



Spectrum of Services

The Center for Occupational Research and Development (CORD) is a national nonprofit organization dedicated to leading change in education. Since 1979, we have created educational tools and innovative programs to empower faculty and prepare students for greater success in careers and higher education. For example, CORD has:

- Partnered with consortia from all 50 states to develop the pioneering contextual academic curriculum series *CORD Applied Mathematics, Applications in Biology/ Chemistry, and Principles of Technology*
- Established national networks for educational improvement and innovation such as the National Tech Prep Network (NTPN) and the National Coalition of Advanced Technology Centers
- Trained thousands of teachers from the United States and ten other countries in contextual teaching and learning strategies
- Developed dozens of advanced technology curricula and extensive training materials for community colleges and industry
- Developed a unique system for creating integrated curriculum built on academic, industry, and employability standards

CORD receives financial support for its work from such varied sources as the U.S. Department of Education, the U.S. Department of Labor's Employment and Training Administration, the National Science Foundation, corporate foundations, community college systems, state departments of education, and school districts.

To help communities and states achieve their educational goals, CORD partners with faculty and administrators to develop solutions that address specific challenges. We offer a spectrum of services for school districts, consortia, colleges, and states that span five major areas:

- **Curriculum Development**
- **Centers and Networks**
- **Professional Development**
- **Career Pathways**
- **International Projects**

We invite you to learn more about how CORD has assisted educators across the country and around the globe.

The CORD staff has nearly thirty years experience creating standards-based curriculum in mathematics, science, and a wide range of technical fields—from broad curriculum frameworks to individual courses. Our curriculum materials include courses for high schools, community colleges, and workforce training.

CORD's national reputation in curriculum design is built on our integrated curriculum development process that ensures course content reflects academic, industry, and employability standards. Our overarching goal is to develop curriculum that meets state and local needs. To help achieve this, our experienced team:

- pre-assesses the needs of educators and employers
- gathers input from employers on essential skills and knowledge
- assesses current curriculum and instructional materials
- ensures new curriculum will meet requirements for high school graduation and college entrance

CORD's curriculum development philosophy is based on our research in contextual teaching and learning which emphasizes the relationship of course content to real-life situations. As much as possible, CORD curriculum incorporates:

- evidence-based teaching strategies
- problem-solving opportunities
- hands-on activities
- authentic assessment
- work-based learning experiences
- critical thinking
- project-based learning

Centers and Networks

For decades, CORD has led education reform efforts by engaging educators, employers, and policymakers in professional networking opportunities. Our ability to work with these groups to help them attain mutually beneficial goals has prompted our establishment and support of both state and national practitioner networks. Among those most notable are CORD's establishment of two national networks for educational improvement and innovation: The National Career Pathways Network (formerly the National Tech Prep Network) and the National Coalition of Advanced Technology Centers, a network of colleges whose collective goal is to enhance economic and workforce development programs and services through technology applications. In creating clearinghouses of best practices, convening practitioner groups, and building partnerships between educational and business entities, CORD's expertise in aggregating resources and building advocacy for important issues continues to expand.

Best Practices

Hawaii Construction Academy

As part of a multi-year project funded by the Employment and Training Administration of the U.S. Department of Labor, CORD partnered with Honolulu Community College (HCC) to develop curriculum for high school construction academies. This program enables high school students to transition to construction programs at HCC and enter the workforce with a wide variety of skills. CORD produced a curriculum planning guide with lesson plans, contextual teaching tools, resources, and assessment instruments for five dual-credit courses.

College and Career Transitions Initiative

In support of this League for Innovation in the Community College initiative, CORD is developing integrated curriculum projects to engage community college students in the six Science, Technology, Engineering and Mathematics (or "STEM") related career clusters. The effort is funded by the U.S. Department of Education's Office of Vocational and Adult Education.

Academy of Information Technology

Supported by funding from ten major corporations, CORD worked with the National Academy Foundation to develop curriculum materials for its Academy of Information Technology (AOIT). The course materials created for grades 9-12 are tightly aligned with relevant academic, employability, and information technology (IT) workplace standards. Materials consist of IT-specific courses as well as lessons for infusion into academic subjects that use IT as the workplace context.

Curriculum Frameworks to Meet State Needs

CORD worked with the Tennessee State Department of Education to develop curriculum frameworks for grades 9-12 for the manufacturing, construction, and transportation service career clusters. In collaboration with statewide industries, CORD developed frameworks that are based on state academic standards, national skill standards, employability standards, and local industry needs, as well as high school graduation and college entrance requirements. CORD developed extensive course materials and professional development activities to assist teachers in the implementation of the curriculum.

Best Practices

National Career Pathways Network

Formerly the National Tech Prep Network, NCPN provides leadership and resources for secondary and postsecondary educators, employers, and community leaders. NCPN provides a means of networking for new and existing programs in Tech Prep, Career Pathways, Career Clusters, and similar Career and Technical Education programs. NCPN's annual conference is consistently rated one of the most important professional development resources for access to programs and practitioners by its attendees. NCPN members are committed to helping students make smooth educational transitions—from secondary to postsecondary to rewarding careers.

National Center for Optics and Photonics Education

In late 2006, a National Science Foundation (NSF) grant was awarded to CORD to establish OP-TEC: The National Center for Optics and Photonics Education. Funded through NSF's Advanced Technological Education (ATE) program, the multi-year grant teams CORD with partner colleges throughout the U.S. to develop and expand educational programs in cutting-edge, high-demand technologies that require photonics. The OP-TEC center has several goals aimed at helping high schools and colleges work together to provide career pathways in which students begin the pursuit of technology-oriented careers early and transition seamlessly into college programs. OP-TEC's efforts will help meet the increasing demand for photonics technicians and strengthen the global competitiveness of America's workforce.

Best Practices

NC-NET

The North Carolina Network for Excellence in Teaching (NC-NET), a project of the North Carolina Community College System, is dedicated to providing a spectrum of effective, easily accessible, and cost-efficient professional development resources for community college faculty across North Carolina. A statewide infrastructure enables members to share resources and avoid duplication of effort, thus improving institutional efficiency and effectiveness. NC-NET is home to faculty-developed teaching and learning modules, online courses, a distance learning online recruitment database, and other innovative resources.

Cultivating Gender Equity in Emerging Technologies

Taking a multi-faceted approach toward encouraging high school girls to pursue careers in cutting-edge technologies, this National Science Foundation project intends to dispel myths about girls' abilities in science and technology, ultimately increasing the participation of women in emerging technological fields. CORD is creating mentor program coordinator workshops, an online toolkit, and a web-based professional development course to foster gender equity.

Online Academy for Community College Faculty

CORD develops and delivers facilitator-led online professional development courses for community college faculty in an engaging environment. Topics range from active learning to retention strategies to technology bootcamp. Participants in the six-week courses have highly praised this unique opportunity to share experiences and best practices with a cohort group through weekly assignments, activities, and discussions.

For nearly 30 years, CORD has empowered teachers to make learning meaningful for students through the application of contextual teaching principles. CORD advocates a constructivist approach to teaching that incorporates what we call the "REACT" strategies (Relating, Experiencing, Applying, Cooperating, and Transferring). Our professional development programs immerse faculty in contextual teaching strategies, enabling them to increase student engagement through hands-on activities, problem-solving, and collaborative and project-based learning.

To determine priority topics and formats for strategic professional development programs, CORD conducts needs assessments at both state and local levels. Our staff analyzes survey data, creates reports, presents findings, and makes recommendations to enable educational leaders to make data-driven decisions.

CORD's professional development programs are designed to create long-term relationships in which secondary and postsecondary instructors receive feedback and support throughout the various stages of new strategy implementation. Our programs range from site-based workshops to facilitator-led online courses.

Career Pathways

Best Practices

Career Pathways Leadership Certification Workshop

To prepare educators to meet the requirements of the Perkins IV legislation, CORD's National Career Pathways Network (NCPN) has developed the Career Pathways Leadership Certification Workshop. Referencing materials from the National Association of State Directors of Career Technical Education Consortium's Career Clusters Initiative, this workshop offers a variety of topics and can be customized to address specific challenges at the state or local level.

Program Assistance

NCPN and CORD offer customized professional development and technical assistance tailored for local program improvement. A wide range of workshop topics is available to help practitioners of Career Pathways, Tech Prep, and other workforce development initiatives lead their programs to new heights.

Adult Career Pathways Model Sites

To create working models of the solutions proposed in *Adult Career Pathways: Providing a Second Chance in Public Education*, CORD is recruiting community colleges interested in becoming pilot sites. The models, built in partnership with local industry leaders and community agencies, will establish career pathways programs that prepare underemployed and unemployed adults to meet the workforce demands of targeted industries.

At its 2004 NTPN conference, CORD asserted that Career Pathways is the next logical step, following Tech Prep, in raising standards and providing greater educational opportunities for all students. CORD established its leadership and expertise in Career Pathways through publications and extensive professional development services for the field. *Career Pathways: Education with a Purpose*, authored by Dan Hull in conjunction with policymakers, researchers, and state and institutional leaders, outlined a framework for recreating high schools that is rigorous, relevant, and designed to help every student succeed. To further its commitment to Career Pathways and serve a wider spectrum of education professionals, NTPN expanded to become the National Career Pathways Network (NCPN) in 2007.

In 2007, CORD published *Adult Career Pathways: Providing a Second Chance in Public Education*. Authors Dan Hull and Dick Hinckley issued a "call to action" on behalf of the millions of adult Americans who are searching for a second chance. They provide compelling research, insightful analysis, and detailed solutions to the complex and critical issues facing educators, students, and the nation as a whole. They call upon community college presidents to create dynamically involved partnerships with employers, community leaders, and policymakers that can achieve meaningful change.

International Projects

CORD International, a division of CORD, develops customized teacher training programs and provides consultation and technical assistance for nations undergoing education reform. CORD is an acknowledged expert and trusted partner for educational systems in countries such as Brazil, Dominican Republic, Chile, Mexico, Malaysia, Philippines, and Turkey. Global realities such as free-trade agreements, the emergence of a knowledge-driven economy, and workforce competitiveness issues are creating the conditions for new paradigms in education all over the world. The CORD International staff provides governmental and educational leaders with the tools to assess current educational conditions and identify gaps in workforce preparation that may be hindering economic development. CORD's curriculum resources and contextual teaching approach offer new tools and techniques for preparing a broad majority of students for success in college and careers.

Best Practices

Puerto Rico

CORD is working with the Puerto Rican Department of Education to help implement *Principles of Technology* throughout Puerto Rico. Through this pilot project, CORD has assembled a team of competent teachers prepared to disseminate the pedagogical and scientific foundations of the *Principles of Technology* curriculum. The desired goal of the project is to establish a solid platform from which to launch a new cadre of teachers that can make a marked difference in physics instruction that will meet the needs of business and industry.

Dominican Republic

In partnership with business and industry leaders led by IMCA, Caterpillar's distributor in the Dominican Republic, CORD International is conducting a pilot project with a magnet secondary-postsecondary institution to develop, apply, and implement a new and innovative 4+2 curriculum model. CORD's curriculum integration and professional development approach coupled with local business leaders' support and guidance is enabling students to graduate with the academic, occupational, and employability skills necessary for future workforce competitiveness.

Brazil

Through a partnership with the Embraer Corporation, CORD has planned and developed the curriculum for the engineer-in-preparation career pathway for Colegio Engenheiro Juarez Wanderley, a magnet high school in the state of São Paulo whose mission is to provide educational opportunities for economically disadvantaged students. CORD's integrated curriculum philosophy and contextual teaching approach is preparing students for future employment as engineers in a wide variety of industry settings.



To learn more about CORD's Spectrum of Services, please contact us:

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