer starting wage - $8.71/hr



Maybe there's simply not enough

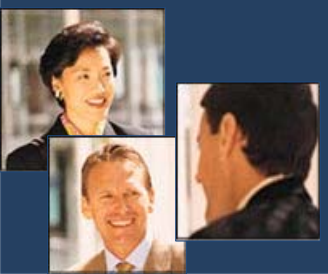
- Economic trends can cause an increase in occupational demand
  - Registered Nurses
  - Nursing Aides, Orderlies, & Attendants
  - Engineers
  - Wind Turbine Mechanics



So…how do we find out…

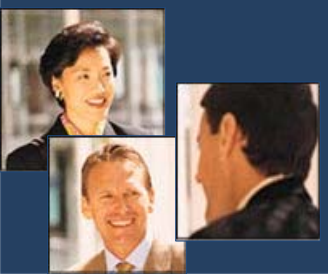
- Identify the current skill and knowledge level of workforce within the region/state (supply)
- Identify occupational clusters based on the work activities, knowledge, and skills
- Identify the needs of the industries within the region (demand)
- Identify education/training needs to bridge the gap between the current workforce and the business needs

That's a Skillshed Analysis



Sources Iowa Uses

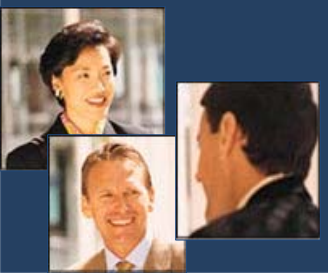
- Supply
  - Laborshed Study
- Demand
  - Workforce Needs Assessment
- Translation of Occupations
  - Occupational Information Network (O*NET)
    - Work Activities
    - Knowledge
    - Skills



What is a Laborshed Study

- Telephone survey
- Based on current commuting patterns
- Random sample of the population 18-64
- Results then projected to the entire area

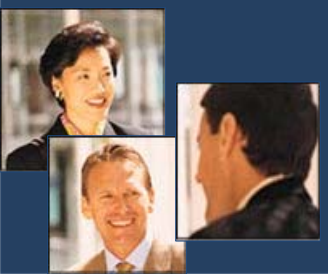
Identifies the current skill and knowledge level of workforce within the region/state



Workforce Needs Assessment

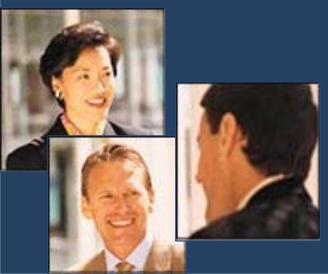
- On-line job vacancy survey
- Sample of an estimated 8,000 employers statewide
  - All industries
  - All employment sizes
- Current vacancies
  - Education required
  - Experience needed
  - Wages
  - Length to fill

Identifies the needs of the industries within the state/region



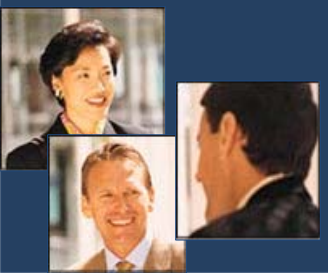
Identification of Strengths/Weaknesses

- Translate Standard Occupational Code (Supply & Demand)
- Use O*NET to map
  - Work Activities
  - Knowledge
  - Skills
- Identify occupational clusters
  - *Occupational cluster, or skill set cluster, is the aggregated set of jobs held by a geographically-defined group of people or those needing to be filled by employers*.



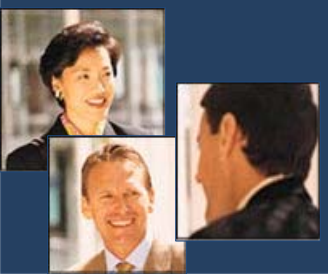
What do we do?

- Map the education and training needed to adapt current skill sets into a skill set within an industry
  - On-the job training
  - Apprenticeships
  - Certification
  - Degree programs
  - Trade and vocational programs
  - Technology-based learning



What Occupation is this?

Troubleshooting
Repairing
Equipment Selection
Active Learning
Reading Comprehension
Critical Thinking
Complex Problem Solving
Installation
Active Listening
Equipment Maintenance



What could it be?

Wind Turbine Mechanic

Automotive Service Technician & Mechanic

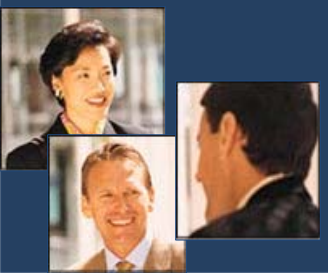
Network Administrator

How do I get there?

- Experience: Interacting w/computers
- Courses/certification in:
  - Engineering Technology
  - Telecommunications
  - Software programs

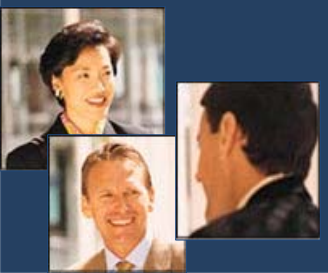
Challenges to Multi-State Usage

- Sources of data – what do we all have?
- Which variables should we use to profile occupations (knowledge, skills, abilities)
- Employer expectations regarding skilled workers
- Identification and development of curriculum/training programs
- Identification of emerging industries and occupations



Goal of the Midwest Innovation Initiative (MI2) Consortium

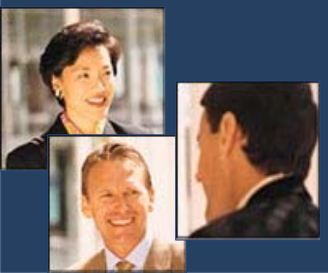
- Identify data to be used
- Develop methodology which can be replicated
- Provide a model to states
  - Sources
  - Process
  - Outcome



Example Gap Analysis

- Inter- and Intra- Occupational cluster skills transferability
- From low projected growth to high projected growth and current openings

Related Occupations			Median Wages	Overlapping Skills and Education	Required Areas for Improvement
Healthcare	Emerging Occupation: Registered Nurse		$23.80		
Healthcare	Career Pathways	Teacher's Assistants	$ 9.53	Clerical; Interpreting the Meaning of Information for Others	Medicine and Dentistry; Customer and Personal Service; Handling and Moving Objects; Inspecting Equipment, Structures, or Material
Healthcare	Career Pathways	Nursing Aides, Orderlies, and Attendants	$11.21	Customer and Personal Service; Handling and Moving Objects	Biology; Therapy and Counseling; Provide Consultation and Advice to Others; Communicating with Persons Outside Organization
Healthcare	Career Pathways	Medical Equipment Preparers	$14.57	Administration and Management; Controlling Machines and Processes	Medicine and Dentistry; Therapy and Counseling; Performing for or Working Directly with the Public; Assisting and Caring for Others



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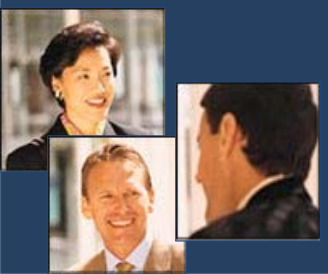

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