Dr. Willard R. Daggett is the president of the International Center for Leadership in Education and is recognized worldwide for moving education systems towards more rigorous and relevant skills and knowledge for all students. Columbus Area Career Connection teachers are dedicated to developing and delivering highly rigorous and relevant instructional tasks and assessments using a problem/project-based learning instructional model. They challenge their students to think in complex ways and to apply the knowledge and skills they have acquired to solve problems and create real-world solutions.

In the Communications cluster, students in the 3-D Visualization and Animation class have worked with the Columbus Visitor’s Center to draw 3-D models of several significant architectural structures in the city. The images were downloaded to Google Earth as a search engine tool for the global community.

“When students are engaged in the learning process, real achievement takes place, and their chances to excel at what they do increase.”

- Willard R. Daggett
C4 Communications teachers involve students in the many facets of multimedia and communications. For several years, teachers have combined their talents with that of their students to videotape a student historical musical review. The Communications students work along side professionals from Insight Communications and the production is later broadcast over the local access television station.

What is C4?

C4 Columbus Area Career Connection provides career and technical education to high school students in Bartholomew, Brown, Decatur, Jackson and portions of Johnson counties. Facilities for C4 classes are located at Columbus East and Columbus North High Schools as well as the McDowell Adult Education Center. C4 program offerings are organized in a career cluster format and include: Agricultural Science/Business, Business Management and Finance, Communications, Computer Technology, Construction Engineering Technology, Engineering Manufacturing Technology, Health Careers, Human Services (including Early Childhood Education, Cosmetology, and Culinary Arts), Protective Services and Transportation.
Construction Engineering Technology teachers supervise students as they build a home in the community. Students in the Architecture classes create the house plans and an advisory board of community professionals provides input. Then students in the Building Trades and Construction Management classes build the structure. The house completed in May 2007 has more than 5200 square feet and was listed by a local realtor for over $400,000.
Students in one of the Agriculture Science and Business classes have developed a plan for recycling products in the school cafeteria. They presented their ideas to school personnel and were given funds to proceed with their recommendations.

The Business Management and Finance cluster has an Academy that meets at the YES Cinema in the heart of Columbus’s business and financial district. Students in the program are immersed in the workplace as emphasis is placed on interaction with community professionals. During the past year, the Southern Indiana Health Organization (SIHO) proposed a challenge to the class. Student teams developed proposals to save employers money while still providing a quality insurance plan for their employees. Representatives of SIHO reviewed the plans, listened to marketing presentations, and selected the best insurance plan.
The **Health Careers** cluster enrolls over 600 students each year. Students in this program participate in classroom and laboratory instruction before being placed in a clinical position in the community to gain on-the-job experience. C4 teachers work closely with post secondary institutions to develop articulated or dual credit hours. For example, C4 Dental Assisting students are eligible to receive up to 33 college credit hours from Ivy Tech with the successful completion of a two-year program.
Health Careers teachers work with the students to prepare them for on-the-job training sites throughout the regional community. These students participate in numerous laboratory situations preparing them for careers in nursing, surgical central service, dentistry and veterinary medicine. C⁴ Health Careers students are eligible to earn certification in First Aid and CPR in addition to their clinical skills.
In the **Human Services** cluster, Family and Consumer Sciences teachers conduct one of two Centers of Excellence for C*. The Center provides students with a supportive learning environment and prepares them for a successful future through classroom instruction and community experiences. Students in the Teacher Education and Early Childhood programs have developed contextual learning modules for use at the kidscommons, a children’s museum and activity center in Columbus.
Family and Consumer Science teachers and students conduct preschools for the community to involve the high school students in lesson plan development and interaction with children. Students are responsible for the operation of the preschools and assume the roles of child care professionals.
The C⁴ Culinary Arts program offers unique learning opportunities for students interested in a career in the hospitality or restaurant industry. Working across cluster lines, the Culinary Arts students and students from the Business and Finance Academy have combined their talents at a luncheon prepared for community partners and in selling prepared holiday food items. The culinary students prepared and served the meal and samples while the Academy students practiced their etiquette, conversation and marketing skills with community participants.

In the C⁴ Cosmetology program, students operate a cosmetology clinic for the public to apply the skills they are learning in the class. Students who successfully complete a two-year program are eligible to take the state board examination to become a licensed cosmetologist.
The focus of the Transportation cluster is hands-on laboratory instruction. Teachers secure resources from various community partners to provide their students with opportunities to practice their technical skills on equipment that is currently used by professionals in the automotive repair industry.
In the Engineering Manufacturing Technology cluster, students in the Electronics Technology class learn how to design, build and apply electronic circuits. Many of the students participate in community X-Mod Racing events sponsored by the electronics class and in First Robotics competitions. Recently, the C4 First Robotics team finished first in a regional competition involving 59 teams from seven different states, Canada and Puerto Rico.

C4 instructors regularly incorporate project-based learning into their classes. This past year, welding students designed and manufactured 56 ft. of ornate hand railing that was placed inside the house built by C4 Construction Engineering Technology students.
Instructors in the Protective Services cluster are current or former members of area police and fire departments, as well as licensed teachers. The Law Enforcement students are involved in numerous labs investigating crime scenes, examining evidence, learning defense techniques and many other facets of the criminal justice system. The Fire Science class is based on the National Fire Protection Administration curriculum and includes all facets of firefighting such as fire behavior, personal protective equipment, fire control and rescue. Students may also earn certification in First Aid, CPR and First Responder.
Students in the Computer Technology cluster at C^4 learn the features and functions of computer networking components as well as installation, configuration, diagnostics, and preventative maintenance. Recently two students from this program were chosen to participate in a workshop hosted by Purdue University and the Indiana State Police to learn how to handle attacks on computer systems. They were the only high school students participating in this statewide event.

Focus on the Future

The C^4 career clusters support each other and the instructors often teach across the curriculum. The strength of the C^4 educational process depends directly on the active innovative support of all stakeholders. Through the vision and resulting activities of C^4 Columbus Area Career Connection, all students in our area continue to have greater opportunities to achieve the knowledge and skills necessary to succeed in a high performance workplace, master challenging post-secondary curriculum and to engage in lifelong learning.
Linked Learning to Life through Rigor and Relevance

C⁴ Columbus Area Career Connection continues to take the lead in developing educational and community support for providing world-class career and technical education to all high school students in the region. The areas of learning within each of the ten C⁴ career clusters represent a connected set of competencies and skills. Career opportunities within a cluster represent all achievement levels and reflect a wide-range of post-high school options. C⁴’s competency-based curriculum is rigorous, integrated and sequenced in alignment with state academic and technical standards. Career Pathways have been established for C⁴ students to assist with the transition from high school to postsecondary education by aligning high school curriculum with college level requirements, allowing for dual or concurrent credit and sequencing curriculum.

World-Class in the Classroom

C⁴ Columbus Area Career Connection empowers students to effectively participate in an international economy as world-class workers and citizens. C⁴ programs are designed to contribute to the broad educational achievement of students by including the basic skills of reading, writing, and math along with their instruction in technical skills. Additionally, C⁴ students improve life skills by increasing their ability to work independently and as part of a team, thinking creatively, solving problems and utilizing technology. All C⁴ programs focus on

- Providing career exploration and planning
- Enhancing academic achievement and motivation to learn
- Acquiring work competencies and skills useful for employment
- Establishing pathways for continuing education and lifelong learning

C⁴ Team Members

Robin Allen  Health Careers  •  Harriet Armstrong  Family/Consumer Science  •  Katie Arnholt  Family/Consumer Science  •  Don Baker  Communications/TV Production  •  Brad Barber  Technical Graphics  •  Sherry Bonnell  Paraprofessional  •  Connie Bolte  Accounting Secretary  •  Robin Cain  Technical Graphics  •  Melissa Casner  Computer Technology  •  Linda Chui  Health Careers  •  Becki Combs  Team Leader  •  Adele Cordes  Teacher Assistant  •  Kristin Cregg  Health Careers  •  Kim Deckard  Family/Consumer Science  •  Cesar DeLuna  Welding  •  Wendy DeLuna  Teacher Assistant  •  Mark Doub  Technical Support  •  Carrie Douglas  Culinary Arts  •  Kay Eaggleman  Family/Consumer Science  •  Leslie Fairchild  Agricultural Science  •  Tracy Fairchild  Paraprofessional  •  Norma Flodder  Independent Cooperative Education  •  Peggy Gamus  Teacher Assistant  •  Nata Gates  Transportation Coordinator  •  Jayne Gault  Family/Consumer Science  •  Kay Gorday  Health Careers  •  Derik Gratz  Welding  •  Kim Green  Communications/Publications  •  Diana Hansen  Brattain  Culinary Arts  •  Mike Hayes  Power Systems  •  Kathy Hoover  Teacher Assistant  •  Curtis Huff  Assistant Printer  •  Clara Jackman  Teacher Assistant  •  Darin Johnson  Construction Engineering  •  Nan Keach  Family/Consumer Science  •  Troy Knorr  Law Enforcement  •  Peggy Maze  Secretary to the Director  •  Pam McManaway  Cosmetology  •  Tim McNealy  Team Leader  •  Adam Megel  Engineering  •  Jeff Metz  Communications/Printing  •  Mike Metz  Construction Engineering  •  Marilyn Metzler  C⁴ Director  •  Stan Meyer  Machine Trades  •  Jayne Morris  Data Specialist  •  Karen Nading  Family and Consumer Science  •  Ron Novak  Communications  •  Nicole Otte  Engineering  •  Linda Pierson  Teacher Assistant  •  Debby Pratt  Public Information  •  Jean Reynolds  Cosmetology  •  Mary Rich  Health Careers  •  Mike Riley  Electronics  •  Christy Ross  Health Careers  •  Rachel Searcy  Language Arts Integration  •  Randy Sims  Engineering  •  Diane Smith  Business/Finance  •  Janet Stephenson  HIP Coordinator  •  Jennifer Stienwdeel  Health Careers  •  Dave Stidham  Transportation  •  Garry Taylor  Transportation  •  Jenny Wallace  Family/Consumer Science  •  Mike Ward  Law Enforcement  •  Teresa Welchman  Counselor  •  Brian Wichman  Construction Engineering  •  Larry Wolfe  Fire Science
Front cover: C⁴ Engineering Manufacturing Technology teachers utilize Project Lead the Way, a pre-engineering curriculum, in their classrooms. This hands-on project and problem-based approach adds rigor to traditional technical programs and relevance to traditional academics.