



---

# The Feasibility of Using O\*NET to Study Skill Changes

Suzanne Tsacoumis  
Human Resources Research Organization (HumRRO)

Prepared for the Workshop on Research Evidence Related to Future Skill Demands  
Center for Education  
The National Academies

May 31, 2007

# What is O\*NET?

---

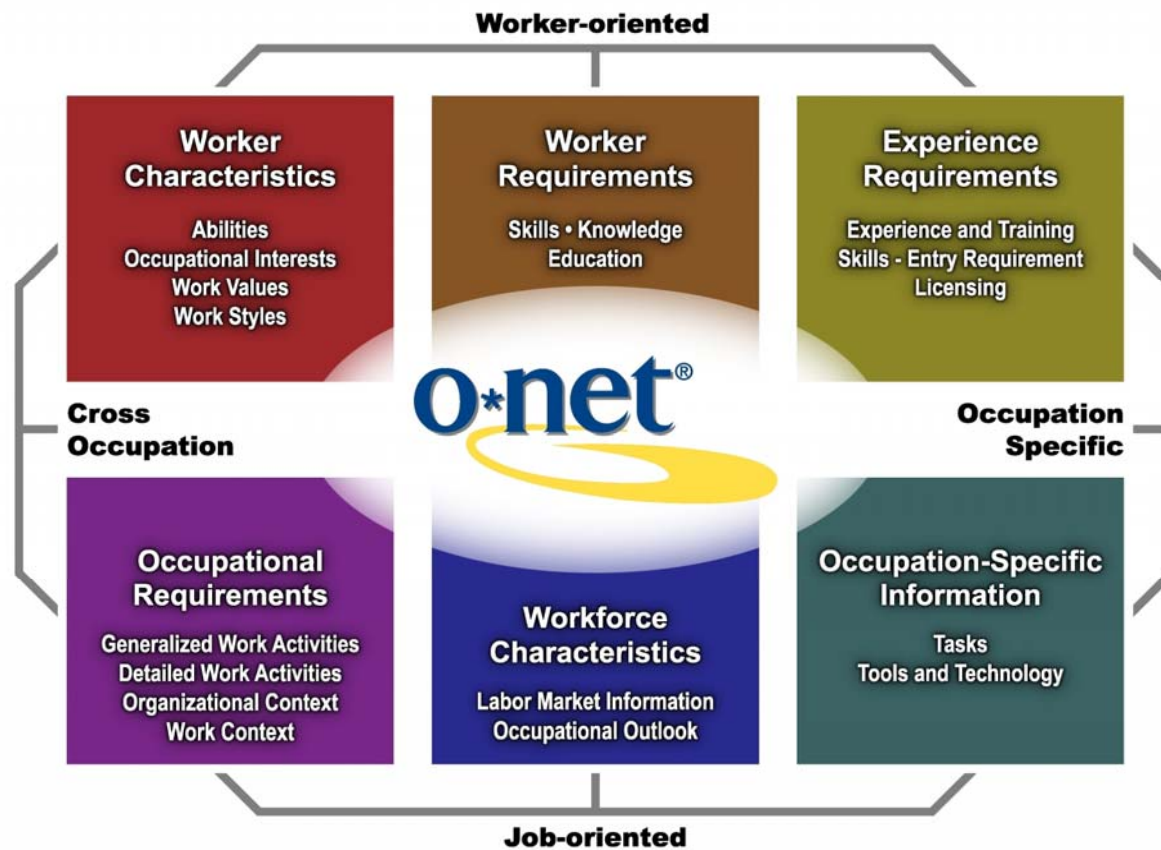
- Comprehensive system for collecting and disseminating information on occupational and worker requirements
- Uses a “Common language”
- Flexible skills-based system with emphasis on skills transferability
- Framework for organizing job and worker information

# O\*NET Structure

---

- The O\*NET Content Model
- Occupational Taxonomy (Standard Occupational Classification – SOC)

# O\*NET Content Model



# Occupational Taxonomy

---

- Based on the Standard Occupation Classification (SOC, Office of Management and Budget)
- O\*NET-SOC 2006
- 949 titles
- 812 data-level occupations

# Sources of Occupational Data

---

- Incumbents/OEs provide ratings on:
  - Occupational tasks
  - Skills
  - Generalized work activities
  - Knowledge
  - Education and training
  - Work styles
  - Work context areas
- Job analysts provide ratings on abilities

# Data Collection Overview

---

High quality data from national sample of incumbents/occupational experts

- Strong business participation
  - 70%+ response rate
- Strong employee participation
  - 66%+ response rate
- Strong national association support
  - 400 plus endorsements
- OMB Approval

# O\*NET Database

---

- Original database: Analyst Database
- Current database: Incumbent/OEs, Analysts
  - All descriptors in Content Model
  - Supplemental data:
    - Detailed work activities
    - Emerging tasks
    - Lay titles
    - Related occupations
    - Tools and technology
- Updated data on 680 occupations

# Example Uses of O\*NET Data

---

- Business and staffing agencies
- Education
- Assessment and Career Information Delivery System
- U.S. Armed Forces
- International community

# O\*NET and Skills Demands: Current Examples

---

- Projects Managing Partnership (PMP)
  - O\*NET data and state short- and/or long-term occupational projections:
    - Current skill supply
    - Project demand
    - Potential skills gaps and replacement needs
- O\*NET, BLS and Census data to identify skills that drive the economy

# O\*NET and Skills Demands

---

- Skills = skills, abilities, generalized work activities
- Compare skills data in Analyst Database with updated data
- Evaluate emerging trends across occupations
- Team O\*NET with Occupational Employment Survey: have occupations needing particular transferable skills grown

# Summary

---

- Uses common occupational taxonomy
- Rich source of occupation data based on large number of descriptors
- Trends in changes in skill demands across occupations
- Some comparisons of skill demands over time within occupations (more in future)