Architecture & Construction Career Cluster Fact Sheet

Career Cluster Name: Architecture & Construction

Cluster Leader: Home Builders Institute

Career Cluster Overview:

<u>Architecture & Construction Career Cluster Definition</u>: Careers in designing, planning, managing, building and maintaining the build environment.

Cluster Pathways: Design/Pre-Construction, Construction and Maintenance/Operations.

What is a Career Cluster: A Career Cluster is a grouping of occupations and broad industries based on commonalities. The Architecture & Construction Career Cluster includes the following industries – architecture and commercial, industrial and residential construction. Industry career opportunities are represented by a total of 16 career clusters.

<u>Industry/Education Working Together</u>: The Architecture & Construction Career Cluster provides an organizing tool for schools, small learning communities, academies and magnet schools. Partnerships involve states, schools, educators, employers, industry groups, and other stakeholders working together to create curriculum guidelines, academic and technical standards, assessments, and professional development materials for the career cluster.

Student Benefits: The Architecture & Construction Career Cluster links what students learn in school with the knowledge and skills they need for success in college and careers. The cluster approach makes it easier for students to understand the relevance of their required courses and helps them select their elective courses more wisely. Career clusters are designed to motivate students to work harder and enroll in more rigorous courses. The cluster initiative identifies pathways from secondary school to two- and four-year colleges, graduate school, and the workplace, helping students to investigate a wide range of career choices. Students learn about career options and the numerous skilled and professional opportunities in the architecture and construction industries.

<u>Keep Parents Informed</u>: The career cluster approach provides a learning experience for parents. Parents can learn what academic and technical courses their children need for college and a variety of career fields in the architecture and construction industries. Clusters and the high standards that go with them reassure parents that their children will be fully prepared for college and the workplace.

Career Cluster Framework - A Tool for Educators:

Learners: Secondary, post-secondary and adult.

<u>Foundations</u>: **Cluster Knowledge and Skill Statements** are specific knowledge and skills that remain consistent throughout the industries. These knowledge and skills are what every learner/worker (regardless of the occupation he/she is pursuing) needs to know to engage in entry level career opportunities in the architecture and construction industries. These knowledge and skills are based on 10 foundations:

- Academics
- Communications
- Problem Solving and Critical Thinking
- Information Technology Applications
- Systems

- Safety, Health and Environmental
- Leadership and Teamwork
- Ethics and Legal Responsibilities
- Employability and Career Development
- Technical Skills

The statements written for each of the 10 foundations describes the knowledge/skills required of learners/workers to demonstrate competence in the academic and technical areas of the Architecture & Construction Career Cluster process.

There are two additional components that complement the Knowledge and Skills Statements – **Performance Elements** and **Measurement Criteria**. Performance Elements indicate what a learner/worker must know or be able to do as related to the Knowledge and Skills Statement. Measurement Criteria clarifies what is to be evaluated and defines the level of achievement as related to the Performance Elements.

Finally, **Pathway Knowledge and Skills** are those areas that are specific to one or more (not all) of the Pathways (Design/Pre-Construction, Construction and Maintenance/Operations) identified for the Architecture & Construction Career Cluster.

Criteria for Implementation:

The National Association of State Directors of Career Technical Education Consortium (NASDCTEc) has identified specific criteria for system development (state level) and local development of the Career Cluster initiative. For implementation of the Career Cluster framework in the classroom, NASDCTEc states classroom practices (what does it look like?). Implementation criteria follow:

System or State Level

State Plan
Statewide Administrative Support
Statewide Professional Development
Statewide Career Development
Standards-Based Curriculum
State Education Partnerships
Industry Partners
Multi-Measure Assessments/Industry-Based
Credentials or Certifications
Assessments/Industry-Based

Parent and Community Involvement Certifications Economic Development Involvement/ Workforce Preparation

Local Level

Administrative Support
Shared Planning Time
Career Development
Professional Development
Standards-Based Curriculum
Learner-Centered Learning
Education Partnerships
Industry Partners
Multi-Measure

Credentials or

Inter-disciplinary Teams Flexible Schedules Integrated Curriculum

Workplace Learning Parent and Community

Involvement

Essential Classroom Practices:

- 1. The curricula include the Cluster foundation knowledge and skills as well as the knowledge and skills for each pathway within a cluster.
- 2. The curricula are developed cooperatively with partnership teams that include secondary and postsecondary instructors/faculty, academic and technical instructors/faculty, and business and industry representatives.
- 3. State academic standards are clearly identified and reinforced in the curricula.
- 4. Communication (reading, writing, listening and presenting) activities are pervasive in the curricula
- 5. The curricula provide broad information and preparation for multiple careers.
- 6. Assessments and industry-based credentials related to each cluster and its pathways are incorporated.
- 7. Learners develop a career educational plan with instructor/faculty support.
- 8. The curricula supports state and local economic development plans.
- 9. Results are assessed; data are collected and used for accountability and continuous improvement.
- 10. A professional development plan is followed to assure instructional improvement. Copyright 2004, National Association of State Directors of Career Technical Education Consortium. All Rights Reserved.

Cluster Leader Contact Information:

C. Deanna Lewis Manager for Career Services Home Builders Institute 1201 15th Street, NW Washington, DC 20005

Phone: 202-266-8927 Email: lewisd@hbi.org

Resources: States' Career Clusters Initiative www.careercluster.org

National Association of State Directors of Career Technical Education

Consortium (NASDCTEc) www.careertech.org

Architecture & Construction Career Cluster Advisory Committee

Cluster Leader

Home Builders Institute 1201 15th Street, NW Washington, DC 20005 Contact: C. Deanna Lewis

Advisory Committee Members

Associated Builders and Contractors 4250 N. Fairfax Dr., 9th Floor Arlington, VA 22203 Contact: Christine Hess

Associated General Contractors of America 2300 Wilson Blvd., Suite 400 Arlington, VA 22201 Contact: John Heffner

The American Institute of Architects 1735 New York Avenue NW Washington, DC 20006-5292 Contact: Catherine M. Roussel

American Institute of Building Design 2505 Main St. Suite 209B Stratford, CT 06615 Contact: Steven Mickley

American Society of Interior Designers 608 Massachusetts Ave NE Washington, DC 20002 Contact: Jennifer Wilcox Carpenters' District Council of Greater Saint Louis and Vicinity 1401 Hampton Avenue St. Louis, MO 63139 Contact: John Gaal

Arkansas Department of Workforce Education Three Capitol Mall Little Rock, AR 72201 Contact: Mike Haynie

NE Department of Education 301 Centennial Mall South P.O. Box 94987 Lincoln, NE 68509 Contact: Richard Katt

Associated General Contractors – Oklahoma 605 NW 13th Street, Suite A Oklahoma City, OK 73103 Contact: Melinda Traynor

Pennsylvania Department of Education 333 Market Street, 6th Floor Harrisburg, PA 17126 Contact: James Gronski SC Department of Education 912A Rutledge Bldg. 1429 Senate Street Columbia, SC 29201 Contact: Bob Couch

Texas Education Agency 1701 N. Congress Avenue Austin, TX 78701 Contact: Esther Camacho

National Association of Minority Contractors 666 11th Street, NW, Suite 520 Washington, DC 20001 Contact: Owen Tonkins

National Association of Women in Construction 327 S. Adams St. Fort Worth, TX 76104 Contact: Carol Chapman

National Center for Construction Education & Research P.O. Box 141104 Gainesville, FL 32614-1104 Contact: Steve Greene

Skills USA P.O. Box 3000 Leesburg, VA 20177 Contact: Marsha Daves

Architecture & Construction Career Cluster Advisory Sub-Committee

A special thank you to:

Northern Arizona Building Association (NABA) 1500 E. Cedar Ave., Suite 86 Flagstaff, AZ 86004 Contact: Jean Richmond-Bowman

Gold Coast BA 2101 Corporate Dr Boynton Beach FL 33426 Contact: Brenda Talbert

HBA of Midland County 7600 Commerce Ct, Suite C Midland MI 48641 Contact: Rob Wright

HBA of Lincoln 6100 S 58th St, Suite C Lincoln NE 68516 Contact: Carol Andringa

Capital Region B & R Assoc 1004 Princetown Road Schenectady NY 12306 Contact: Rita Sickles

Metropolitan Harrisburg Home Builders Association 2416 Park Drive Harrisburg, PA 17110 Contact: Linda McMasters

HBA of Rutherford County 730-A Middle Tennessee Blvd Suite 5 Murfreesboro TN 37133 Contact: Karyn Beaty

Page 6 of 7 A&C Career Cluster Advisory Committee November 2005