Balancing Technical and Non-Technical Skill Development

Leslie Coward
Program Manager
Engineering Career Center
Why are you here today?

- To pick our brains for knowledge
- Network
- Learn more about college to career
- Educate yourselves about what we as employers are looking for

Where does this lead you?
What is needed to get the Job?
What is needed to get the job?

- Technical Skills
- Non-Technical Skills
Technical Skills

In today’s environment, technical competence alone is not sufficient for career success.

Employers want employees who have completed the required courses in their chosen field.

Employers are looking for non-technical skills that help employees perform better.
Non-Technical Skills

Employers want employees who are well rounded

Employees need non-technical skills

Employees who have prepared themselves for the job by balancing both their technical and non-technical skills
How do you gain these skills?

- Educational Institutions
- Organizations
- Projects and research
- Volunteering
How do these skills help you?

- Build your resume
- Increase your marketability
- Improve the total person, employee
Technical Skills

- Educational training
- On-going development
- Technical Competencies
- Application of Knowledge
Application of Technical Skills

- Job Descriptions
- Resume
Non-Technical Skills

- Oral and written communication
- Team Work
- Business Awareness
- Organization and management skills
- Responsibility and initiative
- Problem Solving
- IT competency
Oral Communication Skills

Making a speech or presentation before a large group of people such as your manager, your customer, or your peers is now part of the job.

The need to effectively communicate technical information about your particular discipline to others.
Oral Communication Skills

Ways to develop oral communications skills:

- Participate in oral presentations in your classes
- Join the debate team
- Belong to organizations that require the ability to mix and communicate multiculturally
- Volunteer to work on a crisis hotline
- Volunteer to work in on-campus activities that require public speaking
- Give a speech
- Chair a meeting or discussion group
Written Communications

The ability to read and understand information presented to you in a variety of forms such as diagrams, charts, or text.

You need to write and speak so others understand and pay attention.
Written Communications

Ways to develop written communication skills:

- Get tutoring from the English department
- Attend writing workshops such as proposal writing or grant writing
- Write for the university magazine
- Read more well written books and articles
- Ask your friends to review or edit your writing
Team Work

You can’t be expected to know everything, you can’t be expected to know all the various perspectives.

Working in a team allows you to connect your work to the work of the team and the team to the overall mission of the organization you work for.
Team Work

Ways to develop team building skills:

- Group projects and presentation where you work in a team
- Organizing events, trips (at a university or with friends in vacations)
- Attend sensitivity training sessions to understand and get along with people of other races, religions and ethnic or cultural background.
Business Awareness

Employers value employees who understand the business they are in from a local, national and global perspective.
Business Awareness

Ways to develop this knowledge:

- Participate in activities that put you in a business-like environment
- Seek part time employment in a business
- Develop an interest in current affairs, business, or finance
- Enroll in business related courses
- Read publications and other technical works related to the business
Organization and Management Skills

Whether you are the supervisor, project manager, or just a team member, you need good organizational and management skills.
Organization and Management Skills

Ways to develop these skills:

- Plan, design or carry out a short term project or task from start to finish with well-defined objectives and outcomes
- Prioritize work to meet deadlines
Responsibility and Initiative

Initiative is work that you initiate that reaches beyond the border of your known work where the motivation is not to benefit you, but your organization or your team.

Perform a self assessment that includes establishing goals and priorities for yourself.
Responsibility and Initiative

Ways to establish this skill:

- Look for opportunities to apply new ideas and turn them into something of value to the team.
- Do more work than is required.
- Listen and respect others opinion and ideas in order to evaluate and improve the product or service.
- Take responsibility for an event or assignment.
- Take some positive action without being asked in class.
Problem Solving

Using your technical skills to solve a problem and/or make effective decisions on the basis of the information you have been given.
Problem Solving

Ways to develop this skill:

- Gather all of the information you need to make an effective decision (technical, financial, and conflicting information).
- Participate in a project that requires you to manage change, plan and take ownership of a problem.
- Develop and implement ways to achieve your goals.
IT Competence

It is absolutely essential for you to be able to work efficiently at a desktop computer.

Continuous improvement with a wide range of software packages is necessary.
IT Competence

Ways to acquire this skill:

- Volunteer to work in a computer lab
- Enroll in a distance learning class
- Read technical magazines
- Use the Internet (www.zdnet.com/eweek/)
- Take courses beyond those required in your field.
- Offer to type other students papers and projects.