

Ohio

Department of
Job and Family Services

Green Jobs and the Ohio Economy



Training and Education Programs

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Overview of Research

1. Conducted research regarding best practices in green-related training and education
2. Conducted a survey of educators within the University System of Ohio about green-related programs
3. Developed a database of green-related programs to be used by the State of Ohio as the foundation for an online green program inventory

Best Practices Research Overview

- To identify best practices:
 - reviewed literature
 - interviewed educators and businesses
 - consulted with the Ohio Green Pathways Advisory Panel (OGPAP)
- To illustrate best practices:
 - developed case studies for nationally-recognized programs and example programs in Ohio
- Best Practice research informed the development of educator survey questions

7 Selected Best Practices

- ❑ Program curriculum is based on an assessment of regional workforce demands
- ❑ Program curriculum is informed by industry input, including industry-recognized standards/certifications
- ❑ Program has clearly defined strategies for measuring success
- ❑ Program provides workplace experience for students through internship or apprenticeship opportunities

7 Selected Best Practices, Cont'd

- ❑ Program includes hands-on training with equipment of the type likely to be used in the workplace
- ❑ Program is designed and implemented with partners (such as labor unions, community organizations, state and local government agencies, other educators, and employers)
- ❑ Program is purposefully situated within a larger green career pathway approach

Educator Survey Overview

- ❑ Narrowed scope of survey to 7 selected best practices with assistance from the Ohio Green Pathways Advisory Panel
- ❑ Drafted survey questions with assistance from project sponsors and partners
- ❑ Developed email contact database based upon programs in program inventory
- ❑ Narrowed contact list so that no individual received more than 3 surveys
- ❑ 806 surveys were emailed to educators
- ❑ 269 responses were used in the analysis

Survey – Selected Findings

Responding Programs by Green Sector*

Renewable Energy:	124	47.5%
Energy Efficiency:	117	44.8%
Manufacturing:	111	42.5%
Advanced Energy:	102	39.1%
Bioscience:	78	29.9%
Green Building:	78	29.9%
Agriculture/Biomass:	63	24.1%

*NOTE: programs can relate to more than one sector

Survey – Selected Findings

- Programs responding to employer demand:
 - 64% of respondents: program developed due to a perceived current need in the labor market
 - 60%: program developed due to employer requests for education/training in this field
 - 52%: program developed due to perceived future need in the labor market

- Programs using industry standards:
 - 64% of respondents use industry standards and/or certification criteria to develop their program's curriculum

Survey – Selected Findings

- Apprenticeships and Internships:
 - 65% of respondents: internships are required or optional part of program
 - (22.9% required; 42% optional)
 - 19% of respondents: an apprenticeship opportunity is associated with program
- Hands-on Training:
 - 79% of respondents: program includes a hands-on training component
 - Of these respondents, 70% reported that hands-on training equals at least 25% of required coursework

Survey – Selected Findings

- Partnerships reported with:
 - local employers (66% of respondents)
 - educators at other schools (56% of respondents)
 - labor unions (6% of respondents)

- Elements of career pathway approach:
 - 75% of respondents: Program-related career counseling and job placement services provided
 - 63%: Program has transfer articulation agreements in place with other schools
 - 57%: Program performs outreach to secondary schools (K-12 system) to recruit students

Program Database: Overview

- Builds upon prior work to develop green program catalogs for University System of Ohio institutions
- Combines green jobs-related information in three linked categories:
 - green occupations
 - green sectors (utilizing O'Net and OSDS)
 - Green-related education and training programs

Program Database: Overview

- Provides the foundation for the State of Ohio's online green program inventory at:
 - <http://ohiolmi.com/research/research.htm>
- Includes information on over 1,200 green-related programs at over 60 institutions in the University System of Ohio
- Other data indicate that there are well over 2,500 public green-related programs and over 4,000 combined public and private green-related programs

Program Database: Challenges

- Multiple definitions of green
- Fluidity in program offerings – keeping database current
- Reconciling alternative data sources
- Assigning CIP codes



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For Green Jobs Report:

<http://ohiolmi.com/research/research.htm>

QUESTIONS?

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