

A LOOK AT PARTNERSHIPS BETWEEN EMPLOYERS AND COMMUNITY AND TECHNICAL COLLEGES: OBSERVATIONS AND RECOMMENDATIONS



Produced in conjunction with the project
*Studying the Motivation, Perceived Benefits,
and Return on Investment of Employer
Engagement in Career Pathways Programs*

Conducted by the Center for Occupational
Research and Development (CORD)

in partnership with

Social Policy Research (SPR) Associates

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ABOUT THE STUDY

This document resulted from a study conducted as part of the project entitled *Studying the Motivation, Perceived Benefits, and Return on Investment of Employer Engagement in Career Pathways Programs*. The project's overarching purpose was to better understand how employer engagement impacts the development of career pathways. The study was led by the Center for Occupational Research and Development (CORD) as a companion project to the ECMC Foundation-funded *Advancing Credentials through Career Pathways* initiative. Social Policy Research Associates served as a strategic partner for the study's evaluation design components.

The study team collected and analyzed data regarding employers' engagement in career-technical programs at community and technical colleges. The study asked the following questions:

- What are the motivating factors and perceived benefits for employers to initially engage with the career-technical programs of their local community/technical colleges?
- What benefits have employers realized from their engagement with the career-technical programs of their local community/technical colleges?
- What factors can contribute to sustained employer engagement in career-technical programs?
- What relationship, if any, exists between a community or technical college's ability to effectively design, implement, and sustain training programs that meet a community's workforce development needs and the frequency, depth, and quality of the interactions and resulting relationships with local employers?

The Promise of Partnering

The overarching purpose of postsecondary career-technical education programs is to equip students for success in the workplace. Simply put, these programs are *suppliers* of training for skilled occupations. Employers represent the *demand* side of that transaction, hiring students with the technical and professional skills needed for in-demand jobs.

The two sides—supply and demand—have different priorities. On the one hand, colleges want full classrooms, and they want to be able to point to evidence of success, such as high rates of credential attainment and job placement. On the other hand, employers want access to a sufficiently large pool of qualified job candidates—individuals with a strong work ethic and up-to-date technical skills who can be brought up to speed quickly on their operations and who will stay with them for long periods, thus reducing the high cost of employee turnover.

This study was based on the premise that colleges and employers can improve their ability to meet these respective priorities by helping each other—that is, by partnering—not just now and then, but on a continuing basis. To test our premise, we asked employers and college personnel about their motivations, experiences, and expectations. Why and how do they partner with one another? What are the expected and realized returns on investment? Are things working out as expected? Or are changes needed?

Although our findings reveal some challenges, they predominantly provide good news. Employers, by and large, welcome opportunities to partner with colleges. But to make that happen, colleges need to take the initiative—the proverbial ball is in their court. Of course, many colleges have already taken that initiative, resulting in meaningful college–employer partnerships across the country. But the dizzying pace of technological change calls for ever-closer alignment between what goes on in the classroom and what graduates will be called upon to do in the workplace. As such, we are confident that even mature partnerships will benefit from the recommendations offered in this document. In particular, colleges’ experiences with an industry partnership approach known as the Business and Industry Leadership Team (BILT) model have proven especially fruitful, and we encourage colleges to consider it.



How We Gathered Information

The *Advancing Credentials Through Career Pathways* project supported the identification and design of stackable credentials among 15 colleges through collaboration with local employers. We asked the colleges to nominate regional employers for participation in an online survey. The colleges recommended 182 employers, and 62 responded (a 34 percent response rate).

The online survey asked employers about their motivation to engage with colleges and maintain partnerships, their forms of engagement, their returns on investment resulting from college engagement, their hiring practices with respect to graduates from partner colleges, and their satisfaction with those hires. (The specific wording of the prompts and associated choices is shown in the respective tables in the findings sections below.)

Following the survey, we conducted telephone interviews with representatives of 12 of the surveyed employers. Of these 12 companies, we conducted in-person visits with six of them (indicated by an asterisk below) to discuss their perspectives and experiences in greater depth. We also held separate meetings with the college personnel who were most directly in contact with each of these six employers. To encourage candor, we assured those interviewed that no information would be attributed to them without their permission.

Table 1: Employers and Affiliated Colleges Interviewed

Employer	Employer's Focus	Affiliated Cohort College
California Landscape Contractors Association	<i>Landscape contractors</i>	Bakersfield College, CA
General Microcircuits, Inc.	<i>Advanced electronics manufacturing</i>	Mitchell Community College, NC
LandCare	<i>Landscape installation/maintenance</i>	Shasta College, CA
M-W Electric, Inc.	<i>Commercial electrical contractor</i>	Robeson Community College, NC
Mercyhealth*	<i>Hospital, clinics, health services</i>	Rock Valley College, IL
NGK Ceramics USA, Inc.*	<i>Catalytic converter components manufacturing</i>	Mitchell Community College, NC
ON Semiconductor	<i>Electronic/electrical products manufacturing</i>	Luzerne County Community College, PA
Progress Rail (Caterpillar)*	<i>Rolling stock manufacturing</i>	Forsyth Technical Community College, NC
Siemens*	<i>Power generation equipment manufacturing</i>	Forsyth Technical Community College, NC
Spuntech Industries*	<i>Spunlace fabric manufacturing</i>	Piedmont Community College, NC
Trelleborg	<i>Substrate coatings manufacturing</i>	Isothermal Community College, NC
UniFirst*	<i>Worker uniform manufacturing</i>	Owensboro Community & Technical College, KY

Note: The remaining colleges in the *Advancing Credentials Through Career Pathways* program cohort are Catawba Valley Community College (NC), Lehigh Carbon Community College (PA), Oakland Community College (MI), and Rowan–Cabarrus Community College (NC).

* Indicates the interview took place in person

What We Found

In this section we share findings from the study organized around five themes: (1) employer motivation to engage with colleges, (2) employer motivation to maintain partnerships with colleges, (3) employer perceptions of return on investment, (4) how employers engage with colleges, and (5) employer satisfaction with new hires.

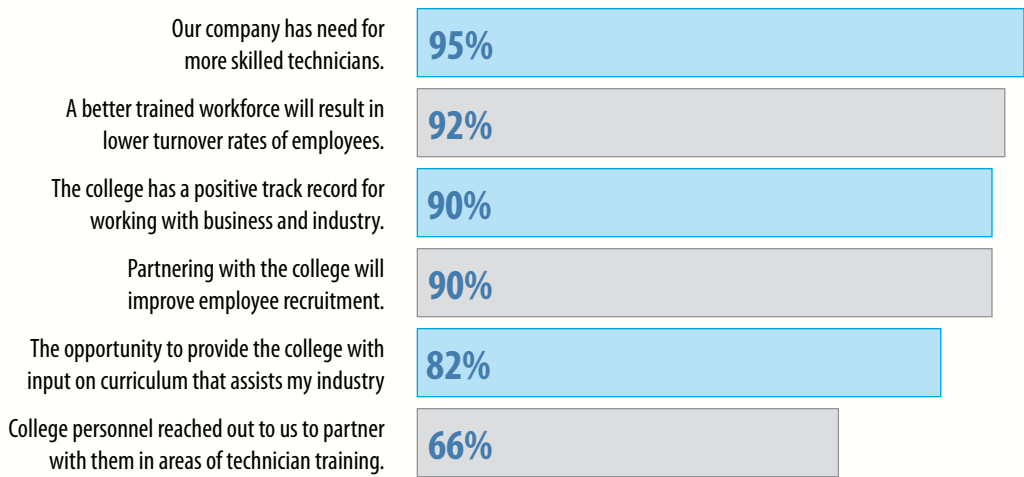
Employer Motivation to Engage with Colleges

Employers overwhelmingly indicated that they were motivated to engage with their local colleges by the need for more skilled technicians (95 percent) and a desire to improve technician recruitment (90 percent) and retention (92 percent; Table 2). A high percentage of employer respondents (90 percent) were motivated to work with colleges that they perceived as having a positive track record for working with business and industry. Many (82 percent) indicated they were motivated to engage because of opportunities to shape the college’s curriculum. And two thirds of the employers (66 percent) noted it was often the colleges’ industry outreach activities that prompted them to engage.



Table 2: Employer Responses to the Question “What motivated your company to engage with the college?”

Percentage of respondents who said “yes” for each item



The telephone and in-person interviews generally echoed these survey results. Employers also offered additional reasons for engaging with their partner colleges. For example, some said their engagement was motivated by faculty members’ promptness in responding to phone calls and their flexibility, as demonstrated by their willingness to hold meetings at company sites, thus minimizing the employers’ travel.

A few employers said they would like to have had more productive relationships leading to outcomes such as joint action plans, shared goals, strategies for marketing sector-specific careers to students and parents, and improvements in safety training. They noted that when colleges have offered programs for which employment demand was weak, the partnership has fallen short of its potential to equip graduates for the workplace and has therefore failed to provide the workers that employers really need.

Most of the interviewed employers said that college presidents must take a leadership role in working with employers and in articulating the vision of a partnership. The president need not be involved on a daily basis, but they must communicate the importance of employer engagement so that faculty, staff, and administrators across the college are cognizant of their support.

In their interviews, college personnel noted that engaging with employers was easiest when there were long-standing college–employer relationships. All the colleges represented were required by state or local policy to have employer representatives on their program advisory committees. The interviews revealed, however, that beyond meeting that minimum requirement, the extent to which employers participated in shaping the colleges’ programs varied a great deal. For example, a few college personnel stated that they were only contacted by employers when the companies needed workers.

Other observations made by college personnel included the following:

- Colleges were strongly motivated to partner with employers by a desire to have full classrooms and effective, well-maintained laboratories, as well as to produce employable graduates.
- College programs were able to further their partnership efforts when their employer partners acted as catalysts or champions of the work, engaging other employers in the same or similar technical program areas.
- Colleges were motivated to engage with employers because they recognized the importance of their role in the economic development of their communities.



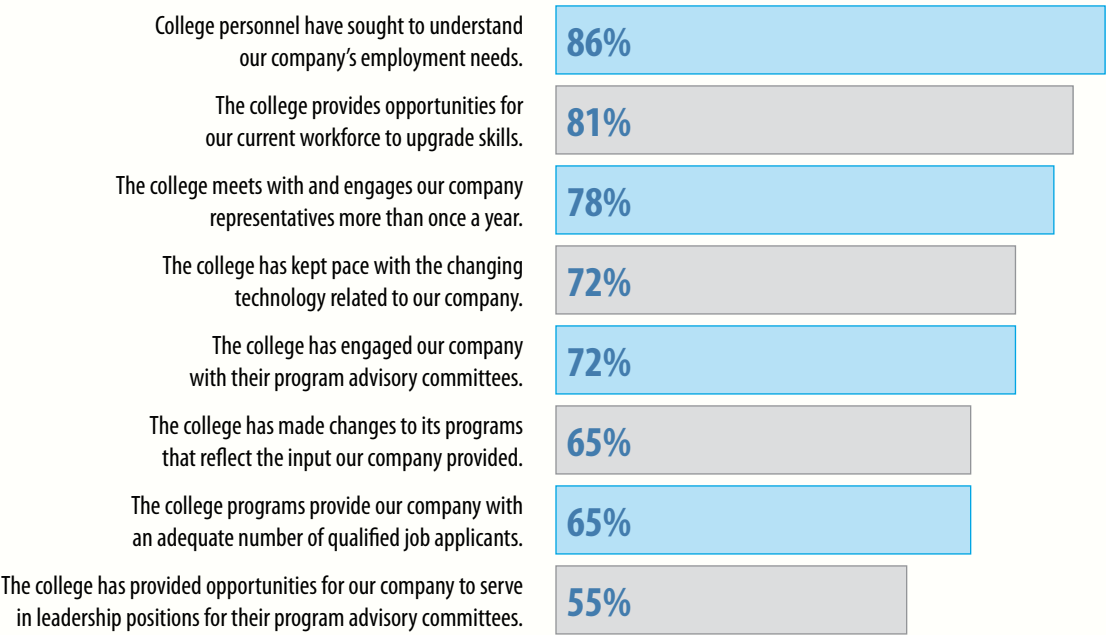
Employer Motivation to Maintain Partnerships with Colleges

The surveyed employers’ greatest motivation to maintain their partnerships with their respective colleges was a perceived desire on the part of college personnel to understand the companies’ employment needs (86 percent; Table 3). Employers were also motivated to stay engaged by the colleges’ ability to upgrade the skills of their current workforce (81 percent) and when their partner colleges engaged with them more than once a year (78 percent). Slightly fewer employers were motivated by a college’s ability to keep pace with technology related to their operations or by their efforts to involve employers in the activities of their program advisory committees (72 percent each). Somewhat fewer respondents indicated that they were motivated to maintain partnerships because a college had made changes to its programs based on employer input or had provided an adequate number of qualified job candidates (65 percent each). The weakest motivation for maintaining partnerships was a college’s record of providing opportunities for employers to serve in leadership positions on program advisory committees (55 percent).



Table 3: Employer Responses to the Question “What factors have caused your company to maintain its partnership with the college?”

Percentage of respondents who said “yes” for each item



In the telephone and in-person interviews, employers noted that their first source of talent should be their local community or technical colleges, and that, in their view, positive relations with the colleges were essential to their own success. In some cases, relationships with colleges gave employers access to grants and outside funding for training. Two employers mentioned state economic development programs they learned about through their relationships with the colleges. Through full funding or grant-matching programs, they had been able to provide training to their employees through the colleges.

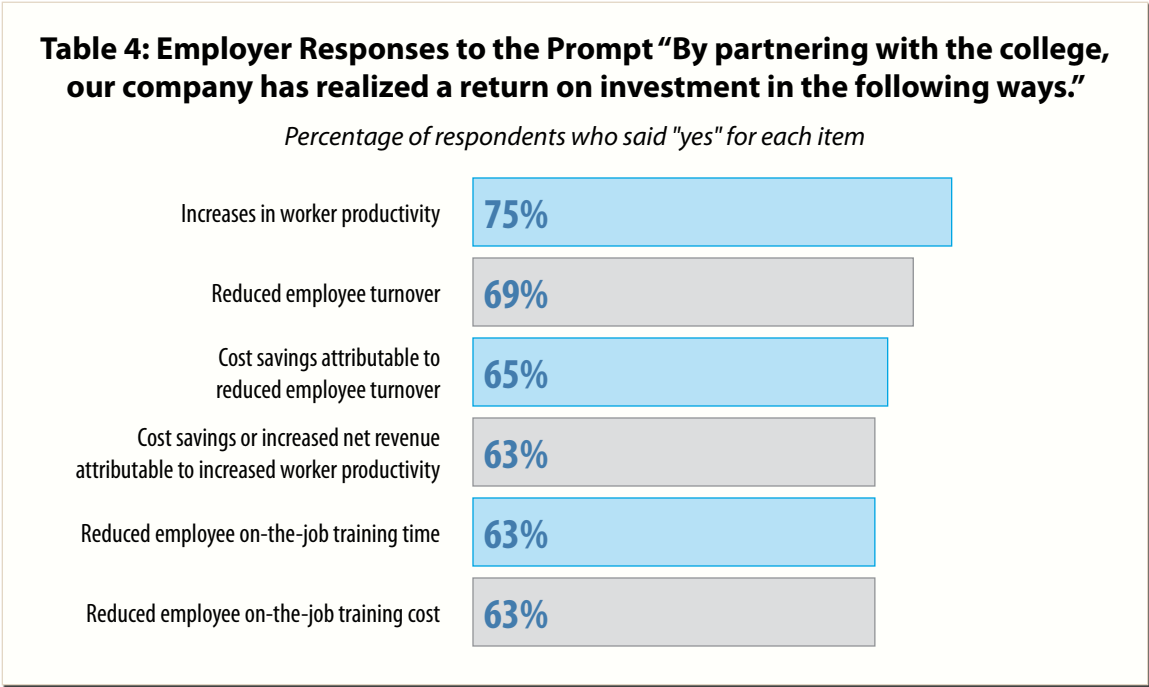
Some employers expressed dissatisfaction with their college partnerships. For example, it was noted that program agendas and the infrequency of meetings (sometimes only once a year) did not provide adequate time to discuss company issues, such as employability skill deficits on the part of new hires or a college curriculum’s emphasis on safety. A few employers stated that the only time they heard from local colleges was when they received notices of upcoming advisory committee meetings.

Some employers suggested that the colleges could be more receptive to outreach from the employers. None expressed enthusiasm about their participation on committees, nor could they point to major accomplishments of the committees on which they served.

College personnel said that they typically sought employer input on the adherence of their curriculum and laboratories to industry standards. The colleges noted that programs are required to involve industry on their advisory committees and in accreditation documentation, federal grants, and industry credentialing. For some programs, the college–employer relationship existed only to meet those requirements.

Employer Perceptions of Return on Investment

Three fourths of the employers surveyed (75 percent) said that their engagement with their partner college had resulted in increased worker productivity (Table 4). A slightly lower percentage (69 percent) identified reduced employee turnover as a return on their investment. Other perceived benefits scored lower, but not significantly: Over 60 percent of the respondents said that, as a result of their engagement with their respective colleges, they experienced reductions in time and costs associated with employee turnover and on-the-job training.



In telephone interviews, most employers stated that although they were not able to point to quantitative data gathered by their company that would support their assertions, they believed they were benefiting from engagement with their affiliated college. Most said that college program graduates required less onboarding time than other new hires. One employer stated that the employees hired from their affiliated college appeared

happier and seemed to enjoy the security of knowing they were well prepared to meet the employer's expectations.

During the in-person interviews, some employers noted that, because of their relationships with their partner colleges, new hires had better initial training, which reduced the need for on-the-job training and curtailed costs incurred because of lost-time accidents. According to some, the engagement helped produce the diversified, highly educated, highly technical workforce needed in today's advanced manufacturing environment. Other employers were less satisfied, however, noting that their partnerships fell somewhat short of their potential to produce workforce-ready hires.


Some of the interviewed college personnel said they viewed positive relationships with employers as essential to their institutions' success. Those relationships, they said, helped the colleges gain support within their communities, provide workplace learning experiences for students, keep curriculum and laboratories up to date, and secure donations. Some college personnel said that when there were demonstrable outcomes of a college-employer partnership, other departments in the college were more willing to expend the time and effort necessary to build partnerships for their own programs.

If we're looking at hard numbers, there's one way we can clearly see the return on investment. That's the ability to recruit skilled machinists into our business—and not just skilled machinists, but people who are coming out of school with the capabilities to grow into skilled machinists, welders, and maintenance technicians.

Cory Phillips, *Plant Manager, Siemens*

I would say [the return on investment is] shortening the training program, which means I have to invest less in them. Because if you come in off the street today and don't have a good mechanical aptitude and good attitude, I can train you, but it's going to take six to eight months at least.

Ken Walker, *Facility Manager, Progress Rail*



Employers believed that their first source of talent should be their local community or technical college, and they saw positive relations with the college as essential to their own success.

Employer Engagement with Colleges

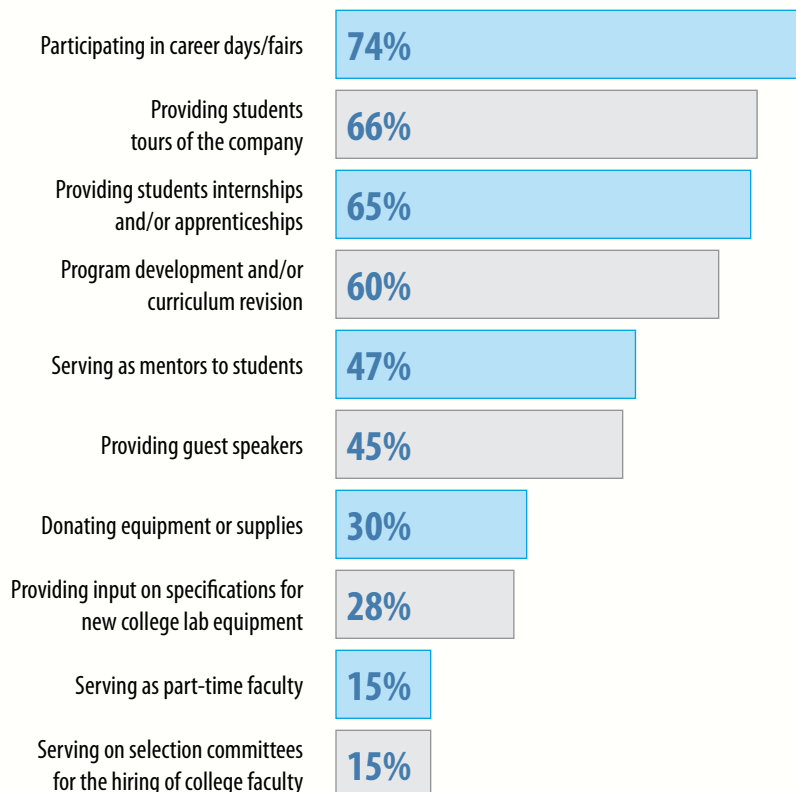
Almost three fourths of the employers surveyed (74 percent) indicated that their companies participated in career days and career fairs (Table 5). About two thirds (66 and 65 percent, respectively) indicated that they gave facility tours to students and provided them with internship and apprenticeship opportunities. Next in frequency was participation in program development and curriculum revision (60 percent). Fewer than 50 percent of employers selected the other forms of engagement—including serving as mentors to students, providing guest speakers, donating equipment or supplies, and providing input on specifications for new college lab equipment—with only 15 percent of employers saying they served as part-time faculty or helped to select college faculty.

In telephone interviews, employers said they were supportive of engagement with their respective colleges and would welcome deeper relationships. As in the online survey, they most frequently mentioned facility tours. Some employers stated that they would be interested in donating equipment or other resources and expressed interest in participating in faculty selection. In one partnership, an employer and a college shared the cost of billboard



Table 5. Employer Responses to the Question “How has your company been engaged with the college?”

Percentage of respondents who said “yes” for each item



signage to enhance student recruitment and increase awareness of employment opportunities. Employers less often described being involved in curriculum design, having company employees serve as part-time faculty and mentors for students, or providing input on college laboratory specifications.

During the in-person employer interviews, the interviewers were given facility tours and were introduced to employees who attested to the value of the education and training they had received at the partner colleges. These informal walk-throughs also gave employers an opportunity to demonstrate how the colleges were engaged with their companies, what benefits had been derived from the engagement, and how the relationships had evolved over time.

Some employers voiced concerns about a lack of sustained contacts and joint activities with their affiliated colleges. Recurring criticisms included a lack of college follow-through, cumbersome channels of communication, a lack of internal coordination among college operations (e.g., registration and records), sluggish bureaucratic curriculum processes, unproductive advisory committees, and a lack of planning.

Notably, the more robust a partnership's channels of communication and joint activities, the greater the commonality in how employers and college personnel described their interactions. More specifically, the interviewers noticed that where there were relatively few demonstrable interactions and the engagement lacked depth, there were larger discrepancies between how each partner described the working relationship.

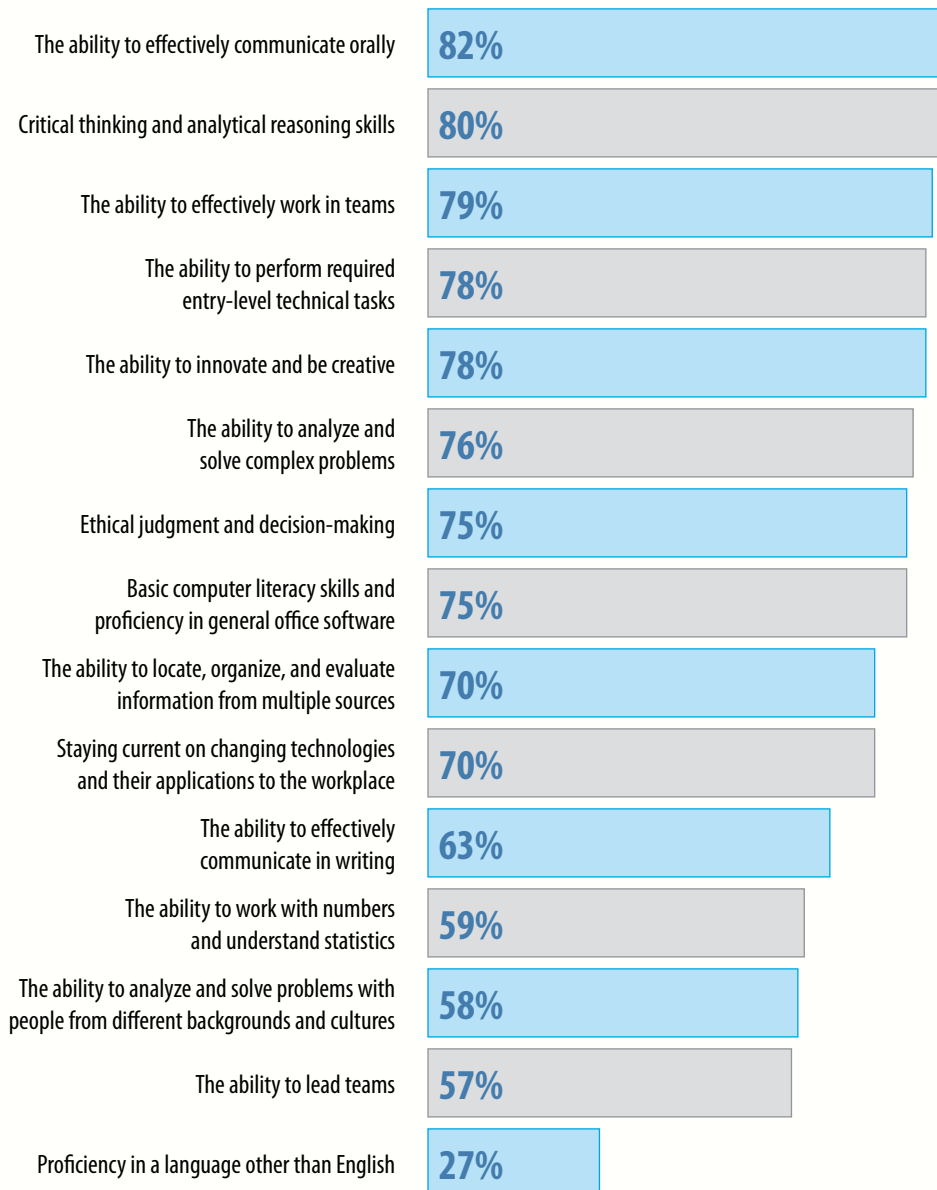


Employer Satisfaction with New Hires

Most of the surveyed employers (79 percent) indicated they had hired graduates from their partner colleges. A high percentage of these respondents (from 79 to 82 percent) said they were strongly or somewhat satisfied with the oral communication, critical thinking, and teamwork skills of these college graduates (Table 6). Employers were asked to indicate their satisfaction with graduates' technical skills—such as the ability to perform entry-level technical tasks (78 percent), use general office software (75 percent), or stay current on changing technologies (70 percent)—and their non-technical skills, including writing (63 percent) and working with numbers (59 percent). They were also asked about less tangible skills, such as creativity (78 percent), problem solving (76 percent), ethical decision making (75 percent), and the ability to find and use information (70 percent), work in a diverse environment (58 percent), or lead teams (57 percent). Finally, just 27 percent of employers were satisfied with graduates' proficiency in languages other than English.

Table 6. Employer Responses to the Question “[If your company has hired graduates of the program(s)], How satisfied are you with the program graduates’ performance on the job?”

Percentage of respondents who said they were “somewhat” or “strongly” satisfied with this ability, skill, or proficiency



The BILT: Giving Employers a Stronger Voice in Shaping College Programs

The role of employers in conventional advisory committees is often to “rubber stamp” what programs are already doing or plan to do, rather than to help shape the direction and content of those programs. The Business and Industry Leadership Teams (BILT) model, developed by the National Convergence Technology Center at Collin College, takes a different approach that puts businesses in a co-leadership role for college technical programs. “The frequency, specificity, and depth of business input, coupled with an industry-led governance structure, sets the BILT model apart. BILTs embrace the notion that employer engagement is not an event, but a process built on trusted relationships between colleges and companies. BILTs leverage the sector knowledge of employers and teaching expertise of faculty to foster powerful collaborations that ensure program curriculum meets the needs of business and students are workforce ready.”¹ Using a structured, repeatable voting process, BILT members—subject matter experts (SME) in their fields—prioritize the knowledge, skills, and abilities (KSA) that program graduates should possess, ultimately producing candidates the businesses are much more likely to hire. BILTs update the KSAs for their programs every year.

The BILT model does not diminish the college faculty’s “ownership” of any program. Rather, it provides a structure for leveraging the expertise of individuals who are active in the field the program is intended to serve. BILTs are designed to keep a close eye on trends and on how colleges can prepare students to be ready for future developments. By positioning employers as co-leaders and agenda developers, the BILT model provides demonstrable industry leadership and drives a higher level of accountability. It allows for an increase in formal and informal communication with college personnel, thus facilitating timely revision of curriculum in response to industry need.

In both the phone and in-person interviews, respondents whose partnerships were guided by the BILT model, as opposed to using conventional advisory committees, expressed high levels of satisfaction. One reason for this is that the BILT model invites deeper and more frequent employer engagement and systematically implements input that is received from employers.



¹ *Pathways to Innovation*, a project of the National Science Foundation Advanced Technological Education (NSF ATE) program, www.pathwaystoinnovation.org.

Takeaways

Below are key takeaways identified from the study. These lessons can be used to inform conversations in your community.

EMPLOYER MOTIVATION TO ENGAGE WITH COLLEGES

- Employers that engage with colleges are most strongly motivated by the need for more skilled technicians and a desire to improve technician recruitment and retention while reducing turnover.
- Employers see a positive correlation between their partnerships with their affiliated colleges and their ability to recruit and keep strong candidates.
- Employers are more motivated to partner with colleges that have a strong history of employer engagement.
- Employers welcome the opportunity to help shape college curricula pertaining to their industries.
- Employers are more receptive to engagement when the partnership has the visible support of the college president.

EMPLOYER MOTIVATION TO MAINTAIN PARTNERSHIPS WITH COLLEGES

- Employers are more likely to maintain partnerships with colleges that understand their needs and keep pace with their industries.
- Employers in the study see colleges as their first sources of talent and view positive relations with colleges as essential to their own success.
- Colleges that have adopted a BILT approach offer opportunities for employers to serve in program co-leadership roles.

EMPLOYER PERCEPTIONS OF RETURN ON INVESTMENT

- Engagement with colleges increases worker productivity and reduces costs associated with turnover, training and retraining, onboarding for new hires, and time-loss accidents.
- Engagement with colleges helps produce the diversified, well educated, highly technical workforce needed in today's workplaces.

EMPLOYER ENGAGEMENT WITH COLLEGES

- Conventional means of engagement, such as tours and career fairs, are common. Somewhat less common are work-based learning experiences, such as apprenticeships and internships.
- While their perspectives are valuable, employers are not frequently invited to serve as part-time faculty or help select new faculty hires.

EMPLOYER SATISFACTION WITH NEW HIRES

- Employers are generally satisfied with the college graduates they hire.
- Employers are most satisfied with their new hires' oral communication, critical thinking, and analytical reasoning skills. They are least satisfied with their new hires' ability to lead teams and their proficiency in languages other than English.

Results of the BILT Approach

We found that employers and college personnel involved in partnerships based on the BILT model expressed more enthusiasm for their collaboration and enjoyed stronger results in areas such as curriculum development, student enrollment and satisfaction, and program marketing. Participation in such teams took more time and effort than conventional advisory committees, we were told, but the benefits (both short- and long-term) made the effort worthwhile. The BILT Academy, an initiative of the NSF ATE *Pathways to Innovation* project (www.pathwaystoinnovation.org), offers guidance on getting started with the model; selecting BILT members and leaders; prioritizing knowledge, skills, and abilities (KSA); and ongoing administration of programs that employ the BILT model.

Recommendations to Colleges

The following points stem from information gathered during the study as well as guidance offered in the [Employer Engagement Toolkit](#), a highly recommended resource developed for the ECMC Foundation-funded *Advancing Credentials Through Career Pathways* project.

1 Be proactive in giving employers opportunities to share information on a regular basis.

One of the takeaways from this study is that employers are more likely to maintain partnerships with colleges that understand their needs and keep pace with their industries. For this reason, colleges should be proactive in reaching out to employers and providing them opportunities to share information on their evolving skills, training, and short- and long-term hiring needs; their retirement projections; and their strategies for growing employee pipelines. That knowledge will, in turn, help colleges build industry-informed programs. Colleges will also benefit from the exchange of information on trends in technology, credentials, and regulations. Information can be gathered from employers in many ways—for example, by attending meetings of employer associations, chambers of commerce, and/or workforce and development organizations. Regardless of the strategies used, colleges should communicate often and make it easy for employers to be involved.

2 Invite employers to strengthen their engagement with college programs.

Employers should be invited into the classroom to speak with students about their specific hiring requirements (credentials earned, industry qualifying examinations passed, and so on), their internship and/or apprenticeship opportunities, or the general trends in their industries. Whatever the topic, giving employers a platform for connecting with students—their future employees—on a personal level benefits everyone involved. Students will be better informed and inspired to attain reachable goals, colleges will be better informed about the industry sector served by their program(s), and employers will gain a sense of connection. In short, colleges should make employers feel like an integral part of the program. Doing so means that in the future, when there are job openings, the employer will look to the college to fill them.

3 Jumpstart program advisory committees.

One of the remarks frequently made by employers during interviews was that conventional program advisory committees often accomplish little beyond fulfilling minimal requirements for employer involvement in program governance. There are many creative ways to give such an advisory committee a boost. For example, colleges should explore the benefits of adopting the BILT model, which gives participating employers a *co-leadership* role in shaping program content and long-term trajectories. By design, BILTs meet regularly to determine what program graduates should know and be able to do, and they keep an eye on future trends. Among the participants in this study, where the BILT model was in place, the experiences of employers, college personnel, and students were overwhelmingly positive.

4 Establish the college as a valuable resource for local employers.

Where possible, colleges should build on existing relationships. For example, employers in the community may already participate in job fairs or career days, and they may be willing to offer site tours or job shadowing opportunities or develop internships or apprenticeships. Perhaps an employer is interested in exploring these options but doesn't know how. The college can provide both information and assistance, helping establish the institution as a valuable resource. Colleges should not wait for employers to reach out, but rather take the first steps. By initiating contact, positioning themselves as community resources, and communicating in a timely, consistent manner with employers, colleges can lay the foundation for a durable collaborative process that serves their own interests as well as the interests of their employer partners, while greatly enhancing the education and career outcomes of their students.

