

### Pathways to Prosperity Network

AN INITIATIVE OF JOBS FOR THE FUTURE AND THE HARVARD GRADUATE SCHOOL OF EDUCATION

# GUIDE TO BECOMING A 9-14 PATHWAYS EMPLOYER

OCTOBER 2014

#### **OVERVIEW**

The *Guide to Becoming a 9-14 Pathways Employer* is for employers interested in partnering with high schools that have 9-14 pathways, a model in which students earn a high school diploma and an associate's degree while gaining valuable industry experience. The purpose of the Guide is to provide employers with all the tools and information needed to partner with these schools in order to provide young professionals with high-quality, work-based learning experiences (experiences that happen in the classroom and in the workplace). The Guide is organized in three sections that are structured to help employers find answers to important questions that may arise as you explore a partnership.

#### Section 1: The Model

In this section you will learn more about the 9-14 model. The goal of a 9-14 pathway is for all students within it to complete a high school diploma and an associate's degree on an accelerated schedule as well as gain valuable work experience that will make students more competitive and career ready upon graduation. This section addresses the benefits of this partnership, and the professional experiences organizations can offer. Some of the benefits to partnership include, but are not limited to the following:

- Employers will have the opportunity to cultivate future talent firsthand;
- Employers will generate positive publicity within their community thereby elevating their brand; and
- Employers will have first-hand access to a pipeline of highly qualified recruits.

### **Section 2: The Students**

The students enrolled in 9-14 pathways are a diverse group of young people who share a common thread. In this section you will learn what makes them a unique group as well as how they are learning work-based skills and ethics that will help them meet the increased demand of 21<sup>st</sup> century careers. The guiding questions for this section include the following:

- Who are the students?
- What technical and work ready skills do they have?
- What makes them qualified young professionals?

### **Section 3: The Employer**

A foundational element of a 9-14 model is work-based learning. Work-based learning ensures that students have the skills necessary to be career ready upon graduation.

Key to work-based learning is successful partnership with employers. Employers must understand what is expected of them, and how partnering with 9-14 schools will benefit them in the short term and in the long run. At this point, you may be asking yourself:

- Is there a right place for my organization to start?
- What kind of commitment are we talking about?
- How can I raise awareness and excitement about this opportunity within my organization?

The Employer section starts with some ideas on where to begin mapped to typical scenarios. Your business may be in a similar situation, and could benefit from the follow-up feedback provided.

At the beginning of this guide we described how young professionals are exposed to a continuum of work-based learning experiences during their program. The Employer section of the Guide is organized along a continuum of experiences your company can provide for students; some experiences require more time and expense on your part. To that end, we've included a timeline for each experience within the continuum in order to give you as much information as possible on the expectations.

The following subsections provides information on *Career Awareness, Career Preparation* and *Career Application*:

#### **Career Awareness**

- Engage with students and teachers as guest speakers
- Sponsor field trips
- Provide mentors to students
- Participate in career fairs

#### **Career Preparation**

Host Job Shadows

- Inform project-based learning project ideas and participate on project review panels
- Provide opportunities for service learning

### **Career Application**

 Provide meaning work experiences for students in the form of internships or apprenticeships

Each subsection contains complete and detailed scenarios, suggested timelines, forms for schools and employers, and tips related to each type of engagement.

You will also find an **Appendix**, which contains additional reference information:

- Bibliography
- Frequently asked questions

The tools and resources in this guide were developed based on the latest national and international research, on information from organizations currently managing work-based learning experiences, and from interviews with leaders in the field. (See the Bibliography at the end of the guide for a list of all reference materials.)

# **SECTION 1: THE MODEL**

Find answers to questions such as:

- Why should we become a partner?
- What is the 9-14 Pathways model?
- What professional experiences can my organization offer?

### WHY PARTNER WITH A 9-14 PATHWAYS SCHOOL

With baby boomers set to retire in record numbers, and with the demand for sophisticated and flexible technical skills growing, companies need to pay attention to the talent pipeline. But many employers claim that despite the glut of jobseekers, there is a skills mismatch. The talent they need does not show up in their HR department. National data indicate that there are 28 million middle-skill jobs—those requiring postsecondary degrees—currently available in the United States. Data also show that over the next 10 years, 14 million new jobs requiring middle skills—a 50 percent increase—will be created, with those requiring STEM skills the highest paid.

From another perspective—that of our country's social cohesion and the well-being of society, the United States cannot afford to lose a generation of young people to long-term unemployment. Research shows that an initial precarious attachment to the labor market reduces wages over a lifetime. And the sad story is that youth (ages 16-19) employment has dropped from about 46 percent a decade ago to a low of about 25 percent today. Indeed, the lower your family income, the less likely you are to hold a job either during the school year or in the summer. No wonder teens are having a hard time entering the labor market; they have no way to get the experience many job openings require.

One way to address these issues is to create programs in schools that provide the academic and career experiences and skills necessary to compete in the labor market. Students in 9-14 pathways programs are not only earning high school and college credit, but also are exposed to, prepared for and immersed in careers through highly sequenced work-based learning activities. Employer partners have the opportunity to shape the future of our youth and of *your* workforce in a way that can be found nowhere else.

The goal for any 9-14 pathway program employer partnership is to help you as an employer provide meaningful learning experiences for a specific group of young people, and at the same time have their contributions benefit your bottom line. Yes, we mean that. With close cooperation between the school and the company, the company's skills

and talent needs will shape what students learn. Your role will be to induct young people into the workplace, give them real work that needs to be done, provide guidance as you would to any employee, and in the case of an apprenticeship, pay them for work accomplished.

Becoming a 9-14 pathways employer partner has a host of benefits – not only are you contributing to your company's reputation as socially engaged and active in your community, you are cultivating future talent firsthand. Pathways employer partners enjoy the benefits of developing a diverse pool of skilled and loyal potential employees; reducing recruitment and training costs; avoiding costly hiring; and having a say in how young people are being educated *before* they come to work for your company.

### WHAT IS THE 9-14 PATHWAYS MODEL?

Launched in INSERT YEAR, INSERT SCHOOL NAME is a high school in INSERT CITY AND STATE that connects high school, college, and the world of work through deep, meaningful partnerships that join K-12, higher education and industry in ways that enable students to earn associate in applied science degrees in INSERT INDUSTRY NAMES fields. Developed in collaboration with INSERT COLLABORATORS, INSERT SCHOOL NAME is pioneering a new vision of college and career readiness that will help to meet the growing demand for skilled workers who can successfully contribute to the 21<sup>st</sup>-century world of work.

With a unique 9-14 pathways model, INSERT SCHOOL NAME goal is for 100 percent of its students to complete a high school diploma and an Associate's degree on an accelerated schedule because students are prepared for and gain college credit while still in high school. Upon graduation, students are qualified to secure an entry-level position in the highly competitive INSERT INDUSTRY industry, or to continue and complete their studies in a four-year higher education institution.

The technical and academic training students receive is carefully matched to the actual jobs that are available—and will be available—to young people moving into INSERT INDUSTRY professions. The goal is to provide, in one program, all the tools necessary for students to graduate straight into careers in the industry.

A critical part of the 9-14 model is work-based learning. This occurs through experiences that take place in the workplace through worksite visits, mentoring, internships, and apprenticeships. Being immersed in a real-world environment ensures that students are learning behaviors and solving the kinds of business problems that will make them highly qualified candidates upon graduation. This learning is contextualized and reinforced in school.

The employers who collaborate with 9-14 pathways schools to provide the work-based

learning experiences are critical partners. This guide is meant to help such employers understand what that means, how it can be beneficial to a company's business, and how to participate in a meaningful and high-quality way.

### WORK-BASED LEARNING

Work-based Learning is designed to provide a seamless, supported pathway to the world of work and career over the course of the students' time at pathways program. The Work-based Learning sequence of coursework, mentoring, worksite visits, internships, and apprenticeships is intertwined with requirements for the INSERT DEGREE TYPES degrees at INSERT COLLEGE in INSERT MAJORS As students gain skill in both their academic and technical coursework, they are asked to apply that skill to a real need in a real work setting—first in a supported cohort model, then moving into a competitive individual internship, and, in some cases, an apprenticeship with an industry.

As students move through the sequence, the goal is that they steadily shift the balance of their time and focus from school to work, just as they simultaneously shift their balance from high school core requirements to college degree completion.

### WHAT ARE THE WORK-BASED EXPERIENCES I CAN OFFER?

Students are exposed to a continuum of work-based learning experiences during their time at pathways. The quality of the experiences depends on employer involvement, and employers can get involved in a variety of ways.

In the first and second years, students begin to develop career *awareness*, and to learn more about the specific INSERT INDUSTRY careers they are being prepared to undertake. Employers can support this phase by engaging as **mentors** or **guest speakers**, sponsoring **worksite visits**, or participating in **career fairs**.

Students are next exposed to activities addressing career *preparation*. This phase offers opportunities for students to advance their personalized education and career plan through an introduction to real-world projects. Here, employers can collaborate with **INSERT SCHOOL NAME** to develop **project-based learning experiences** (that can be managed in-person or virtually) and offer **job shadows**.

Lastly, many students get involved in career *application*, during which they take what they have been exposed to in the awareness and preparation phases and begin to apply it in **deeper**, **paid internships** and, in some cases, an extended **paid apprenticeship**. An apprenticeship involves employers hiring a student for a six-to twelve-month period, during which the students further develop the needed skills for an entry-level INSERT INDUSTRY position. The ultimate goal is for the apprentice to be hired as an employee by the company.



### How Pathways Students Experience Work-Based Learning

Ideally, an employer will partner with INSERT SCHOOL NAME across the full spectrum of work-based experiences, which provides continuity to students and enables employers to get to know them as future employees. As a partner, the employer becomes a valuable collaborator, helping to shape INSERT SCHOOL NAME curriculum, provide employee mentors, and more, to ensure that students are truly prepared to enter the world of work when they graduate.

Depending on the size of your organization or the resources you have available, your organization may choose to start with one or two aspects of work-based learning experiences. For example, your business may want to start by offering guest speakers at INSERT SCHOOL NAME or participating at a INSERT SCHOOL NAME sponsored career fair. The Employer section of this guide provides concrete ideas on how your organization can get involved as well as some tools to prepare for the experience.

Regardless of what you as an employer are able to offer, this guide will help you understand the benefits of opening your doors to qualified young professionals, and will provide the support your business needs to have a meaningful partnership with INSERT SCHOOL NAME.

# **SECTION 2: THE STUDENTS**

Find answers to questions such as:

- Who are the students?
- What skills do they have?
- What makes them qualified professionals?

### WHO ARE THE STUDENTS?

Students at INSERT SCHOOL NAME are a diverse mix of young professionals who share many important things in common: EDIT AND CUSTOMIZE THE FOLLOWING AS IT RELATES TO YOUR SCHOOL AND PROGRAM

**They are driven. INSERT SCHOOL NAME** operates on an extended day/extended year model, maximizing time to give all students the opportunity to earn an Associate in Applied Science degree, regardless of challenges or past academic struggles.

**They are accelerating their studies**. A significant number of students are taking college-level courses starting in tenth grade. Although many of these students will not begin in advanced-level courses when they start at **INSERT SCHOOL NAME**, they are able to make significant academic gains in math and English throughout their first year in order to be ready for the college courses.

**They are succeeding.** Based on data collected over a decade from now nearly 300 9-14 Early Colleges, 9-14 pathways can expect the following:

- 90% of early college high school students graduate, compared with 78% nationally.
- **94%** of graduates will have already earned some college credit by the time they finish high school.

**They are our future.** These students will become an important part of the talent pipeline and will be ready and able to work in areas where there is a shortage of skilled workers.

### HOW DO STUDENTS LEARN WORKPLACE SKILLS?

Adolescents need multiple opportunities to practice and evaluate their skills, and the core of the work-based learning sequence at INSERT SCHOOL NAME is focusing on problem solving and project management. Students work on multiple projects that integrate core academic skills, particularly in INSERT ACADEMIC DETAILS, core technical skills from their college courses, and core interpersonal and practical skills, such as teamwork, time and project management, and effective and professional communication. They are encouraged to revise and review their work as often as possible via a portfolio of work compiled as they make their way through the career awareness phase, to career preparation and finally to career application. The sequence is as follows: EDIT AND CUSTOMIZE THE FOLLOWING AS IT RELATES TO YOUR SCHOOL AND PROGRAM

Career Awareness <ul> <li>Daily, 45-minute class</li> <li>Overview of IT industry and careers</li> <li>Virtual mentorship from employers</li> <li>Field trips to employers</li> <li>Field trips to employers</li> </ul> <ul> <li>Emphasis on teamwork, time management, presentation, resensitils, and goal setting</li> </ul> Project Days <ul> <li>Field trips to employers</li> <li>Field trips to employers</li> <li>Biweekly, 3-hour team meetings</li> <li>Consulting teams define and solve a STEM problem at school with faculty</li> <li>Mentorship continues</li> </ul> <ul> <li>Emphasis on team-building, responsibility, understanding how manage multiple components of project, and problem definition</li> </ul> Virtual Enterprise <ul> <li>Daily, 90-minute course</li> <li>In-school entrepreneurship program and global business simulation that replicates all aspects of a real business</li> <li>Project-based curriculum</li> <li>National and international components of accounting</li> </ul>		
<ul> <li>Overview of IT industry and careers</li> <li>Virtual mentorship from employers</li> <li>Field trips to employers</li> <li>Field trips to employers</li> <li>Biweekly, 3-hour team meetings</li> <li>Consulting teams define and solve a STEM problem at school with faculty</li> <li>Mentorship continues</li> <li>Emphasis on team-building, responsibility, understanding how manage multiple components of project, and problem definition</li> <li>Virtual Enterprise</li> <li>Daily, 90-minute course</li> <li>In-school entrepreneurship program and global business simulation that replicates all aspects of a real business</li> <li>Project-based curriculum</li> <li>National and international components</li> </ul>		
Project Days         • Biweekly, 3-hour team meetings         • Consulting teams define and solve a STEM problem at school with faculty         • Mentorship continues         • Mentorship continues         • Daily, 90-minute course         • In-school entrepreneurship program and global business simulation that replicates all aspects of a real business         • Project Days         • Stem Project Days         • Emphasis on team-building, responsibility, understanding how manage multiple components of project, and problem definition         • Mentorship continues         • Mentorship continues         • Daily, 90-minute course         • In-school entrepreneurship program and global business simulation that replicates all aspects of a real business         • Project-based curriculum	arch	
<ul> <li>Consulting teams define and solve a STEM problem at school with faculty</li> <li>Mentorship continues</li> <li>responsibility, understanding how manage multiple components of project, and problem definition</li> <li>Virtual Enterprise</li> <li>Daily, 90-minute course</li> <li>In-school entrepreneurship program and global business simulation that replicates all aspects of a real business</li> <li>Project-based curriculum</li> <li>National and international components</li> </ul>		
<ul> <li>Daily, 90-minute course</li> <li>In-school entrepreneurship program and global business simulation that replicates all aspects of a real business</li> <li>Project-based curriculum</li> <li>National and international commons</li> </ul>		
<ul> <li>In-school entrepreneurship program and global business simulation that replicates all aspects of a real business</li> <li>Project-based curriculum</li> <li>National and international commonstructure</li> </ul>		
Project-based curriculum     Inational and international comment	ting, e and	
Preparation	realional and international competition	
Internships		
<ul> <li>Individual placements at employers</li> <li>Job shadowing, project-based work and onsite problem-solving</li> <li>Dig deeper into workplace culture</li> <li>More intense application of tech skills</li> <li>Encounter different kinds of site</li> </ul>		
Deeper Internships		
<ul> <li>Spend longer and deeper amounts of time at single site</li> <li>Continued support of advisor and mentor</li> <li>Application</li> <li>Apply to site placements based technical skill gained from collection assessments</li> </ul>	ge	
Paid Apprenticeship		
Apply to competitive range of employer- proposed projects     Exhibit mastery of based-learning technical skills; polished portfolioned portfol		
C TO BECOMING A 9-14 PATHWAYS EMPLOYER 10		

### WHAT DO 9-14 PATHWAYS PREPARE STUDENTS TO DO?

Students will graduate from INSERT SCHOOL NAME with INSERT DEGREE. With this credential, they will be valuable contributors to the 21<sup>st</sup>-century world of work, particularly in INSERT INDUSTRY-related fields, and will be able to fill jobs for which there is a shortage of qualified candidates.

# EDIT AND CUSTOMIZE THE FOLLOWING AS IT RELATES TO YOUR SCHOOL AND PROGRAM. USE THIS AS A GUIDE.

Degree	Related jobs students are prepared for
Associate in Applied Science (AAS) in Electromechanical Engineering Technology	<ul> <li>Electrical technicians</li> <li>Electrical engineering technicians</li> <li>Field Engineer</li> <li>Business machines technician</li> <li>Data processing equipment specialist</li> <li>Electromechanical technician</li> <li>Laboratory technician</li> <li>Biomedical instruments service technician</li> <li>Robotics service technician</li> </ul>
Associate in Applied Science (AAS) in Computer Information System	<ul> <li>Computer programming</li> <li>Database programming</li> <li>Web programming</li> <li>Systems/network administration and support</li> </ul>

# EDIT AND CUSTOMIZE THE FOLLOWING AS IT RELATES TO YOUR SCHOOL AND PROGRAM. USE THE FOLLOWING AS A GUIDE:

### **Degree Descriptions**

The Associate in Applied Science (AAS) in CIS prepares students for entry-level careers in a wide range of computer systems professions. It provides students with a solid foundation in the field of computer systems, which enables them to make a seamless transition to the workforce or into a Bachelor of Technology in computer systems program. This curriculum is well balanced between technical requirements and liberal arts requirements. It also introduces students to the business world. Students are required to complete a semester of accounting and a semester in business management, to provide familiarity with contexts in which computer systems are commonly used.

During the INSERT SCHOOL NAME experience, students achieve early mastery of foundational high school subjects such as math and English language arts, develop general workplace skills and behaviors that are expected of young professionals, and master a set of baseline and specialized college-level technical skills. The skills they

### acquire from INSERT SCHOOL NAME include:

# EDIT AND CUSTOMIZE THE FOLLOWING AS IT RELATES TO YOUR SCHOOL AND PROGRAM. USE THIS AS A GUIDE.

### **General Workplace Competencies**

- MS Office Applications
- Communication Skills
- Teamwork
- Accountability
- Problem Solving
- Motivation
- Project Management
- Adaptation
- Digital Media
- Research and Analysis
- Technical Writing
- Creativity
- Work Readiness
- Ethics
- Leadership

### **Technical Focus Areas**

#### **CST Technical Skills**

- Problem Solving with Computer Programming
- Operating Systems Fundamentals
- Programming Fundamentals
- Database Systems Fundamentals
- Networking Fundamentals
- Web Programming I
- Computer Systems Management and Support
- Multimedia and Mobile Device Programming

- Web Programming II
- Introduction to Systems Analysis and Design
- System Administration (UNIX/Linux)
- System Administration (Windows)

### STUDENT SKILLS PROFILE: GENERAL WORKPLACE COMPETENCIES

These skills are based on research on foundational workplace competencies and technical skills in the Computer Information Systems (CIS). These skills are backmapped to align with classroom instruction at the high school and the college.

Skill	Description
MS Office Applications	Use a suite of applications (e.g., Microsoft Office) for creating, editing, and sharing text, spreadsheets, presentations, and other documents.
Communication Skills	Communicate and work productively with others, incorporating different perspectives and cross-cultural understanding, to increase innovation and the quality of work.
Accountability	Demonstrate productivity and accountability by meeting high expectations.
General Problem Solving	Demonstrate critical-thinking skills using appropriate tools and resources to plan and conduct research, manage projects, solve problems, and make informed decisions.
Motivation	Demonstrate initiative and self-direction through high achievement and lifelong learning while exploring the ways individual talents and skills can be used for productive outcomes in personal and professional life.
Project Management	Plan, organize, secure, and manage resources to bring about the successful completion of specific project goals and objectives.

Adaptation	Adapt to various roles and responsibilities and work flexibly in climates of ambiguity and changing priorities.
Knowledge of Digital Media	Use digital media and environments to communicate and work collaboratively, including at a distance, to support individual learning and contribute to the learning of others.
Research and Analysis	Apply digital tools to gather, evaluate, and use information.
Technical Writing	Analyze and create a variety of information types.
Creativity	Demonstrate creative thinking, construct knowledge, and develop innovative products and processes using technology.
Work Readiness	Know, and understand the importance of, employability skills, while exploring and planning potential career pathways.
Ethics	Understand human, cultural, and societal issues related to technology and practice legal and ethical behavior.
Leadership	Demonstrate leadership skills, integrity, ethical behavior, and social responsibility while collaborating to achieve common goals.

### MEET SOME OF OUR STUDENTS

On the next few pages, you will see professional bios of **INSERT SCHOOL NAME** students have written that highlight their skills and experiences.

# EDIT AND CUSTOMIZE THE FOLLOWING AS IT RELATES TO YOUR SCHOOL AND PROGRAM. USE THE FOLLOWING AS A GUIDE.

### MEET AMARU LEWIS

Amaru is in Year 2 at P-TECH, majoring in computer information systems. His projects and extracurricular activities highlight his interest and talents in computer science.

### Courses:

- Introduction to Computer Science and Programming
- Introduction to Computer Systems
- Introduction to Engineering
- Logic and Problem Solving
- Principles of Digital Communications I & II
- Data Structures and Algorithms

### Programming Languages:

- JQuery, Intermediate
- Javascript, Novice
- Python, Expert
- Ruby, Intermediate
- PHP, Novice
- HTML and CSS, Expert

### Projects:

- NASA Space Apps Challenge: Created an open hardware design for the European Space Agency (ESA) that could be generated by a 3D printer. The Web application used data from the agency's Gaia mission to create a 3D model of a given star's neighborhood. The application identified 100 of the brightest stars nearest earth, and 50 of its closest neighbors. It could then turn that data into a printable 3D model.
- FIRST Robotics Competition, Ultimate Ascent: Designed, constructed, and programmed a robot to compete in FRC's Ultimate Ascent. The challenge was between two alliances, each consisting of three robots, who then competed to shoot as many discs into their opponent's goal as possible during a two-minute match. The match began with a 15-second Autonomous Period in which robots operated independently of driver inputs. Drivers then controlled their robots and tried to

maximize their alliance's score. The match ended with robots attempting to climb up pyramids located near the middle of the field. Each robot earned points based on how high it climbed.

• **Spotify Music Education Hackathon:** Designed and developed a dynamic music history lesson platform, using a lightweight JavaScript framework, that teachers can use in their classrooms. The site enables student discovery based on personal interest and draws from a number of dynamic content sources including Wikipedia, YouTube, and Spotify.

### **Extracurricular Activities:**

- Robotics
- Student Government
- Student Leadership Team
- Shut up and Write

### Code Crew:

A group of software engineers, designers, and entrepreneurs that holds collaborative coding programming sessions

### **Peer Mediators:**

A group of students trained and certified by the New York City Commission on Human Rights as mediators

### Philosophy and Our Lives:

A group that reads and discusses the uniqueness of the present moment—the philosophy of our time—through the lens of thinkers such as Nietzsche, Camus, and Sartre.

# **SECTION 3: THE EMPLOYER**

Find answers to questions such as:

- What does partnering with a 9-14 schools look like?
- How do we prepare in order to provide meaningful work experiences?
- How do we bring this to life in our company?

### **OVERVIEW**

One of the key foundational elements of the 9-14 model is work-based learning. Workbased learning ensures that students have the skills necessary to be career ready upon graduation.

Key to work-based learning is successful partnership with employers. Employers must understand what is expected of them, and how partnering with 9-14 schools will benefit them in the short term and in the long run. Up to this point in this guide, you have been provided an overview of INSERT SCHOOL NAME and an understanding of the skills and knowledge INSERT SCHOOL NAME students possess. At this point, you may be asking yourself:

- Is there a right place for my organization to start?
- What kind of commitment are we talking about?
- How can I raise awareness and excitement about this opportunity within my organization?

The Employer section starts with some ideas on where to begin that are mapped to typical scenarios. Your business may be in a similar situation, and could benefit from the follow-up feedback provided.

At the beginning of this guide we described how INSERT SCHOOL NAME young professionals are exposed to a continuum of work-based learning experiences during their time in the pathways, and how employers can get involved in a variety of ways. The Employer section of the guide is organized along that continuum. You can choose to participate in any one of these experiences, although some experiences require more time and expense on your part. To that end, we've included a timeline for each experience within the continuum in order to give you as much information as possible on the expectations.

### **READINESS SCENARIOS**

Scenarios	Feedback
Your business recognizes that there is a need for more qualified professionals in your field, and wants to take action. You and a few colleagues have discussed some ways to help expand the pool, and want to build broader institutional support.	<ul> <li>You might want to consider participating in some activities to start. Some ideas include:</li> <li>Agreeing to be a guest speaker.</li> <li>Allowing a student to shadow you for a day.</li> <li>Participating in a career fair.</li> <li>After you have had some experience with these activities, you can begin to share lessons learned with the appropriate people at your company, perhaps in Human Resources or Corporate Citizenship. You can then begin to make the case to expand your company's participation. To get started, review the tools and resources associated with the <i>Career Awareness</i> and <i>Career Preparation</i> subsections.</li> </ul>
You work for a small company that would not be able to assign a dedicated resource to coordinating an internship program, but you have a lot of projects that have been on the back burner because of lack of in- house resources to complete them.	Many real projects can form the basis for project- based learning or service learning projects (if you are a community-based or nonprofit organization). You might consider using one of your stagnant projects as the basis for one of these project- based activities. This could simultaneously provide you with student-driven project-based solutions and work products that your company might actually want to use. To get started, review the tools and resources in the <i>Career Preparation</i> section.
You work for a large company that does employ interns. Generally, interns come from already established pipelines such as the local college. You are interested in partnering with an innovative 9-14 model, but are unsure how to get your company to broaden its pool of intern options.	You should first identify the appropriate people within your organization who can help, perhaps in Human Resources or Corporate Citizenship. The <i>Internship</i> section of this guide will help you make a case for expanding your internship program to include INSERT SCHOOL NAME students. That section includes timelines, sample job

descriptions, and tools to support interns on the job. Having all of the expectations laid out will help you properly plan for adding to your current internship program.
To get started, review the tools and resources in the <i>Career Application</i> section.

Scenarios	Feedback
You work for a nonprofit organization and while you have a need for interns, your budget won't allow for one.	You might consider a project-based learning solution, in which a team of students donates time in exchange for real-world experience. The experience is highly structured and supervised. This solution would help you get the support you need while providing valuable work-based learning experiences for students. To get started, review the tools and resources in the <i>Career Preparation</i> section.
You work for a company or nonprofit organization that has an established internship program that hires interns with a goal to promoting them into entry-level positions upon completion of the program and graduation.	Since you have a structure in place, an appropriate solution for this scenario is a deep internship program or a paid apprenticeship, in which the student is immersed in the work he or she might be doing as a full-time entry-level employee. To get started, review the tools and resources in the <i>Career Application</i> section.
You work for a company or nonprofit organization that has an active volunteer program, and you are always looking for ways employees can make a difference.	Work with your Corporate Citizenship staff to develop a volunteer program that includes mentoring INSERT SCHOOL NAME students, hosting worksite visits from INSERT SCHOOL NAME students, or offering guest speaking opportunities at INSERT SCHOOL NAME.

### WHERE DO YOU BEGIN?

Now that you have reviewed the scenarios, you should have a better sense of what your organization may be able to offer, what your organization might be able to gain, and how your organization might want to partner with INSERT SCHOOL NAME.

A concrete next step for you is to review the tools and descriptions on the next pages of the guide to determine what your organization can reasonably do. Each section contains a detailed description of how your organization can partner with INSERT SCHOOL NAME and what the expectations are for each particular activity.

You also may want to consider the following:

- Going to a INSERT SCHOOL NAME open house to get to know the school and learn about additional opportunities;
- Participating in INSERT SCHOOL NAME Advisory Board; or
- Providing input on INSERT SCHOOL NAME work-based learning curriculum.

There are hosts of ways you can be a part of this exciting program. Contact **INSERT** CONTACT NAME for more information.

### STRATEGIES TO ENGAGE OTHERS

As you review the various ways to get involved with INSERT SCHOOL NAME, remember that becoming a INSERT SCHOOL NAME employer partner has a host of benefits. Not only will you be contributing to your company's reputation as a socially engaged, active partner in the community, but your company or nonprofit also will be cultivating future talent firsthand. Here is a list of benefits to employers.

The partnership can:

- Create a pool of skilled and motivated potential employees.
- Improve employee retention and morale.
- Reduce training/recruiting costs for new employees.
- Prepare students for their future.
- Generate positive publicity.
- Enhance capacity to manage a diverse workforce.

Here is a list of concrete strategies to engage employees in your organization to participate:

- Email the larger company about INSERT SCHOOL NAME and the benefits of partnering.
- Profile your partnership on the company's intranet or website.
- Enlist the help of an executive who has influence on others to encourage employees to participate in meaningful ways.
- Start an employee volunteer group that supports this initiative and supports each member of the group.
- Host a brown bag lunch after you have participated in a work-based learning activity and share your experience.

## **SECTION 3A: CAREER AWARENESS**

Find answers to questions such as:

- What work experiences make up career awareness?
- How can my organization provide career awareness experiences for young professionals?

### **CAREER AWARENESS**

- Guest speakers
- Field trips
- Career fairs
- Mentorships

As stated earlier in this guide, an employer will ideally partner with INSERT SCHOOL NAME along the full spectrum of involvement and activities, providing continuity to students and enabling employers to get to know them as future, long-term employees. The spectrum begins at *the Career Awareness* stage.

At the *Career Awareness* stage, students are in ninth and tenth grades. They are primarily involved in fulfilling high school academic requirements, and are just beginning work-based learning and discovering the various careers available to them. This stage presents the opportunity for students to become *aware* of different careers in the **INSERT INDUSTRY** field and to begin to build the foundation for future work experiences.

Employers can support this phase by engaging employees as guest speakers, sponsoring field trips to their workplaces, providing mentors, or participating in career fairs. This section of the guide provides detailed, concrete information on how to launch successful speaking engagements, field trips, and career fair participation, including timelines, forms, presentation tools, and models for communication.

### **GUEST SPEAKERS**

### **GUEST SPEAKERS: OVERVIEW**

Guest speaking in a classroom is an activity that can leave lasting impressions on an organization's workforce and on students. Guest speaking can provide a window into a workplace and an opportunity for an organization to influence the future workforce.

The purpose of guest speaking is to:

- Introduce students and teachers to the business community.
- Broaden student and teacher awareness of potential career opportunities in a given field or industry, expanding their knowledge of various career paths.
- Connect classroom learning to the workplace, motivating students to achieve.

# If you are coordinating guest speakers at your organization or if you are a professional looking to be a guest speaker, use the materials in this section to prepare for your experience.

In this section on guest speakers, you will find the following:

- Timeline
  - Use the timeline to adequately prepare for this experience.
- Preparation Form
  - Use the preparation form when you contact the school. This form will help you to
    organize your thinking and to appropriately prepare for the presentation.
- Presentation Guide
  - Use the guide to prepare a presentation that makes sense for your audience and subject. If you are coordinating a guest speaking program at your organization, use the guide as a handout to give to speakers.

If you are interested in being a guest speaker, contact INSERT CONTACT INFO

### **GUEST SPEAKER: TIMELINE**

Timeline	Task	Description of Task	Notes
4 weeks prior	Contact industry liaison	Email liaison your resume and/or bio, along with a description of the topics you'd like to cover as a classroom speaker.	The liaison will match your expertise to the appropriate course.
3 weeks prior	Prepare demo, activity, or presentation	Spend time to prepare an interactive demo, activity, or brief presentation that makes sense for the classroom you are visiting (use presentation guide)	It is important to make this as engaging as possible. Be sure to allow ample time for Q&A throughout your visit.
2 weeks prior	Email demo, activity, or presentation to industry liaison	Allow the liaison the opportunity to view the presentation to further prepare students. The liaison will also share this with the teaching staff for feedback.	This step is key because it ensures that the content of the demo, activity, or presentation is aligned with the course and is student friendly.
1-2 weeks prior	Promote your event	Send an email to your corporate volunteer coordinator to let him or her know what you are doing.	
1 week prior	Contact industry liaison	Email liaison to confirm that you will be arriving and identify the appropriate logistics for your visit.	

### **GUEST SPEAKERS: PREPARATION FORM**

Please fill out this form and send it to the industry liaison, along with your resume or a brief bio.

Availability (please provide several dates): \_\_\_\_\_

### Estimated Visit Time: \_\_\_\_\_

\*\* (please arrive 15-20 minutes early to check in at main office)\*\*

#### Areas of Expertise:

**Topics to Highlight:** 

1.\_\_\_\_\_

2. \_\_\_\_\_

3. \_\_\_\_\_

**Preferred presentation format** (demo, activity, discussion, panel, etc.)

**Technology needed** (i.e., projector, laptop, wireless Internet):

#### Other notes:

### **GUEST SPEAKERS: CLASSROOM VISIT GUIDE**

By volunteering to speak in a classroom you are taking an important step toward building a more prepared future workforce. This guide will help plan your experience. While this guide will help prepare for most speaking engagements, each engagement is unique. Working closely with the specific teacher is essential to ensuring successful experiences for students and speakers.

### Communicate with INSERT CONTACT TITLE about expectations.

- Send the INSERT CONTACT TITLE your preparation form with your professional expertise, topics you'd like to cover with students, and a proposed format for your visit. The liaison will review this with the teaching staff and match you with the appropriate class and teacher. Building rapport and understanding of what the class is focused on and what the teacher's expectations are will help you to prepare a more successful presentation. This is also a good opportunity for you to learn about the school and classroom. Understanding how a classroom is arranged, what the audio/visual availabilities are, and usual behavior of the class is important.
- In addition to logistics (time, place, length of presentation, age of students, technology needs) you will need to be familiar with what students are learning in class. For example, if you are speaking to an algebra class, you may want to ask what the students have already learned, what teachers are currently covering, and how the curriculum can relate to your profession. Making your job relevant to student learning will help motivate them to succeed and develop skills necessary to pursue careers in your industry. For example, an engineer would want to explain how math is used to construct bridges and buildings and how accuracy can enhance safety.
- The teacher will be preparing the class for your presentation. Any resources (bios, publications and websites, etc.) you can send the teacher in advance are appreciated.

### Prepare for your visit.

At the end of your visit, students should be able to answer the following, in addition to other information that your demo/activity/presentation provides:

- What industry do you work in?
  - What does that industry do, and how does it affect students?
- What organization do you work for?
  - What is your job function? What other organizations exist in your industry? What careers are available in your organization? What sort of education and training is required for such careers?

- What was your personal career path?
  - Hearing about personal career paths always resonates best with students. Students need to understand the breadth of careers available and the diversity of career paths, even for individuals in the same industry. The key takeaway for students should be that multiple career paths are open to those with the proper education and training.
- The most successful classroom visits are interactive, and usually include a demo, hands-on activity, or a work-related artifact. A very short formal presentation may also be incorporated into a classroom visit.
- If you are doing a career presentation, you could:
  - Introduce yourself: name, title, education and training, why you're presenting today. (5 minutes)
  - Introduce your industry and what business or service is performed. Discuss varying careers in the industry. (5 minutes)
  - Introduce your organization and what sets it apart from competitors. Be sure to talk about the culture in your organization. (5 minutes)
  - Mention your job function, how long you have been there and your personal path to that career. Include the education and training required and what choices led you. Hearing personal career paths resonates well with students. (5 minutes)
  - Expose students to the breadth of career options in your industry. For example, aside from becoming a doctor or nurse, help students understand that there are hundreds if not thousands of other opportunities within the healthcare industry, ranging from management to information technology to accounting. (5 minutes)
  - Conclusion: review the main points of your presentation. (5 minutes)
  - Question and Answer (25-30 minutes)

### Considerations

- Make your visit relevant to what students are learning in the classroom. Has one of your projects or products been in the news lately? Have you recently won any awards?
  - Activity Idea: Distribute a few post-its to each student. Have them write one reason why their classwork is important to your industry. Give them a couple of minutes to put the finished post-its on the board, and review a few with the class. Any opportunity to get kids out of their seats in an organized way can make your presentation more engaging.
- Simplify terminology and avoid using acronyms and industry jargon.

 Activity Idea: Take jargon in your industry that is similar to that in another industry, and ask the class to discuss the ramifications of misusing or misunderstanding it.

### **GUEST SPEAKERS: TIPS**

- **Tip 1:** Like adults, students are lost quickly if you simply read to them from a PowerPoint presentation. If using PowerPoint, use it to show pictures of projects, products, workers and attire, useful graphs, or other information.
- **Tip 2:** Build activities into your presentation that encourage participation and engagement. Lecturing rarely keeps student attention. The teacher is a resource for ideas when planning your presentation.
- **Tip 3:** Be sure to gauge understanding throughout your presentation. Arrange protocols for questions with the teacher, in advance. If asking students to hold questions until the end, remind them to write the questions down.
- **Tip 4:** Make the presentation personal, with specific details and stories appropriate for the age group. Include details on what your workplace is like (how many hours people work, how they are dressed, how they communicate and treat others). The teacher can inform you about anything you should highlight.
- **Tip 5:** Include the teacher in the presentation. Teachers are a great resource and can help manage student decorum. If they are not engaged, chances are students will not be, either.
- **Tip 6:** Money and other perks speak to students, so be prepared to divulge potential salary ranges and other benefits of your organization or career. Students should not ask your own salary, but having some figures worked into your presentation helps. Also, relate salary ranges to education and training, discussing entry-level salary expectations.
- **Tip 7:** Provide current information about your industry, your organization, and competitors, having done additional research if necessary. Up-to-date information is critical.

### **FIELD TRIP**

### FIELD TRIP: OVERVIEW

Allowing a group of students to enter a workplace is beneficial to students, teachers, and working professionals. Students see places where they may one day work themselves. Teachers get a look at the industries they are preparing students to enter. Professionals get to influence young people on future career choices in their field.

The purpose of field trips is to:

- Expand students' knowledge through active, hands-on experiences in the business community.
- Broaden student and teacher awareness of potential career opportunities in a given field or industry.
- Connect classroom learning to the workplace, motivating students to achieve in school.

If you are coordinating field trips to your organization, use the materials in this section to prepare for your experience.

In this section on field trips, you will find the following:

- Timeline
  - Use the timeline to adequately prepare for this experience.
- Preparation Form
  - Use the preparation form when you coordinate with the industry liaison and school on a field trip.
- Step-by-Step Guide
  - Use the step-by-step guide to prepare your workplace and your co-workers to maximize the student experience.

If you are interested in hosting a field trip, contact INSERT CONTACT INFO

### FIELD TRIP: TIMELINE

Timeline	Task	Description of Task	Notes
3 months prior	Meet with INSERT CONTACT TITLE	Set up a conference call to discuss learning objectives and possible tours, speakers, demos, or experiences for students during the trip.	Schedule follow-up calls as necessary.
2 months prior	Prepare agenda	Spend time to prepare an agenda for the visit that makes sense for the group you are hosting (use Step-by- Step guide)	
1 month prior	Host a pre-visit with teacher	Allow the teacher the opportunity to visit the site and do a walk-through of the agenda.	This will allow them to further prepare students for the visit, and will give feedback to the site hosts to ensure that the agenda is student friendly.
2 weeks prior	Confirm logistics with industry liaison	Email liaison to confirm that you are still expecting them.	
1-2 weeks prior	Notify colleagues and promote the event	Send an email to your colleagues, letting them know about the event.	

### FIELD TRIP: PREPARATION FORM

This form has been created to help you and the teacher build a common understanding of the goals of the field trip. It can be completed over the phone in 20–30 minutes.

Date of Engagement:
<b>Begin/End Time:</b>
Number of students participating:
Learning Objectives of Field Trip:
1
2
3
Possible Learning Experiences during Field Trip:
1
2
3
What's been covered in class that would be pertinent to reinforce:
What will be discussed in class next:
Other notes:

### FIELD TRIP: STEP-BY-STEP GUIDE

By opening your workplace to students, you are taking an important step toward building a more prepared future workforce. This step-by-step guide will help plan an effective field trip experience.

### Communicate with the INSERT CONTACT TITLE

Schedule a 30-minute to 1-hour conference call with the INSERT CONTACT TITLE. This is a good opportunity for you to learn about the students who will be visiting your workplace. This is also the time to discuss learning objectives for the trip and possible experiences that could address them.

- In addition to logistics (time, length of visit, and age of students) you will need to discuss what the students are learning in class. This will help you tailor the visit, so that they can see how what they are learning in school translates to the workplace.
- The teacher will be preparing the class for their visit. Any resources you can send the teacher in advance are appreciated. They might include bios of hosts as well as information on the organization and on what students will see.
- Scheduling a pre-visit with the INSERT CONTACT TITLE and two or three representatives from the teaching staff is essential. They should be able to tour the facility, walk through the agenda, ask questions, and give feedback to ensure that the logistics and content of the trip are student friendly.
- Make sure you ask yourself these questions: How do you create a great workplace visit at your company or organization? Who at your workplace knows how to talk to kids? Who's funny and informative? What is interesting to show? Logistically, how do you provide a tour to more than 100 children? Will you provide snacks and refreshments?

At the end of a field trip experience, students should be able to answer the following:

- What was the workplace like?
- What would it mean for a day-to-day job?
- What struck you as surprising?
- Who are some of the professionals in the industry?
- What are some job functions?
- What are the day-to-day norms followed by employees?

Below are two sample agendas you can use to model your own agenda:

### Agenda 1

10:00 a.m.	Welcome and Introduction by Sr. Executive		
10:20 a.m.	Icebreaker with mentors and volunteers		
10:35 a.m.	Interactive Demonstrations by professionals		
11:15 a.m.	Students engage in interactive hands-on activity		
12:30 p.m.	Lunch with mentors and new hires		
1:30 p.m.	Depart		
Agenda 2			
10:00 a.m.	Welcome/Introduction by Sr. Executive		
10:20 a.m.	Icebreaker with mentors and volunteers		
11:00 a.m.	Interactive Tour		
12:00 p.m.	New Hire Panel and pizza lunch		
1:00 p.m.	Students work with mentors and volunteers on real project		
1:30 p.m.	Video and discussion industry-related issues and solutions		
2:00 p.m.	Team Competition		
3:00 p.m.	Depart		

### FIELD TRIP: CONSIDERATIONS

- There are many logistics involved in creating a great workplace visit! Make sure there is one person who facilitates the day, orients visitors, and assigns groups to visit various departments.
- Have a debriefing after the field trip in an on-site conference room.

### **CAREER FAIR**

### **CAREER FAIR: OVERVIEW**

Career fairs are a powerful part of the exposure students get to the workplace. In a career fair, students are able to see the various career opportunities open to them either in the form of available internships or in the form of professional positions available once they finish their coursework. It's also an opportunity for you as a professional in the field to represent your company to a bright group of students who are eager to learn from you.

The purpose of career fairs is to:

- · Introduce students and teachers to careers in the community
- Broaden student and teacher awareness of potential career opportunities in a given field or industry, expanding their knowledge of various career paths
- Allow students to ask questions and present themselves to you as potential employees

If you have been asked to participate in a career fair at **INSERT SCHOOL NAME**, use the materials in this section to prepare for your experience.

In this section on career fairs, you will find the following:

- Timeline
  - Use the timeline to adequately prepare for the career fair.
- Preparation Form
  - Use the preparation form to guide your conversation with the school about the event.
- Career Fair Tips
  - Use the Career Fair Tips to prepare your materials and presentation, if applicable, to maximize student engagement and excitement.

If you are interested in participating in a career fair, contact INSERT CONTACT NAME

### CAREER FAIR: TIMELINE

Timeline	Task	Description of Task	Notes
8 weeks prior	Meet with representative from school	Meet with school to discuss goals of the career fair	
6 weeks prior	Recruit volunteers	Find coworkers to staff booth and help create presentation	
4 weeks prior	Research presentation	Research display and handouts (company's values, goals, and mission, and the role of the specific department)	
2 weeks prior	Prepare presentation	Spend time to prepare a presentation that makes sense	
1 week prior	Email teacher presentation	Allow the teacher the opportunity to view the presentation, to further prepare students	

### **CAREER FAIR: PREPARATION FORM**

This form has been created to help you and the teacher build a common understanding of the goals of the career fair. The form can be completed over the phone in 20-30 minutes.

Date of Engagement:
<b>Begin/End Time:</b> ** (remind teachers and students to arrive 15-20 minutes early if appropriate)**
Teacher Name:
Teacher Phone:
Teacher Email:
Best times to contact:
Number of students participating:
Topics to highlight during Career Fair:
1
2
3
What's been covered in class that you could refer to:
What will be discussed in class next:
Technology needed (i.e., wireless Internet):
Other notes:

### CAREER FAIR: TIPS

- **Tip 1:** Focus on the basics: Describe, through your display and handouts the company, your organization's values, goals, and mission, and the role of the INSERT INDUSTRY department.
- **Tip 2:** Give students a sense of the impact of the organization by showing testimonials by satisfied customers, statistics related to meeting goals, or examples of good public relations.
- **Tip 3:** Provide information about the work environment. Representatives from your company should be prepared to discuss what they like about working for the company.
- **Tip 4:** Staff your booth with professionals from the INSERT INDUSTRY department, or professionals who can talk knowledgeably about the INSERT INDUSTRY department. Students will want to ask questions of people familiar with the department in which they intend to work.
- **Tip 5:** Be prepared to answer questions about compensation. It's understood that most companies don't want to give specific information about salary at a career fair, but be prepared to field questions about it.
- **Tip 6:** Treat students as potential new hires. This seems like an obvious point, but the students you will meet are younger than you might ordinarily meet at a job fair. By the time they are attending a career fair, though, they have already gained some understanding of the field.

### **MENTORSHIP**

### **MENTORSHIP: OVERVIEW**

Mentoring is a vital component of student life at INSERT SCHOOL NAME. Mentoring provides students with an added measure of emotional, academic, and career support. At the beginning of a school year, students are partnered with industry professionals who will serve as caring role models, working with them on a range of activities integrated into student learning. Communication is school based and takes place primarily online. However, there are structured face-to-face opportunities built into the school year.

The purpose of mentoring is to:

- Introduce students to the INSERT INDUSTRY by providing a direct connection to an industry professional.
- Allow students the opportunity to interact with an adult professional in order to build confidence in themselves as future professionals.
- Provide students with an inside understanding of the fields they will be entering during their time at INSERT SCHOOL NAME and after they graduate.
- Provide positive adult professional role models whom students can stay connected with over the course of their time at INSIRT SCHOOL NAME and beyond.

If you are interested in being a mentor or initiating a mentoring program at your company, use the materials in this section to prepare for the experience.

Students progress in the mentoring program through several stages that are anchored by their work-based learning course. Each year offers a different level of support and outcomes for students, according to where they are in the INSERT SCHOOL NAME scope and sequence.

- Progression through model
  - Exposure and broad support→ thought leadership/guidance through projectbased learning→ targeted skills development→ navigating the workplace
- Outcomes by year
  - Year 1: Exposure to company employees as mentors; strong industry presence at school
  - Year 2: Mentors support work-based learning projects
  - Year 3: Mentors offer tailored college and career guidance and serve as project managers to virtual enterprise students; in the summer, mentors support

internship program

• Years 4-6: Mentors support job shadowing and apprenticeships; mentors continue to offer college and career guidance as students approach graduation

In this section on mentoring, you will find the following:

- Expectations
  - Mentoring is an established program at INSERT SCHOOL NAME. The expectations will prepare you for how the program operates.
- Mentoring Activities
  - Online activities include some of the things you might do with your mentee. Use the activities as a tool to share with interested staff.
- Mentoring Tips
  - Use the Mentoring Tips to prepare for the experience and to decide if mentoring is right for you and your company.

If you are interested in learning more about the mentoring program at INSERT SCHOOL NAME, contact INSERT CONTACT NAME.

### **MENTORSHIP: EXPECTATIONS**

The most important requirement INSERT SCHOOL NAME has for your employees as mentors is their commitment to helping encourage and support students during the school year. If possible, mentors will continue to work with their student mentees for as long as students are part of INSERT SCHOOL NAME. We understand that this may not be possible or reasonable, so a commitment of one school year is requested.

Every student will be matched with one mentor. If necessary, some mentors may have more than one student mentee. Matches will be gender- and language-based as much as possible. More specific matches will be made for students with specific or special needs at the request of INSERT SCHOOL NAME teachers.

Although we want to encourage the students to focus on STEM and other topics chosen by their teachers, a mentor needn't to be an **INSERT INDUSTRY** expert in order to be a great role model. Providing encouragement to students gives them a chance to engage with helpful and caring adults, other than teachers and parents.

### **INSERT SCHOOL NAME** mentors must commit to:

• Participating in training

- Participating in three face-to-face opportunities (kickoff and two other events)
- Communicating with their student mentee every week over the course of the program (October-May), with a commitment of approximately ½ hour per week
- Following all safety and security rules of the program, including a background check
- Completing an evaluation

The next page describes each of the above commitments in more detail.

### **MENTORSHIP: DETAILED EXPECTATIONS**

### Security

Participating company partners are responsible for the behavior of their own employees.

**INSERT DISTRICT NAME** requires mentors to go through background checks before they can participate in the program.

In addition, each **INSERT SCHOOL NAME** student must have a signed parent permission form in order to participate in the mentoring program.

Strict rules and procedures also have been put in place to ensure the safety and security of students and mentors. This includes no sharing of personal information and regular monitoring of all online conversations.

### Training

All participants—including program managers, teachers, mentors, and students—must receive training before they can participate in the program. Training addresses roles and responsibilities, program rules, and helpful hints for participation, as well as training on how to use the online communication tool.

### In-Person Opportunities

The program includes three mandatory, face-to-face opportunities for mentors and students: one at the beginning and two during the remainder of the school year.

The first face-to-face event serves as a kickoff for the program, and usually takes place over two hours at the school. Mentors and students have the opportunity to meet in person, engage in fun icebreaker activities, and talk about what they personally want to achieve through the program.

Other in-person events include, but are not limited to site visits and an end-of-year celebration that takes place at INSERT SCHOOL NAME or a partner location. There may be other in-person events throughout the year, linked to work-based learning

opportunities. These would not be mandatory for mentors, though they are encouraged to attend.

### Communicating

Mentors agree to communicate with their mentees regularly, at least once a week. Most communication happens via an online tool created especially for this program.

### Evaluation

At the conclusion of the program, **INSERT SCHOOL NAME** administers surveys for students, mentors and teachers/staff to help continue to strengthen the mentoring experience for all participants.

### **MENTORSHIP: MENTORING IN PRACTICE**

**INSERT SCHOOL NAME** teachers have developed weekly activities that they would like their students to work on with their mentors. As much as possible, these activities are integrated into what students are learning in school. Mentoring could include homework/coursework, project-based assignments, or workplace skills.

For example, in Year One, mentors and students engage in activities that correspond to key workplace competencies students will be learning during their first year and beyond, such as leadership, teamwork, problem solving, communication, and ethics. Each month is dedicated to a broad competency, with weekly activities associated with various aspects of that competency and tied to a specific classroom project.

Traditional mentoring conversations also take place alongside academic projects. These are linked to life at INSERT SCHOOL NAME with mentors receiving suggested writing prompts to guide conversations with students. (What's your favorite thing about school so far? What has been most challenging about life at INSERT SCHOOL NAME?)

# EDIT AND CUSTOMIZE THE FOLLOWING AS IT RELATES TO YOUR SCHOOL AND PROGRAM

<b>Year</b> (Mentor:Student Ratio)	<b>Year 1</b> (1:2 or 1:3)	<b>Year 2</b> (1:2 or 1:3)	<b>Year 3</b> (2:5)
Objective	Exposure and broad academic support	Thought leadership and guidance through project-based learning	Targeted skills development
Curriculum	icouldbe	icouldbe	Virtual Enterprise
Structure	Online activities every week and supporting in-person events	Online activities every week and supporting in-person events	Group mentoring model with online activities aligned to VE
Events	Kickoff E-Week Site Visits Showcase Days (2) End-of-Year Event Classroom Mentor Activities	Kickoff Project Days E-Week Site Visits Showcase Days (2) End-of-Year Event Classroom Mentor Activities	Kickoff VE Showcase Days End-of-Year Event Classroom Mentor Activities Intern Prep Sessions

### **MENTORSHIP: MENTORING COORDINATORS**

Initiating a mentorship program at your company or organization can be a rewarding way to contribute to the INSERT SCHOOL NAME partnership. Below are some tips for beginning and maintaining a mentoring program within the INSERT SCHOOL NAME partnership.

- A formal mentorship program has established goals for the mentors and mentees; communicates them clearly to mentors and mentees; provides support and training; monitors progress of individuals and the program itself; and measures the program's outcomes. Before recruiting volunteers, work with your contact at INSERT SCHOOL NAME to determine and plan how these crucial elements will work within your organization's culture.
- As with any program, it is also important to consider how the program will operate. How will mentors be recruited? Registered? Trained? How long will a mentorship last?
- Mentors can be found in a variety of ways. You can send out a general request for employees to volunteer, or you could tap into existing volunteer programs at your organization. You might even ask senior managers to nominate individuals from their departments who might benefit from practicing people management skills in the lowstakes context of a mentorship program.
- INSERT SCHOOL NAME provides a great deal of support in running a mentoring program. Once you have recruited a team of mentors, INSERT SCHOOL NAME will provide you with an online tool to use to monitor and train them within your organization.

### **MENTORSHIP: TIPS**

**INSERT SCHOOL NAME** offers extensive training for mentors during their work in the program. Below are some of the training areas:

- **Tip 1:** Becoming a positive role model,
- Tip 2: Creating learning experiences,
- Tip 3: Communicating,
- Tip 4: Setting reasonable expectations, and
- **Tip 5:** Having fun—this should be a fun experience for both mentor and mentee.

# **SECTION 3B: CAREER PREPARATION**

Find answers to questions such as:

- What work experiences make up career preparation?
- How can we provide career preparation experiences for INSERT SCHOOL NAME scholars?

## **CAREER PREPARATION**

- Job shadows
- Project-based learning

At this stage in the continuum, students are in tenth and eleventh grades. They will have had two to three years of work-based learning in their courses and will have developed the problem-solving skills to work in a group on larger, more substantive projects for companies within their community. This is an opportunity for them to concretely prepare for real work within the INSERT INDUSTRY field.

Employers can support this phase by hosting **job shadows** and providing opportunities for **project-based learning**. This section of the guide provides detailed, concrete information on how to launch successful job shadow, service-learning, virtual-project, and project-based learning opportunities.

## **JOB SHADOW**

### JOB SHADOW: OVERVIEW

As a critical part of career preparation, job shadowing impacts student decisions regarding further education and training. Exposure to the workplace provides firsthand insight into the operations of an industry, organization, and career path. Working with passionate and knowledgeable professionals illuminates career options and requirements.

A job shadow is usually a one-day opportunity for a student or group of students to visit a workplace to experience what it is like working for a specific organization. A job shadow is not a field trip. When job shadowing, students will have more of an opportunity to see a real workday in action.

The purpose of a job shadow is to:

- Enhance student preparation for real-world career opportunities, including education and training required for such careers.
- Provide a "day in the life" for a student, allowing her or him—in a constructive and productive manner—to soak in the environment, cultural norms, and day-to-day practices of the workplace, resulting in further refinement of professional skills.
- Connect workplace requirements to classroom learning, making daily schoolwork relevant to student career goals.

Hosting job shadows benefits organizations, as well as students. Most hosts have documented increased workplace morale, improved teamwork across departments, and stronger relationships with the community. Some organizations have developed lasting relationships with students, ultimately hiring new employees as a result of the job shadowing experience.

In this section on job shadows, you will find the following:

- Timeline
  - Use the timeline to adequately prepare for this experience.
- Preparation Checklist
  - Use the preparation checklist in discussions with teachers or students to prepare for your shadow day.
- Step-by-Step Guide
  - Use the step-by-step guide to prepare an agenda for your job shadow allowing for "real" work to still be a part of your day.

### JOB SHADOW: TIMELINE

Timeline	Task	Description of Task	Notes
8 weeks prior	Meet with Teacher	Email industry liaison to discuss the goals of the day and logistics (use preparation form)	
6 weeks prior	Promote your event	Send emails out to appropriate members of your organization in order to garner excitement about the student job shadows	
4 weeks prior	Prepare an agenda	Prepare an agenda for the day and review it with all internal stakeholders	
1 week prior	Email teacher agenda	Allow the teacher the opportunity to view the agenda to further prepare students	
1 day prior	Contact teacher	Email or phone industry liaison to confirm that the student or students will be arriving	

### JOB SHADOW: PREPARATION FORM

This form has been created to help you and the teacher build a common understanding of the goals of the job shadow. The form can be completed over the phone in 20-30 minutes.

Date of Engagement:
<b>Begin/End Time:</b> ** (remind teachers and students to arrive 15-20 minutes early to check in at security desk if appropriate)**
Teacher Name:
Teacher Phone:
Teacher Email:
Best times to contact:
Number of students participating:
Topics to Highlight during job shadow:
1
2
3
What's been covered in class that would be pertinent to reinforce:
What will be discussed in class next:
Other notes:

### **JOB SHADOW: TIPS**

- **Tip 1:** Introduce the company and your role. Give students a sense of the impact of the organization by showing testimonials by satisfied customers, statistics related to meeting goals, or good public relations. Describe how your role fits into the big picture.
- **Tip 2:** Provide information about the work environment. Schedule a kickoff to the day where other representatives from your company discuss their roles and how those intersect with the role the students are about to shadow.
- **Tip 3:** Be explicit. Make sure to include as much description and explanation as possible as to what students will see during their shadow, and the importance of it in the larger scheme of things.
- **Tip 4:** Prepare in advance. Make sure to schedule a few to-dos for the day of the shadow that really show your use of **INSERT INDUSTRY** skills in solving a problem.
- **Tip 4:** Share your thought process and the reasons you are doing what you are doing. In other words, if you have to decide on an approach to take with a task, describe the thoughts leading to the decisions you are making.
- **Tip 5:** Focus on tasks that show teamwork. Invite students to sit in on a meeting or discussion with team members in order to get a sense of how teams work to solve problems.
- **Tip 6:** Share information about your career. Tell students the training, education, and experience you have. Describe how you entered the profession and how long you have been in the field. Make sure to share any advice you have for someone starting out in your field.

## **PROJECT-BASED LEARNING**

### **PROJECT-BASED LEARNING: OVERVIEW**

Project-based learning is an active approach to teaching and learning in which students explore real-world problems and challenges in the form of specific projects that may run over a couple of weeks, a couple of months, or an entire semester. The purpose is to give students a chance to practice real-world problem solving in a safe environment. Because INSERT SCHOOL NAME students are being prepared for the workplace, it is essential that projects be based on current situations in real workplaces.

**INSERT SCHOOL NAME** is connecting with industry professionals to design projects that relate to what they are preparing students to do in the real world. One way to partner with **INSERT SCHOOL NAME** is to provide guidance and concrete projects teachers can use in their classrooms to provide students the opportunity to solve

problems, preferably INSERT INDUSTRY-related, at a community-based organization (CBO). The students will use these projects to design a solution and deliver, or deliver and implement, the solution. Emphasis will be placed on practical, attainable results. Guided by teachers and stakeholders from the CBO, student groups will be asked to submit a project plan with a timeline and proposed product. Student groups will conduct research, if necessary, and produce a solution that they can implement or that can be implemented by the organization itself.

### HOW MIGHT AN EMPLOYER INFORM PROJECT-BASED LEARNING?

- Help identifying projects: It would be helpful for students to know the types of projects they may be asked to do once they are working in the INSERT INDUSTRY field, and the considerations to be taken when embarking on a project. Teachers could then simulate those projects in classrooms and employers could offer guidance along the way. You could support this by submitting ideas for projects that you could monitor, providing feedback until completion.
- **Guide the project:** While students are working on projects, employers can provide guidance at pivotal stages, such as during project planning, defining requirements, or analyzing research findings. The type of guidance would depend on the project.
- Evaluate presentations of projects: Once a project is assigned and completed, how will students be evaluated? As an employer, you can help evaluate projects by providing a real-world view of the process and the product.

*If you are interested in learning more about project-based learning, please consult the following websites:* 

http://www.bie.org/

https://www.ibm.com/ibm/responsibility/initiatives/activitykits/

http://teacherstryscience.org/

www.discoverengineering.org

http://www.edutopia.org/project-based-learning

www.engineeryourlife.org

### **PROJECT-BASED LEARNING: EXAMPLE**

# EDIT AND CUSTOMIZE THE FOLLOWING AS IT RELATES TO YOUR SCHOOL AND PROGRAM

The sample project below is from P-TECH's Engineers' Week (E-Week) event. E-Week is a national program that promotes project-based STEM workshops designed to get students interested in engineering. It's also a great way to expose students to several

career pathways, and to encourage collaboration.

For this event at P-TECH, students worked in teams on a design challenge to reinvent New York City's pay phones, based on an actual Request for Proposals the city developed last year (<u>http://www.youtube.com/watch?v=eJx91LDXREk</u>). IBM volunteers helped facilitate this activity by providing guidance to the teams. At the end of the event, the volunteers scored the designs, and the winning team received a prize.

# NYC REINVENT PAYPHONES DESIGN CHALLENGE: INNOVATION AND RENOVATION!

**TASK:** The Reinvent Payphones Design Challenge challenges you to redesign New York City's payphones! Create a prototype that imagines the future of New York City's public pay telephones. The goal of Reinvent Payphones is to encourage innovative, data- and design-driven ideas that will help modernize payphone infrastructure across the five boroughs and optimize use of public space once the City's current payphone contracts expire in 2014.

**WHY:** Current payphone vendor agreements expire in 2014, creating opportunities for innovation.

**WHO:** The City is currently gathering feedback on the future of payphones. As part of this effort, the City is inviting students, urban planners, designers, technologists, architects, creators and legal and policy experts to build physical and/or virtual prototypes imagining a new public utility through payphone infrastructure.

**WHAT:** The City manages a telecommunications network of 11,412 public payphones throughout the five boroughs. Payphone use has decreased with mobile device adoption, but payphones still serve the communications needs of thousands of New Yorkers a day, especially in times of emergency.

### Judging Criteria (5 possible points per category):

**Connectivity:** Ability to connect New Yorkers and enable communication, including for safety and emergency purposes

Creativity: Originality, innovation and quality of idea

Visual Design: Including visual appeal and user experience

Functionality: Flexibility, versatility, scalability, accessibility and sustainability

**Community Impact:** Support of local residents, businesses and cultural institutions

### **Design Process Steps**

**Step 1—Understand the need:** What is the problem? What do I want to do? What are the project requirements? What are the limitations? Who is the customer? What is the

### goal?

**Step 2—Brainstorm and design:** Imagine and brainstorm ideas. Be creative. Investigate existing technologies and methods to use. Explore, compare, and analyze many possible solutions. Select the most promising idea.

**Step 3—Plan:** Draw a diagram of your idea. How will it work? What materials and tools are needed? How will you test it to make sure it works?

**Step 4—Create:** Now, use the materials in your classroom to build a prototype or create a poster to demonstrate your idea. Does it work? Talk about what works, what doesn't, and what could work better.

**Step 5—Improve:** Talk about how you could improve your end product. Make revisions. Draw new designs. Make your end product the best it can be!

### **PROJECT-BASED LEARNING: CHECKLIST**

Since projects can be short in duration or last the course of a semester, use this checklist to help guide your timeline.

□ Brainstorm project ideas: Before meeting with INSERT SCHOOL NAME, brainstorm a list of relevant project ideas. Brainstorm one or two problems you are facing right now in your work. What problems would benefit from an alternate perspective that might be interesting for high school students to solve? The next page provides a project Proposal form for you to use as you brainstorm project ideas.

Present project ideas: Meet with students (and teachers as needed) to present project ideas and refine ideas into something students can and want to work on completing. Remember, you are working with students to define a project that has meaning for them and for you as an employer.

Kick off the project: Once a project has been decided upon, have a formal kickoff for it. Use the sample agenda provided on the next few pages.

Schedule check-ins: Ask the designated project leader to keep you informed of progress on the project and to include you at pivotal times in the project cycle, so that you may provide feedback on progress. Use the sample agenda provided on the next few pages.

☐ Inform the evaluation: Plan to be on the evaluation team that provides student feedback on the delivery of the project. Typically, there is a culminating event, like a presentation, where you can view the result of students' work. Use the sample evaluation tool provided on the next few pages to help guide your thinking around

what to look for during your evaluation. Typically, you will receive a more customized rubric or checklist, with which to evaluate the work, from INSERT SCHOOL NAME.

### PROJECT-BASED LEARNING: PROJECT PROPOSAL

This form has been created to document your ideas for a project-based learning project teachers can assign students, and can be used to prepare for an initial conversation with INSERT SCHOOL NAME.

Organization:
Project lead:
Lead Phone:
Lead Email:
Description of project idea:
KEY QUESTIONS:
How are projects like this typically organized? Individual? Group? Virtual?
Who needs to be involved in a project like this?
What are the steps in the project cycle?
How are projects like this typically evaluated?

What are the potential challenges?

What would the typical timeline be for this type of project?

What are the types of skills/resources needed to execute and complete the project?

Other notes:

### **PROJECT-BASED LEARNING: MEETINGS**

**Sample Agenda for Project Sharing** (This meeting can happen at INSERT SCHOOL NAME or within the organization. The goal is for industry partners to present project ideas that INSERT SCHOOL NAME students can complete.)

- All stakeholders introduce themselves (5 minutes)
- Organization leads discuss their industry, a typical day, and how the projects they have brainstormed fit. (15 minutes)
- INSERT SCHOOL NAME stakeholders ask questions and refine project ideas by choosing the project they'd like to work on (20 minutes)
- Final questions and answers (5 minutes)

### **Project-sharing meeting considerations**

- Make sure all key stakeholders are present
- Be open to ideas students have to refine the project or to make the project fit with their needs and goals

**Sample Agenda for Kickoff Meeting** (The kickoff meeting happens after a project idea has been presented and agreed upon. It can take place at the organization or at INSERT SCHOOL NAME. The goal is for stakeholders to discuss the project, define clear deliverables and expectations, and agree upon a timeline.)

- All stakeholders introduce themselves (5 minutes)
- INSERT SCHOOL NAME project lead describes the project as they understand it or have refined it to fit the needs of the class or school, provides any and all background information, describes how the project is related to the larger organization, and shares any pertinent resources needed to complete the project (15 minutes)
- Stakeholders ask questions and review pertinent resources (15 minutes)
- Initial timeline, project plan, and communication plan discussed (10 minutes)
- Review of next steps (5 minutes)
- Final questions and answers (5 minutes)

### Kickoff meeting considerations

- Make sure all key stakeholders are present
- Provide information so that there is one person who is communicating with INSERT

#### SCHOOL NAME stakeholders

Document all requirements and expectations and hand out document at kickoff meeting

### **PROJECT-BASED LEARNING: MORE MEETINGS**

# Sample agenda for midpoint meeting/check-in with students and teachers, as needed

- Project lead describes the progress of the project: describes how the project is progressing against the evaluation rubric, timeline, project plan, and communication plan (15 minutes)
- Stakeholders ask questions and raise pertinent issues (15 minutes)
- Review of next steps (5 minutes)
- Final questions and answers (5 minutes)

### Midpoint meeting considerations

- Make sure all key stakeholders are present
- Document all issues and concerns about project

### Sample agenda for final meeting

- Project lead presents the project to company/organization and to INSERT SCHOOL NAME stakeholders (30 minutes)
- Stakeholders ask questions (15 minutes)
- Final questions and answers (5 minutes)

### **Final meeting considerations**

- Make sure all key stakeholders are present
- Document all issues related to evaluation
- After the final meeting, company/organization and INSERT SCHOOL NAME meet to complete the evaluation tool

### PROJECT-BASED LEARNING: SAMPLE EVALUATION TOOL

POINTS	PROJECT CRITERIA
Excellent 🗆 90 – 100	<ul> <li>Project <u>exceeded expectations</u> in the following:</li> <li>Project addressed a key question or problem that is relevant to the workplace or industry.</li> <li>Project showed evidence of current research.</li> <li>Information/solutions were presented creatively, using handouts, pictures, graphs, and video.</li> <li>Project showed evidence of collaboration with key stakeholders and team members.</li> <li>All team members demonstrated full knowledge of project, and all team members were able to answer questions posed regarding the project by key stakeholders at any given time.</li> </ul>
	Specific Notes:
Good □ 80 - 89	<ul> <li>Project <u>met expectations</u> in the following:</li> <li>Project addressed a key question or problem that is relevant to the workplace or industry.</li> <li>Project showed evidence of current research.</li> <li>Information/solutions were presented creatively, using handouts, pictures, graphs, and video.</li> <li>Project showed evidence of collaboration with key stakeholders and team members.</li> <li>All team members demonstrated full knowledge of project, and all team members were able to answer questions posed regarding the project by key stakeholders at any given time.</li> </ul>

Average	Project has been completed but demonstrates <u>only adequate</u> <u>competence</u> with respect to the following:
70 - 79	• Project addressed a key question or problem that is relevant to the workplace or industry.
	• Project showed evidence of current research.
	• Information/solutions were presented creatively, using handouts, pictures, graphs, and video.
	• Project showed evidence of collaboration with key stakeholders and team members.
	• All team members demonstrated full knowledge of project, and all team members were able to answer questions posed regarding the project by key stakeholders at any given time.
	Specific Notes:
Needs Work	Project has been completed but <u>needs work</u> with respect to the following:
60 - 69	• Project addressed a key question or problem that is relevant to the workplace or industry.
	• Project showed evidence of current research.
	• Information/solutions were presented creatively, using handouts, pictures, graphs, and video.
	• Project showed evidence of collaboration with key stakeholders and team members.
	• All team members demonstrated full knowledge of project, and all team members were able to answer questions posed regarding the project by key stakeholders at any given time.

# **SECTION 3C: CAREER APPLICATION**

Find answers to questions such as:

- What work experiences make up career application?
- How can my organization provide career application experiences for INSERT SCHOOL NAME scholars?

## **CAREER APPLICATION**

- Internships
- Apprenticeships

At this stage in the continuum, students have matured in their academic and workplace preparation at INSERT SCHOOL NAME. They will have had concrete work experiences and are ready to apply all they have learned in a paid internship or apprenticeship. Their time at INSERT SCHOOL NAME will culminate with a Capstone project that will demonstrate what they have learned during their apprenticeship and will be a showpiece for their work portfolios.

Critical to the success of internships and apprenticeships are a set of clear, measurable expectations, dedicated supervision, open lines of communication, and fair and comprehensive evaluation and feedback.

In this section, you will find an overview of the importance and function of internship and apprenticeship programs, as well as information on how to run an internship program that benefits both the student and the employer, including:

- An outline for an orientation program for supervisors of interns and interns themselves
- · Suggestions for creating a meaningful work environment
- Sample intern job descriptions
- Sample intern interview questions
- Sample memo of agreement between the supervisor and intern
- · Sample biweekly updates for interns and schools
- Intern termination policy

This section also provides information about apprenticeships and the Capstone project, which is the culmination of learning.

## **INTERNSHIPS**

### **INTERNSHIPS: OVERVIEW**

A paid internship is essential to the INSERT SCHOOL NAME experience. It is rewarding for both the intern and the supervisor, and is the gateway to future paid work for students.

In order to provide successful internship experiences for both the intern and the company, the latter must be prepared. A meaningful internship program has to have a few things in place in order to run smoothly. At a minimum, a company needs the following:

- A person designated to coordinate an internship program;
- A plan to mentor, train, and support supervisors who manage interns; and
- A plan to orient and support interns while they are part of your organization.

Whether internships are short-term (1-4 weeks) or longer-term (summer-long or up to six months), the coordination of an internship program is ideally managed by a dedicated person who can be its champion. Working with interns must be a coordinated effort between the school and the employer, because a paid internship is an extension of the classroom and college experience. Done correctly, paid internships apply, in a real-world context, all of the learning that students have amassed. This is why we have included a list of the soft skills and the INSERT INDUSTRY skills students have been exposed to by this point. These skills will be the basis for how they are evaluated in the workplace.

In this section on internships, you will find the following:

- Eligibility requirements for students
- Information for supervisors
  - Supervisors who manage INSERT SCHOOL NAME interns need certain skills. They also need to be aware of what is expected of them as they work with a INSERT SCHOOL NAME young professional. There are tools to address their needs, such as an explanation of their role, suggestions for orienting and training supervisors to be INSERT SCHOOL NAME partners, and evaluation tools.
- Description of meaningful work experiences
  - Use the description to ensure interns are being used to their fullest capacity.

 Sample intern job descriptions will help identify the types of appropriate work experiences you should make available for interns.

**STUDENT ELIGIBILITY FOR INTERNSHIPS AT INSERT SCHOOL NAME** In order for a student to be eligible for an internship, she or he must:

- 1. Be a Year 3 student;
- 2. Be a successful participant in the Virtual Enterprise curriculum; and
- 3. Be enrolled in college classes.

Eligible students may fall into either of two categories, high INSERT DEGREE TYPE or low INSERT DEGREE TYPE, depending on the number and type of college courses they have taken:

- Students who have started taking the INSERT MAJOR courses will be eligible to apply for more advanced INSERT DEGREE TYPE internships (e.g., programming at IBM).
- Students who have started the academic college courses (math, English, etc.) will be eligible to apply for the lower-INSERT DEGREE TYPE internships (e.g., HR or marketing positions at IT companies).

### Preparation for application and internship experiences:

- The school will provide a mini-course on the application process, including resume development, mock interviews, dressing for success, portfolio presentations, etc., during extracurricular time (e.g., weekends, Regents week, etc.)
- All students will be supported by an advisor or team of advisors.

# SUPERVISOR TRAINING

### SUPERVISOR TRAINING: ORIENTATION

An orientation that covers the following topics can provide supervisors with the building blocks they will need to be successful in their role.

- Overview of the INSERT SCHOOL NAME program
  - Vision, mission, values
  - Company's relationship with INSERT SCHOOL NAME (e.g., why they have established this partnership, and what it means)
  - Our company's work-based learning commitments (e.g., speaker series,

internships)

- The students
  - How students are selected for internships
  - What skills they have/student profiles
  - What we expect of students
- Expectations for supervisors
  - Role of the supervisor
  - Time commitment (e.g., 2-3 hours per week)
  - Types of work assignments (meaningful, productive work experiences that benefit the company and the student)
  - Creating a performance contract
- Providing feedback
  - Frequency (e.g., having formal "review" conversations twice per month, providing an update to INSERT SCHOOL NAME workplace coordinator)
  - Example evaluation forms
  - Scenarios you may encounter and what you should do.
- Logistics, e.g.,
  - Approving timesheets
  - Frequency of one-on-one meetings (e.g., once per week)
  - Termination policy

### **CREATING A MEANINGFUL WORK ENVIRONMENT**

Internships are intended to be "real" jobs. The benefit to you is to have a contributing member of the team who can help the bottom line. The benefit for the intern is to obtain real work experiences that she or he can apply to future opportunities at your or other workplaces. Here are some recommendations for creating as meaningful a work environment as possible.

- Situate the intern appropriately
  - Interns learn more when they are in a setting where they can participate fully. Make a space for interns near you or in the heart of the group, so they can see firsthand how their work affects others around them.
- Provide meaningful work experiences
  - Your first instinct may be to give the intern basic, administrative tasks such as

preparing mailings, stapling documents, or photocopying large projects. Clearly, these tasks need to get done and there may be times when it is appropriate for an intern to address them; however, these are tasks that should be completed by less experienced and skilled interns. INSERT SCHOOL NAME scholars have had years of training in the INSERT INDUSTRY field and in workplace skills by the time they get to the internship level, and can support you in much more powerful ways that are integral to your core business. You will find some concrete examples in the sample job descriptions provided.

- Provide clear instructions and model
  - When assigning a new project or task, make sure to provide clear instructions to the intern, then model or demonstrate what you want her or him to do. In your overview, detail how the task or project fits into the overall work of the group or department.
- Observe and provide feedback
  - This is a real opportunity for you, as a supervisor, to mentor and coach an intern. The only way to ensure you are getting what you need and the intern is thriving is to observe and give constructive feedback. We provide tools to support this process on the next pages.
- Don't rescue
  - As people learn, they ask lots of questions (maybe the same question twice or three times), and they make mistakes. Try to avoid rescuing the intern by taking back the work and doing it yourself or giving it to someone else to do. Allow time for the intern to learn. It's important to build a cushion of time in the first couple of projects or tasks, so that learning may occur. It's also important to observe and provide feedback as noted above.
- Evaluate performance
  - At first, you might want to provide daily feedback on performance. As an intern becomes more confident in her work, wait until after she has completed a task to give feedback. It may be more appropriate to first ask the intern to do a selfassessment then build off of an intern's self-assessment by adding your own observations.

# EDIT AND CUSTOMIZE THE FOLLOWING AS IT RELATES TO YOUR SCHOOL AND PROGRAM. USE THE FOLLOWING AS A GUIDE.

### SAMPLE INTERN JOB DESCRIPTIONS

Employers who want to hire interns from INSERT SCHOOL NAME can use the following job descriptions as a starting point, tailoring them to the unique needs of the company.

### Example 1: Information Technology Intern

[COMPANY] has a paid internship position available for a high-achieving INSERT SCHOOL NAME student. This opportunity allows the student to receive hands-on training and experience while using his or her skills to assist [COMPANY] in achieving its business objectives. The internship is 20 hours per week and will be on site at [COMPANY]'s office in INSERT CITY NAME.

### **Position overview:**

[COMPANY] is [brief description of company]. The information technology intern will provide desktop support to [COMPANY]'s \_\_\_\_\_ users in the INSERT CITY NAME office. Support includes specification, installation, and testing of computer systems and peripherals within established standards and guidelines.

### **Responsibilities include:**

- Maintain desktop images
- Work with vendor support contacts to resolve technical problems with desktop computing equipment and software
- Installation of software
- Diagnose and troubleshoot operating-system problems
- One-on-one consultancy to end users

### Required skills:

- Knowledge of networking technologies, including configuration of PCs, switches) preferred
- Experience working with database technologies (SQLServer, Access) preferred
- Knowledge of programming (Java or .net) preferred
- Experience in the maintenance and repair of computers
- Excellent organizational and communications skills
- Ability to work independently and within groups

### Pay Rate:

\$11 per hour

To apply:

Applicants should send resumes to \_\_\_\_\_\_ and note "Information Technology Intern" in the subject line. Please be sure that you meet the listed requirements before applying! No phone calls please.

### Example 2: SBS Web Developer Internship

[COMPANY] has an exciting paid internship position available for a high-achieving INSERT SCHOOL NAME student. This opportunity allows the student to receive handson training and experience while using his or her skills to assist [COMPANY] in achieving its business objectives. The internship is 30 hours per week and will be on-site at [COMPANY]'s office in INSERT CITY NAME.

### **Responsibilities:**

- Update [COMPANY]'s website properties including designing dynamic content and form creation
- Regularly meet with staff to determine content needs for intranet and Internet sites
- Interact with business users to understand current business process and identify business problems
- Respond to and track support tickets in our service-support system related to websites and Web-based applications

### **Required Skills:**

- Excellent communications skills with nontechnical end users
- Basic knowledge of HTML, CSS, JavaScript, jQuery, and XML
- Browser-based application development experience (ColdFusion, ASP, ASP.NET) a plus
- Some database and data-manipulation skill (SQL, Excel, Access)
- Able to work independently, multitask, and prioritize while working on several projects simultaneously

### Salary:

\$11/hr

### To apply:

Applicants should send resumes to \_\_\_\_\_\_ and note "Web Developer Intern" in the subject line. Please be sure that you meet the listed requirements before applying! No phone calls please.

### Example 3: Engineering Workshop Maintenance Intern

The Engineering Workshop is an ASP.NET web application used for contingency analysis and monitoring of the electrical distribution system. The application has evolved to include hundreds of reports and is visited by over 600 distinct users each month. Due to this growth, maintaining a high level of reliability and efficiency is critical.

### **Qualifications:**

Student must possess a good work ethic and be flexible in meeting assignments. Excellent analytical skills with a computer science background as well as strong interpersonal skills are required. Candidate must be a self-starter, with a high degree of integrity, energy, initiative, resourcefulness, and imagination. This assignment focuses the applicant on analysis of existing computer systems and on recommendations based on that analysis.

### Duties:

- Develop a basic understanding of the [COMPANY] Distribution System.
- Develop an in-depth understanding of the [COMPANY] Control Center procedures and the role of existing computer systems as they relate to those procedures.
- Analyze user requirements, procedures, and problems to automate processing and to improve existing computer systems and information structures.
- Execute SQL queries against existing databases utilizing efficient data access methods and an in-depth understanding of the data structures being queried.

### **Results Required:**

- Implement necessary changes to ensure data quality and consistency across existing systems and reports.
- Implement new reports to accommodate the emergent needs of the [COMPANY] Control Center.
- Document findings and update existing system documentation.
- Make a presentation to the staff on findings and developments at the end of the assignment.

### Skills Required:

- Computer science design concepts
- Microsoft Office applications (including MS Access)
- Relational Database design

• Familiarity with a programming language such as VB, C++, Java, or Perl

### Salary:

\$12/hr

### To apply:

Applicants should send resumes to \_\_\_\_\_\_ and note "**Engineering Workshop Maintenance Intern**" in the subject line. Please be sure that you meet the listed requirements before applying! No phone calls please.

### SAMPLE INTERVIEW QUESTIONS

Here is a list of reasonable questions to ask potential INSERT SCHOOL NAME interns. These questions have been mapped to what INSERT SCHOOL NAME scholars will know and be able to do at the time they apply to an internship at your company. (PLEASE CHANGE SOME OF QUESTIONS BELLOW TO YOUR PARTICULAR INDUSTRY FIELD AS THE SAMPLE QUESTIONS ARE DIRECTED TOWARDS IT FIELD)

- Tell me a little about yourself and your professional goals.
- Tell me about an INSERT INDUSTRY-related project you were involved with. What was your role? What challenges did you face, and how did you handle them?
- WHAT DATABASE AND OPERATING SYSTEMS YOU ARE FAMILIAR WITH?
- WHAT PROGRAMMING LANGUAGES YOU KNOW?
- Tell me about any other skills you have that we have not discussed yet.

### SUPERVISOR TRAINING: PERFORMANCE CONTRACT FOR INTERNS

Both the supervisor and the intern should agree on the expectations of the relationship, so that there is clear communication from the outset. It is important for interns to learn the requirements of the job, how they will be evaluated, and the company's rules and standards.

Whether you will have an intern for a short-term or long-term experience, it's important to think through exactly what you want that intern to do. Designing a performance contract may help in setting clear expectations up front.

Here is sample information to include in a contract:

• **JOB DESCRIPTION:** Describe in as much detail as possible the role and responsibilities of the intern. List duties, projects to be completed, and deadlines, if

relevant. Remember to keep in mind the meaningful work experiences outlined in this guide.

- **DELIVERABLES/TASKS:** Describe how internship activities will enable the student to work in her respective field and build upon her current knowledge. Include projects, research, report writing, and any other deliverables the intern will complete.
- **SUPERVISION:** Describe in as much detail as possible the supervision to be provided. How will the supervisor provide feedback to the intern? How often?
- **COMMUNICATION:** Describe the expectations around communication. Will you have weekly status meetings with interns? Will you expect a weekly status report via email? Note any specific communication requirements you have.
- **AGREEMENT:** This contract may be amended by the intern or internship supervisor at any time, upon written notice.

### INTERNSHIP: PROGRESS UPDATE

Receiving feedback is an important contributor to an intern's learning experience, and is key to communicating expectations. Use this form or a form like it to communicate progress and provide feedback to interns on at least a biweekly schedule. Use this same form to share progress with the INSERT SCHOOL NAME Work-Based Learning Coordinator.

Intern:	
Supervisor:	
Today's Date:	
Date of last update:	-
Current projects:	
Major accomplishments:	
Challenges:	
New projects/tasks:	
Notes:	

### SUPERVISOR TRAINING: SCENARIOS

There may be occasions when you will have to contact the INSERT SCHOOL NAME Liaison because an intern is not working out. There are clear reasons when that is necessary, like insubordination or consistently missing work days. In those cases, it's clear what to do. It's often unclear what to do when you have an intern who is doing fine, but needs support and guidance in a particular way. Here are some scenarios to review and discuss.

Scenario	What to do
Kendrick is an intern who, for the first month of his internship, had been very engaged in his work and shown promise. During the past week, he has not been as engaged. He seems bored. When you try to find him, he is not at his desk, but either talking to another employee, in the cafeteria, or nowhere to be found.	Kendrick may very well be bored. This situation warrants a conversation with him. Tell him that you've noticed that he has not been as engaged in the work as he once was. Ask him to share what might be the problem. If he is unwilling, it may be that he is unsure how to communicate his needs to you. In that case, review the tasks you have been giving him and review Kendrick's resume. See if he is being utilized to his best ability. If you feel he is, then make sure to bring it up again in your biweekly status meeting.
You have given Cecelia many discrete tasks that she has accomplished well with ease. You have now given Cecelia a larger project with multiple tasks. She didn't ask a lot of questions and you observed that she didn't take any notes, so you asked her to explain back to you what needs to get done. She did. Satisfied that she is ready to work, you move on. A week later when the project is due, you check in and discover that very little of the work has been done and what has been done has not been done correctly.	It may very well be that Cecelia did not fully understand the project, but did not want to ask questions for fear of seeming she didn't have the knowledge needed to do the job. You should sit down with her to review the project again. Insist that she takes notes and encourage her to ask questions. Make sure she understands that you have confidence she can do the work because you have already seen what she can do. You are giving her a more challenging project, so expect many, many questions. Give her milestones to complete the project. Say that you will check in after two days to see how she is coming along, and give her a concrete example of what you expect to see in two days. She may have needed more support to go from discrete

tasks to a project of her own, so providing her with

	the extra support at the beginning will grow her skillset and abilities.
Scenario	What to do
You and David have grown fond of each other over the course of the internship. He has confided in you that he has been having some personal trouble and needs advice. You listen to David, but soon realize that he may need more help in overcoming his personal issues than you can provide.	It's natural for an intern to get attached to his supervisor. It's important to not overstep your role as his work supervisor. If you feel as though your intern is in trouble or in need of support outside of work, you should contact the INSERT SCHOOL NAME program manager to determine best next steps.
Tanesha has been giving it her all since the day she started, has been producing high-quality work, and has an excellent attitude. She is always	Tanesha requires a different time commitment on your part than others might. What you will need to do is prepare longer-term projects that can't be done in one sitting. This will require you to set aside time up

since the day she started, has been producing high-quality work, and has an excellent attitude. She is always done with her projects early and often sits around waiting for more work. She often comes to you to tell you that she has nothing to do and is ready for a new challenge, but you can't seem to keep up with her. Tanesha requires a different time commitment on your part than others might. What you will need to do is prepare longer-term projects that can't be done in one sitting. This will require you to set aside time up front to prepare such a project. You can give her this project and tell her that when she is done with more urgent work she can revisit this project in order to complete it.

If she maintains that level of performance throughout the internship, consider giving her formal recognition such as a special award. Work with the INSERT SCHOOL NAME program manager to determine the best approach.

### SUPERVISOR TRAINING: STUDENT ORIENTATION

An orientation for students should help them get familiar with the expectations and logistics of the internship program as well as get an introduction to the company.

Topics that would be helpful to include in a student orientation might include:

- Overview of the vision, mission, and values of the company
- High-level view of the organizational structure
  - Product lines, business units, functions
  - How the area in which they are working fits into the broader organization
  - Workplace/organizational culture (e.g., Is this a culture that works individually or in teams?)
- The role of the intern
  - Role of the intern
  - Company expectations
- How interns should work with their supervisor
  - Meet supervisors (set aside time in the agenda for the interns to meet their supervisors)
  - Set goals for the internship with the supervisor
  - Review the performance contract
  - Check in regularly (e.g., once or more per day)
- Making other connections
  - Finding mentors (the importance of finding mentors beyond their supervisor who can contribute to their development)
  - Meeting other employees (importance of networking and getting to know other people in the organization to maximize the learning experience)
  - What to do if you run into a problem or are having trouble with a team member or supervisor
- Logistical details, e.g.
  - Expected hours/days (e.g. 9:00 a.m.- 5:00 p.m.; four days per week)
  - How to submit time sheets (if applicable)
  - Sick time (e.g., who to call when you are sick)
  - Holidays (which ones are observed)

- Vacation (if applicable)
- Dress code
- Computer/email/Internet usage policies
- Review a map of the floor plan that includes bathrooms, vending machines, etc.
- It would be helpful to include a list of area lunch locations

### SUPERVISOR TRAINING

### **APPRENTICESHIP: OVERVIEW**

An apprenticeship in the INSERT INDUSTRY field is an essential component of the INSERT SCHOOL NAME experience. By the time students get to the apprenticeship stage, they are ready to tackle the world of work on their own, with minimal interaction with the school. Apprentices should apply for paid positions created with apprentices in mind. Apprenticeships can be up to a year long.

- Apprenticeships
  - Are competitive. The application and hiring process is formal.
  - Are based on projects of value or high need proposed by employers, and placements vary depending upon skills of students.
  - Culminate in a presentation and defense of an original project developed during the apprenticeship, and exhibit mastery of work-based learning and technical skills.

# **APPENDIX**

Bibliography

### **BIBLIOGRAPHY**

- Allen, L., J. Hogan, and A. Steinberg, A. (1998). *Knowing and Doing: Connecting, L, and Work*. Providence, RI: Jobs for the Future.
- BATEC (2012), Bridge to community college toolkit. Boston, MA: University of Massachusetts, Boston.
- BATEC (2012), Tech Apprentice Program Community College: A guide to managing a technology internship program. Boston, MA: University of Massachusetts, Boston.
- BATEC (2012), Tech Apprentice Program High School: A guide to managing a technology Internship program. Boston, MA: University of Massachusetts, Boston.
- Beller, L. (2011). High school level work-based learning continuum: a pathway to college & career readiness. IL. Chicago Workforce Investment Council.
- Big Picture Company (1998). The new urban high school a practitioner's guide. The Big Picture Company.
- Career Academies, UK. Internship supervisor toolkit.
- Career and Technical Education (CTE) (2010). Building a system of college & career academies in Chicago public schools (CPS) the Chicago CTE story. IL, Chicago Public Schools (CPS).
- City-Tech key concepts (2012.).
- Cole, J. & E. Decker. (presentation slides). SFUSD Career Technical Education. [San Francisco Public SF, School.
- CTE. CPS career and technical education guide to work-based learning CPS, business & community partners. IL, CPS.
- Darche, S., Nayar, N., & Reeves Braco, K. (2009). Work-based learning in California opportunities and models for expansion (research report). CA, James Irvine Foundation.

Darche, S., Teacher/faculty externship program – teacher/faculty guidebook.

- Educationandemployers.org (2012). Inspiring the future: the quick and free way to find employee volunteers to give career insight talks to young people in your school or college.
- Engaging a Business or Coalition- Getting up your business administration/coalition to build up their education activity.
- Engaging Employees Engaging your employees.
- European Communities (2004), Europass mobility.
- European Communities (2004), Introduction to Europass mobility: instructions for using the Europass mobility.
- Gap Inc. (2012). A toolkit for employers connecting youth & business.
- Hanson, Deanna (2012). NAF Interview. NY, NAF.
- Hapern, R. (2012). It takes a whole society opening up the learning landscape in the high school years: an executive summary of the Nellie Mae education foundation.MA. Nellie Mae Education Foundation.
- Hesinki City College of Technology, Agreement and Plan of the Student for On-the-job Learning Period.
- Higginbothom, A., Work-based Learning exemplars: worthwhile internship experiences for students, local employers, and the community. NY, NAF.
- Huddleston, P., Mann, A., Dawkins, J. (2012). Employer engagement in English independent schools. England, Education and Employers Taskforce.
- JFF (2011). Work-based learning report .
- Linked Learning Alliance (2011). Career practicum: a work-based learning strategy. McKoy, D., Stern, D., Bierbaum, A. (2011). Work-based learning through civic engagement. CA, Center for Cities and Schools, University of California, Berkeley.
- Milfort, M. (2012). An examination of the information technology job market: a credentials that work research brief . Boston: Jobs for the Future.
- NAF (2008). The NAF learning handbook. NY, NAF.
- NAF (2009). National Academy Foundation Advisory Board Manual. NY, NAF.
- NAF (2010). Learning Handbook, NY, NAF.

NAF (2010). Scheduling guide to planning your YOPTM journey 2010-2011. NY, NAF.

- NAF (2012). Guide to work-based learning: a continuum of activities and experience (Revised).
- NAF (partnership with America's Youth) (2006/2007).NAF Internship Toolkit.
- NAF. An exemplary practice cutting edge advisory board Waco, Texas.
- NAF. Document on where to find meaningful internships.
- NAF. Instructor Planning Guide: Digital Storytelling Curricular Integration Projects for Academies. NAF and Pearson Foundation.
- NAF. National academy foundation guide to work-based learning: a continuum of activities and experience.
- NAF. The rigor/relevance connection.
- Nancy Hoffman. notes from SWISSCOM Interview with Daniel Roth July 23, 2012
- National Academy Foundation (2012). Demonstrating college and career readiness internship assessment for student certification: overview for final field test. New York, NAF.
- National Academy Foundation (2012). Guidelines for coordinators of the supervisor assessment of student college and career readiness (field test version). New York, NAF.
- National Academy Foundation (2012). Supervisor assessment of student college and career readiness, glossary (field test version). New York, NAF.
- National Academy Foundation (2012). Supervisor assessment of student college and career readiness, scoring guide. New York, NAF.
- National Academy Foundation (2012). Supervisor orientation to assessment of student college and career readiness (test field version). New York, NAF.
- National Academy Foundation (2012). Supervisor assessment of student college and career readiness (field test version). New York, NAF.
- National Academy Foundation. Preparing youth for life: the gold standards for high school internships.
- National Academy Foundation. Year of planning guidebook, 2012-2013. New York, NAF.

Notes on the August 24 Interview with Anthony Mann and Nancy Hoffman.

- OECD (2010). Learning for jobs Synthesis report of the OECD reviews of vocational education and training. France, OECD.
- P-TECH (2012). P-Tech work-based learning scope and sequence; workplace competencies.
- P-Tech (2012). Where we are going? P-Tech Capstone Experience; how we will get there? workplace learning strand.
- P-Tech (20211). Pathways in technology early college high school (P-TECH) STEM pathways to college & careers. DC, IBM.
- P-Tech. 9-14 Early college and career school model: building a pipeline of young professionals to sustainable careers.
- P-Tech's curriculum chapter playbook.
- Roder, A., Elliott, M., (2011). *A promising start* Year up's initial impacts on low-income young adults' careers. NY, The Economic Mobility Corporation.
- Rubric for linked learning pathway certification and continuous Improvement (2011). Linked Learning: Pathways to College and Career Success.

Swisscom, Comment les jeunes apprennent à organiser leur vie.

Swisscom, Der Wille ist der Weg.

YearUp Phone Interview with Catie Smith, July 23, 2012.

YearUp, Boston. Financial Operations Skills Profile.

YearUp, Boston. High Expectations, High Support (overview).

YearUp, Boston. Information Technology Skills Profile.

- YearUp, Boston. Internship Logistics.
- YearUp, Boston. Internship Manager Orientation (presentation slides).

YearUp, Boston. State Street Manager Orientation (agenda).

YearUp, Boston. Student Handbook.