

Acknowledgments

Employers expect community colleges to produce graduates who are not only technically skilled, but also possess professional skills. This handbook aims to support technical instructors to develop students' professional skills. It represents the culminating work of Project GOALS, a researcher-practitioner partnership funded by the National Science Foundation. These research-based materials were developed by Louise Yarnall, Erin Smith, Anandita Krishnamachari, Patrik Lundh, and Rebecca Griffiths of SRI, with invaluable input, testing, and review by educators affiliated with Evergreen Valley College in East San Jose: Angel Fuentes, Roberta Kunkel, Maniphone Dickerson, Mark Bernbeck, Manuel Rosas, Michael Cortese, Michael Hernandez, Lawrence Lyon, Chetan Shah, Mithran Menon, Jim Burnham, Fred Mitchem, and Erik Koepf.



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Introducing Professional Skills

What are professional skills?

Every job requires two basic kinds of skills: technical skills and professional skills. People typically develop technical skills through training, coursework, or a certificate program. These skills help you do the technical aspects of your job.

On the other hand, people mostly develop professional skills through experience and reflection. These skills help you get, keep, and advance in a job. The Association for Career and Technical Education says that professional skills are "most critical" to workplace success in the 21st-century economy. Professional skills are sometimes called "21st-century skills," "soft skills," and "durable skills." Many believe these skills help a person take charge of their career and job success.²

Some examples of professional skills are teamwork, communication, adapting to workplace expectations, willingness to learn, critical thinking, and problem-solving. Sometimes they also include creativity, responsibility, and ethics.

Why is this relevant to me?

To be successful in most jobs in today's world, you'll need professional skills. Technical skills may be enough to get a job, but research tells us that employers believe professional skills show how you will get along with other team members (or customers) and how well you will handle your job performance and career. Employees with strong professional skills have better job prospects, improved performance at work, more career possibilities, flexibility in new work environments, and higher job satisfaction.³ Figure 1 shows just how much employers value professional skills.

Who created this handbook?

This handbook was created by the Project GOALS team. Project GOALS is a 4-year research collaboration between SRI International—a nonprofit research institute—and educators at Evergreen Valley College in the San José-Evergreen Community College District in California. Project GOALS supports your course instructors to help you develop your professional skills for career success.

Also, the need for professional skills will rise over the next decade.⁴ As jobs increasingly rely on technology and automation, employees with strong professional skills will have an advantage: They perform skills that machines can't. Figure 2 illustrates how professional skills become more important as automation increases.

Figure 1. Professional skills valued by executives and hiring managers*

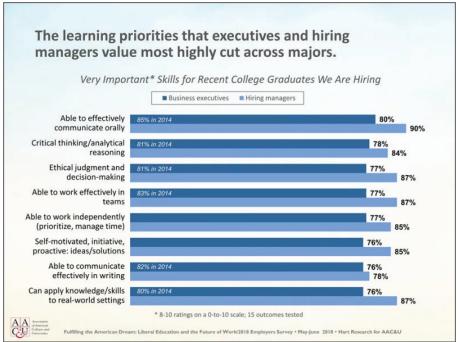
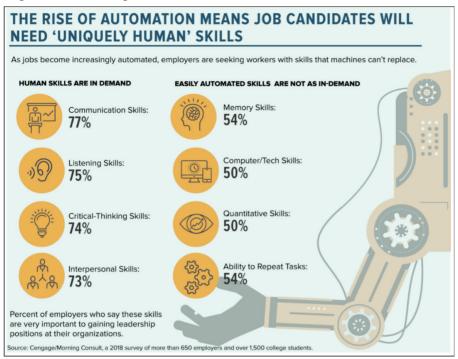


Figure 2. Growing demand for "human" skills†



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[†] Image reused with permission from the Society for Human Resource Management. Original website: Wilkie, D. (2019, Oct. 21). Employers say students aren't learning soft skills in college. SHRM. https://www.shrm.org/topics-tools/news/employee-relations/employers-say-students-arent-learning-soft-skills-college

Using This Handbook

Many schools and colleges have begun to teach professional skills because of their growing importance. This handbook will support your learning by helping you identify your professional strengths and track how you develop professional skills over time.

From your first to your last course, this handbook will be your guide. Use it during and after your coursework and work-based learning experiences, such as internships, apprenticeships, and even the jobs you do while attending college. This handbook can also help you work with coaches and counselors who assist in the preparation of resumes and job interviews.

Some [employers] have also mentioned a lot about how they want someone who is going to be able to work with others. Even though you do work on your car by yourself, you still have to be able to be part of a bigger team.

- Project GOALS participant

How can I use this handbook?

- 1. To learn about professional skills during the first few weeks of your certification program.
- 2. To review examples of different professional skills to see what they look like in the workplace.
- 3. To watch the videos before engaging in activities related to professional skills in your course.
- 4. To practice ways to develop professional skills in your certificate program.
- 5. To understand how different activities and experiences can help you develop professional skills during your coursework and current or future job roles.
- 6. To create a professional skills portfolio that includes work products and assessments that you can use in present or future job roles to demonstrate your professional skills.
- 7. To interpret your self-assessment scores and your instructor's average class score in these skills.
- 8. To use the skill development rubric to identify areas of growth and excellence.
- 9. To determine the best ways to demonstrate your professional skills to a current or prospective employer using a professional work portfolio.

Checklist of Professional Skills⁵

In your class, you will focus on a subset of professional skills that technical employers have identified as important. These are highlighted below. In addition, there are other types of professional skills that you may encounter in your career.

 Interpersonal skills Teamwork: ability to work with other employees, manage expectations and work in a reliable manner, and manage conflict. Communication: ability to convey information clearly; having strong written, verbal, and nonverbal communication skills; being a good listener; understanding questions and concerns of clients; listening to supervisor's directions.
 Intrapersonal skills Adapting to workplace expectations: demonstrating flexibility/adaptability, initiative, dependability, responsibility, general professionalism, and a service orientation. Initiative: ability to work independently and demonstrate agency; having curiosity and being willing to learn. Cultural and global competence: exhibiting interpersonal and social skills that are respectful of cultural differences. Productivity: ability to set goals and priorities and manage time and projects; exhibiting punctuality, persistence, and precision/accuracy.
 Cognitive skills Lifelong learning: ability to remain curious, humble, and willing to learn new things; includes the motivation, confidence, and skills to pursue independent learning. Creativity and innovation: ability to think creatively, work creatively with others, and implement innovations. Critical thinking and problem-solving: ability to reason effectively, make judgements and decisions, and solve everyday problems.

I think [the Project GOALS program] really emphasizes how important teamwork can be in a field that is normally not known for that.

- Project GOALS participant

Developing Your Professional Skills

In your courses, you're going to participate in a variety of activities to help you develop some of the professional skills you've read about so far. This section tells you a little about what activities to expect.

Informational videos

Your instructor will show videos to introduce professional skills, clarify why these skills are important, and explain how to perform these skills in the workplace.

Why professional skills matter

In these videos, community college faculty, students, and industry managers discuss why professional skills matter.

- Importance of Professional Skills: https://www.youtube.com/watch?v=yYBwEpXZanY&t=8s
- Recommendations for Jump-Starting Professional Skills: https://www.youtube.com/watch?v=sqb1WfTC4DM&t=7s
- Using Professional Skills While Transitioning to the Workplace: https://www.youtube.com/watch?v=DR79APoFKgl&t=20s

How to perform professionally

In a series of video playlists by New World of Work, faculty and students talk about how they learned to perform several professional skills: https://www.voutube.com/@newworldofwork8038/playlists

Lab activities

While you participate in labs to build your technical skills, your instructor may include some additional roleplaying activities so you can practice specific professional skills in teams. These role-playing activities will vary from one lab to the next. Your instructor will pick a professional skill, like teamwork or communication, for everyone to practice. Then your instructor will assign team roles that are associated with this particular skill.

Reflection on performance

After labs, you'll reflect on your professional skills to gain insight into your strengths and opportunities to grow in these skills.

There's a good reason for reflection in the classroom. The workplace is a "high-stakes" context for learning professional skills, where your performance is regularly evaluated and your job success is on the line. But the classroom is a "low-stakes" context where you can learn these skills with the support of your instructor and classmates. Being able to reflect on your performance now will help you throughout your working life.

During your classroom reflections, you'll rate your skills with a specific context in mind (during the lab activity, for example). The next section tells you more about the reflection tools and steps.

A Deeper Look: Following the Steps for Reflection and Growth

To take control over how prospective employers view you, you should first learn how to reflect on your professional skills. It's a good strategy to learn from different kinds of reflection, like self-reflection, team reflection, and instructor reflection. This will give you different perspectives and ideas to consider as you grow your skills.

Your instructor will provide a set of tools to help you reflect. These tools are intended to help you assess your professional skills, observe and appreciate how your teammates perform these skills, and learn from your instructor's assessment of how well your class is performing these skills.

The most valuable part was they had us paired up in groups and did interviews of each other. ... It definitely opened my eyes to a few things I wasn't aware of before.

- Project GOALS participant

These reflection activities will help you:

- develop a sense of your strengths and opportunities for growth in the professional skills
- assess your teammates' performances of the professional skills
- set goals for personal growth
- build your capacity to describe your professional skills in resumes and job interviews

Steps for self-reflection

Step 1. Rating performance

Research suggests the best way to assess professional skills is through self-reflection after a task.⁶ In your courses, you'll most often have self-reflection after a lab activity. You'll generally use a simple online survey and rubric to rate your performance—or your teammates' performance—on a numeric scale.

Step 2. Comparing different sources of ratings

Next, you'll receive a summary of your self-reflection ratings. Your instructor may also share class ratings so you can more deeply reflect on your own performance. Generally, your instructor may share:

- A summary of the average self-reflection ratings across the whole class, so you can see how your self-ratings compare with your classmates' self-ratings.
- A summary of how team members rated each other in lab activities, so you can see how your selfratings compare with your teammates' ratings of your performance.
- A summary of how your instructor rated everyone in team activities, so you can see how your selfratings compare with your instructor's ratings for the whole class. This is helpful because instructors usually rate students as having more room to grow in their professional skills than other students do.

Using ratings from different perspectives is similar to what happens in the workplace. You'll receive feedback from coworkers and managers throughout your career.

Also, using ratings from different perspectives gives you a more accurate understanding of your strengths and opportunities for growth. We all can be positively or negatively biased when we rate our own skills. Such biases emerge for many reasons, from our moods to social tensions. So getting different views on how you and your classmates perform the professional skills helps to reduce bias.

Step 3. Deciding on next steps for personal growth

Your instructor may help you develop goals for personal growth in professional skills. You'll write brief summaries of what you learned in a class or lab about your skills, and what you plan to practice in future labs or work settings.

Such reflections will become part of your professional skills portfolio. After you collect several of these reflections, you can use this portfolio to work with a career coach or counselor to develop compelling and accurate stories about your professional skills for resumes, job interviews, and workplace performance reviews.

The next step tells you more about how to use your reflection results to set goals and create stories about your professional skills.

Step 4. Using your self-reflection ratings

This step guides you in interpreting your self-reflection ratings and the average ratings your instructor provided for the whole class. This step also helps you use these ratings to build your professional skills portfolio.

On the next page, there's a worksheet where you can enter your own ratings and the class average ratings from your instructor, so you can easily compare them. An example of a completed worksheet is also included included on page 9. Follow the directions below to complete this step.

Directions: Interpreting your self-reflection ratings

- 1. Complete the worksheet on the next page.
- 2. For a specific professional skill, compare your rating with the average rating for the whole class. For example, if you're interpreting ratings for communication, look at your rating for this skill and then at the class average for communication (double-check to make sure it's the right rating). Comparing the two will help you understand whether you can develop a professional skill more, or if you've already mastered it.

Here are some questions to guide your thinking:

- a. How do your self-ratings compare to the other ratings?
- b. Why so you think these ratings are different based on what you observed and experienced during the lab activity?
- c. Where or how might bias have affected your own ratings? If you feel there was bias, what kind was it?
- 3. Look at the student rubric your instructor provided to understand what the ratings mean. For example, a rating between 4 and 5 for communication may suggest you demonstrate good communication skills and can participate in team discussions, attend meetings on time, collaborate with your peers, and so on.
- 4. After you review the rubric for a particular professional skill, ask the questions below to guide your thinking:
 - a. Based on your consideration of the different data sources, would you like to revise your self-rating? Why or why not?
 - b. What are some areas related to the skill that you want to improve on? Do you feel like you have the right resources to continue developing the skill?

Rating comparison worksheet

Directions

- 1. Paste your self-reflection ratings in the box on the left.
- 2. Paste the class average ratings you received from your instructor in the box on the right.

	_

Your self-ratings

Class average ratings

Directions

3. Enter the values for your self-ratings and class average ratings for each professional skill into the middle columns below by double clicking on any cell. The "Difference" column will automatically calculate the difference between the two scores. This column will also show whether you need a bit more practice with a specific skill (if the cell is orange) or whether you have mastered the skill (if the cell is green).

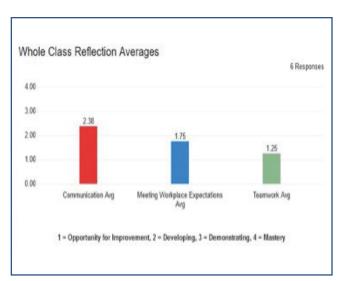
Professional skills	Your self-ratings	Class average ratings	Difference
Teamwork			0
Communication			0
Adapting to workplace expectations			0
Lifelong learning			0

Directions

- 4. Reflect on your own ratings and the class average ratings. If one of your ratings is lower than the class rating, it may indicate an opportunity for growth. If one or your ratings is higher than the class rating, it may indicate an area of strength.
- 5. Review the student rubric and interpret your ratings based on the descriptions your instructor provided.

Example of completed worksheet





Your self-ratings

Class average ratings

Professional skills	Your self-ratings	Class average ratings	Difference
Teamwork	2.67	1.25	1.42
Communication	2.5	2.38	0.12
Adapting to workplace expectations	3	1.75	1.25
Lifelong learning	2.25	0	2.25

In this example, the student's self-ratings are higher than the class average ratings across all four professional skills, with ratings ranging between 2 and 3. Based on the rubric, ratings between 2 and 3 show that the student is "developing" their skills. So this student should continue to grow their skills through training, resources provided in this handbook, and hands-on activities.

A Deeper Look: Creating Your Professional Skills Portfolio

Throughout your certificate program and your participation in Project GOALS, you'll develop work products, complete self-reflections, receive instructor assessments, and more. You can use this portfolio of materials to showcase your development of professional skills!

Here are some types of materials and artifacts you can gather for your portfolio:7

Career development materials:

- Career and educational development plan
- Resume
- Application for employment
- Letters of recommendation

Documentation of progress:

- List of work experience and roles/responsibilities throughout your certification program

Work samples:

- Project reports
- Course reports

Writing/research samples:

- Products of teamwork
- Presentation samples

Self reflections:

- Insights into professional strengths
- Goals for future growth and practice

STAR Stories

Instructor endorsements:

- Recommendations
- Testimonials to your growth in specific professional skills



STAR stories

A STAR story has four parts: situation, task, action, and results. STAR stories are a great way to take what you've experienced and learned in class or labs and turn it into a story you can use in a job search. STAR stories are particularly helpful for resume writing or interviews because they express how, why, and in what ways you've practiced or gained experience in a professional skill.

Your instructor may give you a STAR story activity to do in class or as a homework assignment. You can also use the worksheet below to create your own story about your professional skill development.

STAR Story Worksheet			
STAR structure	Your STAR story		
Situation: Describe a situation where you got to practice a professional skill. This is a situation that presented a <i>challenge</i> to that skill.	What was the challenging situation you experienced in the lab activity?		
Task: Describe your role in the situation. What role were you performing in the situation and what was expected of you?	What was your role in the lab? What responsibilities and skills did you have in that role?		
Action: Explain how you addressed the situation and what steps you took to overcome the challenge. How did you go "above and beyond"?	What did you do or say to help?		
Result: Explain the outcome of the situation. Provide concrete examples and, if possible, a quantifiable achievement based on your efforts (for example, how quickly or how smoothly something could be done).	How did your effort influence or change the challenging situation?		

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