

# NCCER

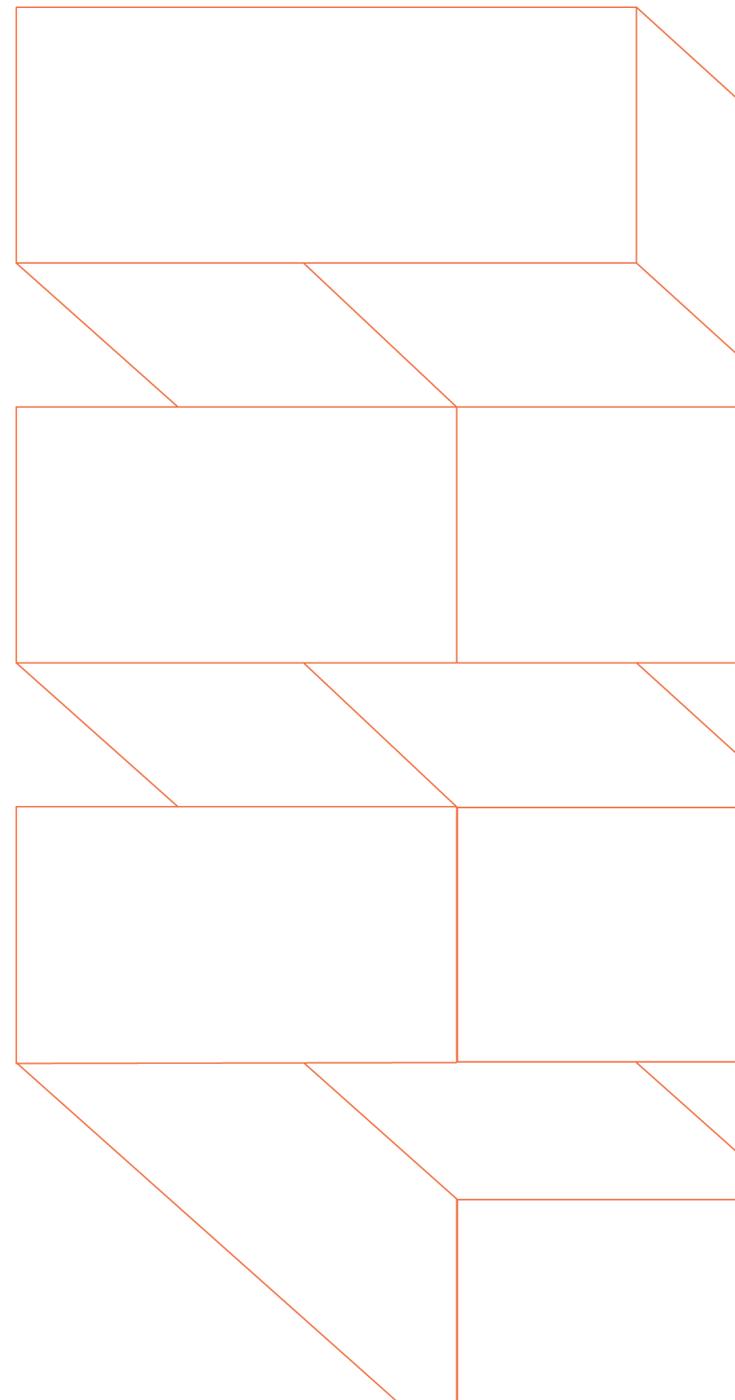
National Center for Construction  
Education and Research

## Industry and Education:

### A Guide for Effective Collaboration

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# STEP 01: Analyze Your Need

The first step in creating effective partnerships between industry and education is to clearly understand your organization's needs. Identify the skills and knowledge you want the collaboration to teach or reinforce, as well as what is required to move into high-demand jobs. Needs can be readily apparent and act as a catalyst for collaboration, but you should still consider evaluating needs strategically. By knowing all of your needs, you are prepared to discuss and maximize areas of collaboration. Utilize workforce planning data to assist in this analysis. Schools can use NCCER's Craft Labor Map found at [byf.org/explore/demand-map](http://byf.org/explore/demand-map).

## Questions To Consider:

- Where are your training programs strongest and weakest?
- Do you have adequate facilities for training?
- Do you have the staff or funding necessary to meet your needs?



## Examples from Best Practice Profiles

### LPR Construction

#### *(Industry to Education):*

"Identify the training program that will meet the most critical business needs first, and develop/institute that program. Once you have the first program running smoothly and effectively, add additional programs."

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### North Carolina Department of Public Instruction

#### *(Education to Industry):*

Several decades ago, NCDPI recognized the industry demand for a skilled and trained workforce and sought out NCCER curriculum for their CTE program. The curriculum process and credentialing of students was hampered by the underestimated number of student credential completions.

### Louisiana

#### *(State Perspective):*

The Louisiana Workforce Investment Council contracted with Louisiana State University in 2013 to conduct a comprehensive, occupational forecast for the industrial construction industry, which indicated a critical demand for skilled labor.

# STEP 02: Research Existing Programs

Before starting your own program, first check whether an existing program or partnership can meet your needs. The purpose of this step is to save you from recreating what has already been done. There might be an organization or program already working in your area of interest that you can partner with, conduct Internet searches, make calls and ask your network about possible partners.

## Questions To Consider:

- Where are your training programs strongest and weakest?
- Do you have adequate facilities for training?
- Do you have the staff or funding necessary to meet your needs?

## Examples from Best Practice Profiles

### Craft Training Center of the Coastal Bend

#### *(Industry to Education):*

A long-standing, founding partnership with the members of the local ABC chapter has provided much needed support for the CTCCB. Through these members, the CTCCB was connected directly to the local refineries and industrial plants. Open communication about the industry's workforce needs led to the implementation of specific craft training programs at the CTCCB.

### Gaylor Electric, Inc.

#### *(Industry to Education):*

To overcome the shortage of skilled electricians, Gaylor and Noblesville High School developed a unique internship program in 2013 in collaboration with Vision Noblesville, a community development initiative. Originally developed in 1993 as a benchmarking process to measure the city's successes and failures, Vision Noblesville is an integral part of the community's overall governance and development.



# STEP 03: Identify Available Resources

Compile a list of what your organization can contribute to a partnership. Funding is always important, but things like facilities and equipment, man-hours and skill sets are also valuable resources. Include in this list any resource that can potentially aid in the development of your partnership and its initiatives. Identify individuals within your organization that can be the champions to ensure the project continues moving forward.

## Questions To Consider:

- Who can coordinate and lead the program(s) needed?
- What facilities and equipment can you provide?
- Do you have any earmarked funding or grants to contribute?

## Examples from Best Practice Profiles

### Mississippi Construction Education Foundation (Industry Association to Education):

For MCEF, all secondary programs are funded by an annual \$600,000 grant from the Mississippi State Board of Contractors. MCEF has also received several Department of Labor training grants for training youth, underemployed and unemployed. Many of these participants entered the MCEF apprentice program to further their training and begin careers in construction.

### Construction Education Foundation of North Texas (Education to Industry):

Industry permits access to its well-equipped training facilities to technical colleges in the North Texas area with a corresponding need. At first, educators viewed industry as an asset to help with their day-to-day physical needs, but over time these repeated connections showed educators that industry wants their support and can provide viable career paths.



# STEP 04: Identify Stakeholders

Know the constituents your partnership will serve. Determine which individuals and organizations will be required to accomplish your goals and who will benefit as a result. Identify both the internal and external decision makers that you will have to go through. Collaboration might be between two organizations or it could include multiple organizations all working together toward a common goal, so be broad when surveying your environment.

## Questions To Consider:

- Who from your organization must be involved in order for any type of partnership to succeed?
- Who are the external influences of your targeted area?
- Who else could benefit from participating in this collaboration?
- Do all stakeholders agree with the assessment of your needs and available resources?



## Examples from Best Practice Profiles

### North Carolina Department of Public Instruction

#### *(Education to Industry):*

As the need for national industry-recognized credentials grew, the NCDPI CTE division began to look for alternative ways to sponsor the NCCER program. After conducting industry and stakeholder surveys and meetings, the consensus was that NCDPI CTE would be best to sponsor a successful program.

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### Robins & Morton

#### *(Industry to Education):*

The Robins & Morton team knew that at the core of each community outreach, there needed to be champions; employees and craft professionals who were passionate about helping the people of Millen. To ensure that their connection to the community ran deep on the job site, Mittie engaged her senior-level site management early on, and found ways for them to use their interests in meaningful ways. The senior superintendent and other managers quickly found their niche and made each project their own, rather than simply following a top-down mandate from the corporate office.

### Construction Education Foundation of North Texas

#### *(Education to Industry):*

In coordinating career day events, CEF has identified critical educator and administrator partners within the school system. The school superintendents, known in Texas as regional directors, have extensive influence, as well as connections into CTE classrooms. CEF relied heavily on the relationships with these individuals to get the career days started. Each connection with educators and administrators helped build rapport.

# STEP 05: Establish Your Organization's Goals

Clearly define what your organization realistically hopes to achieve from collaboration. You have already identified your needs, so now is the time to select the areas that will be worked on. Summarize the goals you hope to accomplish. Define what metrics your organization will measure to determine success, and then create objectives that are specific, measurable, attainable, realistic and time-bound (SMART). For example, "By December 21, 2026, ACME Corporation will reduce the time required to hire employees from ten to five business days."

## Questions To Consider:

- What meaningful statistics does your organization already measure?
- Are there areas of weakness that are too hard to measure? If so, what smaller components can you focus on?
- Does your organization have a strategic plan to which you need to align your goals?



## Examples from Best Practice Profiles

### Gaylor Electric, Inc.

#### *(Industry to Education):*

One of the primary goals of the internship program is to develop an educated, well-trained workforce that will contribute to the city's economic development.

### Gulf Power Company

#### *(Industry to Education):*

The ultimate goal for Gulf Power Academy is to be a model for how industry can work hand-in-hand with education to make sure that the demand for a well-trained workforce never exceeds the supply.

# STEP 06: Reach Out To Potential Partners

Partnerships are mutually beneficial, so it is as important to understand how you can add value to your partner(s) as it is for you to understand what benefits you will receive. Schedule meetings with the targeted partner(s) to discuss how to collaborate and help each other. Be prepared to sell your idea because your targeted partner(s) might not see the value immediately.

## Questions To Consider:

- Who from your organization must be involved in order for any type of partnership to succeed?
- Who are the external influences of your targeted area?
- Who else could benefit from participating in this collaboration?
- Do all stakeholders agree with the assessment of your needs and available resources?



## Examples from Best Practice Profiles

### LPR Construction

#### *(Industry to Education):*

LPR leadership approached a local community college to start an ironworking/welding program after identifying that the college's CTE funding had been cut. LPR was able to assist by offering to train students with their 15 NCCER certified instructors.

### Louisiana

#### *(State Perspective):*

To address the skills gap, LWIC formed the Craft Task Force, which brought together industry, various state agencies, high schools, technical colleges and private training providers.

### Robins & Morton

#### *(Industry to Education):*

Robins & Morton met with representatives from the Jenkins County School System, which included the superintendent and head of curriculum design to ask several questions: "Can you tell us about your education system," "What are your goals," and "If you had a wish list for your schools, what would be on it?".

# STEP 07: Work With Partners To Develop a Plan

Until this point, all the planning you have conducted has been done internally. You have established what you hope to achieve in your partnership, now identify what your partner(s) hopes to achieve. Work together to develop clear goals and SMART objectives (see step five for more information on SMART objectives) for the collaboration.

## Questions To Consider:

- What are the desired results of the program and the metrics that will be used to measure success?
- Will you hold routine meetings with industry and education representatives?
- Will your partnership form an advisory council?



## Examples from Best Practice Profiles

### Mississippi Construction Education Foundation

#### *(Industry Association to Education)*

The MCEF board recommended NCCER craft training for secondary and postsecondary craft training across the entire state, and together, they set a goal of building and ensuring a quality workforce in Mississippi.

### Louisiana

#### *(State Perspective):*

The Craft Task Force decided that CTE needed to be based on standardized curricula. Industry then determined that NCCER credentials were ideal, so the technical colleges agreed to focus on short-term, compressed NCCER training for students, particularly Levels 1 and 2 in the highest-demand skilled crafts occupations such as electrician, carpenter, millwright and pipefitter.

### Robins & Morton

#### *(Industry to Education):*

To organize the site staff, a community outreach committee was formed with 20-30 employees who rotated in and out. This committee helped plan events, distribute information and encouraged their co-workers to get involved. They also took the lead volunteer positions for each event. Outreach volunteers from the job site were able to volunteer their company time and were paid for their service hours. This strategy removed any excuses and proved to be a successful incentive.

# STEP 08: Define the Partnership Scope

Clearly describe the aim of the partnership, how it will take form and how broad its scope will be. Discuss with your partner(s) the division of labor, responsibilities and commitments. Agree to a set of action items and areas that each partner will manage, as well as the expected time frame to complete the project.

## Questions To Consider:

- What resources is each partner contributing?
- If specific funding is required, how will the funds be raised?
- How much time is needed to accomplish the goals?



## Examples from Best Practice Profiles

### Gulf Power Company

#### *(Industry to Education):*

Faced with a shrinking availability of qualified workers, the company partnered with West Florida High School (WFHS) of Advanced Technology in 2001 to start the Gulf Power Academy. This four-year program integrates traditional academics with craft and technical training to prepare students for a career in the electric utility industry and for college.

### Louisiana

#### *(State Perspective):*

Louisiana Community and Technical College System (LCTCS), which is comprised of 12 Louisiana community and technical colleges, and Associated Builders and Contractors (ABC) agreed to a memorandum of understanding (MOU). This MOU provided LCTCS members without suitable facilities for CTE with access to ABC's well-equipped facilities, which filled a critical void for the colleges and even allowed for additional dual enrollment opportunities for high school students. In addition, ABC agreed to share craft instructors with LCTCS to help overcome a shortage in qualified instructors.

# STEP 09: Develop a Marketing Strategy

Whether you are appealing to customers, students or legislators, you must develop a marketing plan for how you will appeal to your audience. Create a compelling narrative that describes your story and its importance. Research to find out what communication tools will be most effective with your audience. Consider utilizing your local chamber of commerce or economic development agency for promotion.

## Questions To Consider:

- What distinguishes your program from other programs?
- What will be your communications strategy, and how will you reach your audience?
- How are you going to sell your program to students and their parents?



## Examples from Best Practice Profiles

### North Carolina Department of Public Instruction

#### *(Education to Industry):*

For large organizations, like school districts, which are planning the launch of an NCCER program, gather support from associations and contractors who already use the NCCER process. Program directors should educate their local workforce development agencies, community colleges and industry organizations that are not familiar with NCCER. In this way, there is support for the NCCER process from the top down. Taking ownership through accreditation for an entire school system gives strong foundation for education and industry partnerships.

### Mississippi Construction Education Foundation

#### *(Industry Association to Education):*

In order to establish recognition of NCCER craft training for college credit at these institutions, MCEF made the request and showed how awarding credit would benefit the student, MCEF and the college. For MCEF, offering college credit is often an incentive for students to enroll in NCCER training and gives them the opportunity to progress. 72 percent of apprenticeship students indicate that receiving college credit is extremely important to them and their long-term career goals.

### Louisiana

#### *(State Perspective):*

The Louisiana Workforce Investment Council (LWIC) prioritizes certificates based on the feedback from industry representatives with input from educators. Certificates on the State Focus List approved by the LWIC receive the highest number of points, and most of NCCER's certificates are in the highest priority category. Schools earn more funding by increasing the number of points their students obtain.

# STEP 10: Implement the Collaborative Plan

It is time to get working. Execute the action items that you agreed upon with your partner(s). Consider using shared calendars and documents—like Google Docs—to coordinate events and projects. No planning process is perfect, so be prepared to problem solve with your partner(s) and have an established process when problems or issues arise.

## Questions To Consider:

- Have you encountered problems or obstacles you did not anticipate in the initial planning?
- If so, how can you collaborate to overcome these challenges?
- Is there anything you would do differently in the planning process next time?



## Examples from Best Practice Profiles

### Louisiana

#### *(State Perspective):*

In response to this misalignment between K-12 educational programs and Louisiana's future job openings in the skilled crafts, the Louisiana Department of Education, along with industry partners on the Louisiana Workforce Investment Council, advocated restructuring how high schools provide CTE offerings on a statewide, legislative level.

### Gaylor Electric, Inc.

#### *(Industry to Education):*

Counselors matched students with the businesses they felt would best suit their career interests. A total of 125 students were selected for internships throughout the community, and nearly 30 of the mostly junior and senior students were selected for craft internships. Students were bused to the ABC training center in Indianapolis one to two days a week for a three-hour, hands-on class where they learned NCCER Core curriculum and were offered an introduction to the various career options available in the crafts. At the same time, students also attended a three-hour craft-training class at Noblesville High School one to two days each week in a more traditional classroom setting.

### Robins & Morton

#### *(Industry to Education):*

On a large industrial job site, communication can be complicated. In order to make sure everyone was connected to current outreach projects, Mittie planned a communication board at the job site trailer with pertinent event details and photos of past outreach involvement. The board became a sense of pride for the craft professionals involved in each event. Mittie also used the Robins & Morton website to communicate information about upcoming outreach projects and needs.

# STEP 11: Meet Routinely To Maintain Progress

Maintain progress and further develop the relationship with your partner(s) by continuing to meet monthly or quarterly to discuss program obstacles and successes. Certain components of the program may need to be tweaked during the implementation, and meeting regularly assures a greater degree of flexibility. Review the agreed upon metrics to determine if the program is on track to meet its objectives.

## Questions To Consider:

- Is everything developing as planned, and if not, what needs to be changed?
- What areas of the partnership are excelling, and what areas of the partnership need more attention?



## Examples from Best Practice Profiles

### LPR Construction

#### *(Industry to Education):*

Semiannual training meetings take place with key company stakeholders and training staff to address any issues in a timely manner. This top-down approach proves a serious commitment to craft training's impact on the industry.

### Mississippi Construction Education Foundation

#### *(Industry Association to Education):*

Each of MCEF's associations has a representative on the MCEF Board of Directors. The board meets six times a year with an executive board meeting intermittently as needed. MCEF benefits greatly from having this direct tie with industry.

### Construction Education Foundation of North Texas

#### *(Education to Industry):*

CEF leverages career day opportunities to develop and strengthen partnerships beyond the event. When both entities work together, mutually beneficial situations can develop automatically, and the relationship between education and industry becomes synergistic.

# STEP 12: Evaluate the Program

After completion, compare the program's outcomes to its objectives. Identify areas where the program met or exceeded the objectives. Review areas where the program fell short of objectives and determine the cause. It might not be that the program failed, but that the objectives were not realistic. Also, evaluate whether the program ultimately meets the needs of your organization by comparing the outcomes to your internal goals and objectives.

## Questions To Consider:

- What are the specific areas of success, and how can they be replicated?
- What did not meet expectations, and what action needs to be taken?
- Is the program meeting the overall established goals and objectives?
- Does this program continue to meet your needs? If not, what needs to change?



## Examples from Best Practice Profiles

### Craft Training Center of the Coastal Bend

#### *(Industry to Education):*

5,189 students have earned NCCER credentials since CTCCB began delivering craft training, and 95 to 98 percent of graduating students are employed in the construction field.

### North Carolina Department of Public Instruction

#### *(Education to Industry):*

The program's success has been highlighted in the positive high school graduation rate—in 2012, 94 percent of all North Carolina students enrolled in a CTE program graduated high school, compared to 80 percent of traditional students.

### Construction Education Foundation of North Texas

#### *(Industry to Education):*

Gaylor expects the program to provide 50 new employees each year. By putting that many young people to work, Gaylor is not only establishing a new pipeline of qualified craft professionals to sustain its own workforce, but it is also ensuring the prosperity of the entire community.



For expert guidance on how to grow your program through collaboration, or to learn more about NCCER's comprehensive construction education tools and resources, contact us at **888.622.2730** or visit [nccer.org/wfd](https://nccer.org/wfd).

*The National Center for Construction Education and Research (NCCER) is an independent 501(c)(3) nonprofit education foundation and the leading provider of construction education for industry and career and technical education programs. With flexible workforce development and learning solutions, NCCER's programs provide consistency and quality to ensure craft professionals and learners receive industry-recognized credentials and certifications.*