

CHAPTER 7

THE MENTORING PROCESS AND VALUE TO YOUR CAREER

The dictionary defines the word mentor “as a person who is a wise and trusted counselor or teacher.” At all stages in our lives, each of us depends upon and uses mentors. These mentors are usually referred to in different terms. When we are young our mentors are most often our mothers and fathers. As we mature, other mentors come into our lives. These mentors may be teachers, coaches, or guidance counselors, or may even be older brothers or sisters, and aunts or uncles [1]. As we continue to mature, our mentors might be called monsignor, rabbi, or professor. The point here is that each one of us calls upon and asks for the advice of mentors in our personal lives. Are engineering mentors necessary for successful career development? Yes. You need mentors at work just as you do in other areas of your life.

UNDERSTANDING THE BENEFITS OF MENTORS

My experience and that of others has shown that finding and developing the right mentor can significantly increase your chances for career success. The Institute of Engineering and Technology has a website dedicated to helping its members understand the value of having a mentor [2,3]. If your mentors are well placed and well thought of in the organization, they can be your guide to the top, provided of course, you can meet their expectations and perform on the job. Mentors can help you develop the necessary technical and business skills you need to progressively rise to the top. Kevin Hoag in his book *Skills Development for Engineers* published by the Institute of Electrical



FIGURE 7-1 Having a mentor is very valuable for your career.

Engineers identifies mentoring as a key component in skills development [4] (Figure 7-1).

A good mentor who is strategically placed in the organization can introduce you to the inner circle of executives who make the decisions as to who will be moving up the corporate ladder.

Correspondingly, a mentor who is not strategically placed or not very well thought of in the organization, or offers poor guidance, can severely hurt your career. Your challenge is to find the right mentor and develop an amiable relationship. This relationship will significantly enhance your career development. In this chapter, we will identify all the benefits a good mentor can provide you, and then we will suggest ways you can find and develop good mentors.

A good mentor will help sponsor you, provide coaching, protect you, recommend you, and even help you get the more challenging and consequently more rewarding job assignments. Through these helpful mentoring steps, you will be exposed to the shortcuts and hopefully avoid the pitfalls and setbacks.

► **Career Tip.** Having a great mentor can make your job significantly easier.

Sponsorship from a mentor is essential to getting the challenging assignments that provide you with the opportunity to perform and clearly demonstrate you are ready to move up. A good mentor is usually in a position to defend your abilities should they come into question by management. He or she is the person who interacts with management to vouch for your suitability to handle difficult assignments. Your mentor is there recommending you for the assignment, clearly identifying you as the best candidate to successfully complete it. It is this type of sponsorship that will make you stand out from the crowd.

► **Career Tip.** A mentor can help sponsor your next promotion.

Coaching is an equally important function a mentor will perform. A good mentor can provide the coaching or polishing necessary for advancement. Good coaching can help overcome a multitude of problems that you might otherwise have been unable to handle. Good coaching may come in the form of learning how to deal with an overly domineering supervisor or coworker. It may also come in the form of technical advice as to how to solve problems and how to avoid technical failures.

Good coaching may come in the form of challenging assignments causing you to expand your expertise, or it may also come in the form of recovery from failure or getting advice on what to do if you fail. A good mentor is a good coach, always there challenging you, inspiring you, and demanding the best. Protecting is another function that a good mentor performs for you.

Often people will try to find a cause or a person to blame when the engineering project fails. A good mentor will stand up for you in times of need and defend your actions, provided of course they agreed with them in the first place. Mentors can easily deflect arrows or blame away from you and can be a shield in troubled times.

► **Career Tip.** A mentor can protect you in troubled times.

By developing a good relationship with a powerful mentor you assimilate power just by being associated with them, you send signals to other people in the organization that you are a member of a powerful team. You acquire some of your mentor's influence and will have resources behind you, which may make it possible for you to obtain inside information or new organizational power to cut through the bureaucracy and red tape.

FINDING GOOD MENTORS YOU CAN RELY UPON

The best place to begin looking for a mentor is outside your department; any senior supervisor in a position to influence your career positively is a potential candidate. Choosing someone inside your department may be quick and easy

but will cause too many problems. Having a mentor inside your group may cause jealousy from other group members, innuendoes of favoritism, and even the alienation of other group members.

Finding a good mentor is not an easy task and may take quite a long time to cultivate [5,6]. When looking for a mentor you should be looking for someone with whom you are comfortable and compatible in ideology. The mentor should share similar views to yours about company strategies and success in the corporate world. The mentor should appear to you as a successful role model whom you would like to emulate. You should find the mentor stimulating, challenging, and an inspiration to you to perform to the top of your ability. This type of relationship cannot be planned but must be cultivated over a period of time.

The mentor should be a person with whom you can share your triumphs as well as your defeats. You will need him or her for guidance, nonjudgmental listening, and constructive criticism. They should be a person with whom you feel comfortable trying out your new ideas and you should respect and value your mentor's honest opinion. They should also respect your intelligence and capabilities.

► **Career Tip.** You should be comfortable to discuss problems with your mentor.

Unfortunately, mentors do not walk around the company with badges identifying themselves. So you must be aware of the subtle hints potential mentors give. When you are working with senior people, do they take the time to explain to you everything you should know? Do they spend extra time making sure you get the assignment right? Do you find yourself sharing similar strategies on the best approach to the problem? Is there an unexplainable chemistry between you and your mentor? Do you enjoy discussing difficult problems and tasks with him or her? Does your mentor like your style and compliment you on your work? Similar outside interests are other things you might have in common with mentors. People who like your work and spread the word are good candidates. These are all good signs the person you are working with would make a good mentor for you.

► **Career Tip.** You have to actively seek out mentors. Join a mentoring group if possible.

Once you have found a good candidate to be your mentor, the challenge becomes one of developing your relationship. Just as in any other relationship, you must invest your time. A good way to do this is by sharing lunch hours. Stop by your mentor's office on a periodic basis just to get an opinion about the project you are working on. Pass by your mentor's office on the way

home at night. Volunteer your help on a project they are working on. If your mentor is like most people, they could always use a little extra help. Look for special projects around the company that are pet projects of your mentor and get involved in them.

As you start to develop the relationship you can cultivate it by letting your mentor know how much you value their opinion. Everyone likes to hear how valuable their opinion is. You might even ask if they would mind if you considered them as a mentor. The point here is that you must be aggressive about finding a mentor and maintaining a relationship. However, you need to be cautious when doing so.

First, being overly aggressive can be misinterpreted as being too pushy or give the impression your foremost interest is empire building. This can trigger resentment from your coworkers and earn you the reputation of being a “brown nose” or “apple polisher.” Second, the relationship with a mentor must be beneficial to both you and them because you do not want to become just a “gofer” or “yes man.” If your mentor is only using you for their own benefit, it’s time to move on and look for another one.

► **Career Tip.** Pick mentors who are a minimum of two levels above you and have 8–15 years more experience than you.

Age difference is an important factor in picking a mentor. If your mentor is within 4–8 years of your age, they are more of a close friend than a mentor. The best age difference is between 8 and 15 years of age. More than 15 years of age, the relationship may turn into a parent–child relationship.

Don’t put all your eggs in one basket. In other words, don’t rely on only one mentor. If you spend all your time developing a relationship with one mentor and he or she leaves the company, you are suddenly left stranded. This is where having more than one mentor can be beneficial. Even though mentors may appear to know it all, one mentor simply cannot provide all the guidance you need. For engineers, it is good to have at least one technical mentor, one political mentor, and a mentor with great business acumen. This way you gain experience in dealing with technical, political, and business moves within the company.

► **Career Tip.** Find several different mentors, each with different backgrounds and experiences.

For example, you may be working on a tough technical problem and require assistance from a senior technical person, in this case your technical mentor may be able to provide the best guidance. On the other hand, a project you are working on may be a dead-end project as far as company management is concerned. A smart business mentor can forewarn you of the futility of

working on the project and even assist you in moving on to more rewarding projects.

HOW TO UTILIZE A MENTOR

You must be aware that utilizing mentors can be both over and underdone. You have to strike a balance, which will come with time and experience. If you are constantly seeking out the advice of your mentor for every conceivable problem, then you are overusing them. Your mentor will soon come to realize you are incapable of making decisions and view you only as coming to them so they will do your work for you. On the other hand, if you only go to your mentor after you have solved everything and there is no real need to take advantage of their wisdom and advice, you lose the benefit of coaching. In either case your relationship with the mentor will not work. Here are some guidelines for when to utilize your mentor.

Times of trouble are probably the most obvious. When you are having difficulty and do not know where to turn, see your mentor. However, you should not “dump” your problems on your mentor. Coming to the discussion with some possible solutions indicates that you are thinking of potential solutions and really trying to work the issues. Be ready to discuss your options and highlight the pros and cons.

Ask your mentor for advice and find out what they think your options are. If you have missed anything helpful, your mentor will point this out for you. Ask for their guidance and be ready to act on it afterward. Nothing is more discouraging for a mentor than to recommend a course of action and have the employee fail to try it out.

Reporting back to your mentor on your progress is also important. Provide feedback on your activities; this shows you are really taking and utilizing their advice. Utilize your mentor for trying out new ideas and approaches to problems. A good mentor will have years of experience and should be able to assess your chances for success. Nothing helps sell a new idea faster than when your mentor is pushing for it along with you. In expressing new ideas, let them make constructive criticism, then implement any suggested changes. You may not see the need for the changes, but he or she may know of hidden barriers in the organization of which you are unaware. Your mentor’s suggestions should help you to overcome these barriers.

► **Career Tip.** It is always a good time to utilize mentors.

A good time to utilize your mentor is at the beginning of the project. Meet with them and discuss your plans for the project, for example, how you have set things up, your planned actions, and any problems you anticipate. Your mentor has years of experience and should be able to identify, in advance, your problem areas.

Approximately halfway through the project, discuss the problems you are encountering and the steps you are taking to solve them. Try to present problems with potential solutions, ask for an opinion on how the project is coming along, and ask them to do research on how other superiors perceive the progress of the project. It's always good to know whether management thinks you are doing a good job or not. Remember, mentors are great resources for finding out how to overcome barriers in the organization.

Another good time to seek out the guidance of your mentor is when the project is coming to a conclusion. What is the best way to end the project and present the results? How can you make management aware of the fine job you did on the project? What steps can you take to determine the next project you will be working on? Does your mentor have any recommendations? Can he or she sponsor you on another project? Who are the people you must contact? These are all important questions a good mentor should be able to help you with at the end of the project.

Another good time to utilize your mentor is when you feel that your position seems to be stagnating or when you feel you're in a dead-end job.

Good mentors will be able to tell you about things you may not be aware that are going on behind the scenes. It is quite easy for them to sit down with your supervisor or other people in the organization and get any information to which you may not have access. A good mentor will show you how to get out of the situation or just weather the storm.

When you have failed on a project and need to recover, never be afraid to ask for help. Some people react to failure by trying to hide it, failure does not have to be a career limitation. In fact, a good mentor can show you how to overcome failure and actually make it an opportunity for advancement. Nothing is more impressive to management than when you can show them how you sought out the help of others, identified a solution, and made corrections after a failure. Doing this is not career-limiting but part of career advancement. Shawn McCarthy in his book, *Engineer Your Way to Success* published by the National Society of Professional Engineers, points out overcoming difficulties or failure is all part of being successful [7].

Developing and utilizing mentors is a skill you need to develop for career advancement. Knowing the best time to go to your mentor will depend upon your relationship with them. The above-mentioned times are suggested as guidelines for helping you. Gordon Shea in his book, *Making the Most of Being Mentored*, points out many excellent times and actions you can take to get the maximum benefits from your mentoring experience [8].

HOW TO BE A GREAT MENTOR

Being the mentor means you are the leader and will guide the protégé or mentee through this process. The key words are “lead” and “guide.” Lead the mentee through the process. They will be looking to you as having a clear

vision of where they need to go and know how to best get this accomplished. You are not to drive or tell the protégé what to do, but let the protégé discover and learn solutions to problems. You are a guide along their trail to career success.

The first step for the mentor is to ensure the relationship gets off to a good start by setting a tone of enthusiasm, excitement, and genuine interest in their career. Mike Pegg in his book, *The Art of Mentoring*, suggests some great ways to start out your program [9]. Make sure you allow enough time socializing and exchanging personal information about each other's careers. Try meeting in more relaxed areas like the cafeteria or company lounge.

Regular meetings will establish a rhythm and foundation to construct successful career plans. Plan to meet for an hour, preferably two, at least once a month. Have a plan for each meeting and ensure your time together is fruitful and each of you walk away with identified actions.

GREAT QUESTIONS FOR MENTORS TO ASK

Initially, as a mentor, you should assess the condition of the protégé's career plan. Does he or she have a career plan with goals identified? Refer to Chapter 2, *Developing Career Plans for Guidance*. Have short-term and long-term goals been identified? What is most important to the protégé and what gets their excitement up? Ask open-ended and probing questions.

Where do you want to be in 5–10 years?

What do you like to do the most?

How would you describe your ideal job?

What are you really good at?

What areas do you want to improve?

How can I help you?

What organization are you in and what would change?

MENTOR ROLES AND RESPONSIBILITIES

To fully engage your protégé, take them to meetings you think might benefit them to attend. Copy them on leadership articles.

This is one of the challenges for you as a mentor—describing how you learned what you know so your protégé can learn from your experience. One way to accomplish this is through examples. By thinking through specific experiences, you can gather the gems that will be the most beneficial to your protégé.

The following are some suggestions for activities that may help you in this process:

1. Share your weekly activity report. Explain what the “hot” issues are and why your group has been concentrating on them.

2. Discuss your resume. Share your career decisions, and review the process you went through to make them.
3. Copy articles you find in business or industry publications that may be particularly helpful to your protégé.
4. If possible, ask your protégé to attend one of your staff meetings. Discuss the impact of some of the decisions made, the group dynamics and any follow-up activity that will be necessary.
5. Review a list of volunteer organizations you are participating in, and the role you play. Discuss how involvement in those groups has helped your career.

► **Career Tip.** Mentors open doors and windows to new insights, by sharing their experiences and knowledge.

By simply exposing your protégé to alternative ways to accomplish goals, you are opening doors and windows they might not have considered before. Great door-opening activities are lab tours or production area tours and attending meetings with you.

Connecting your protégé with colleagues that can become informal mentors is another door to open. As you get to know your protégé, you will think of others who may be able to provide them extra guidance. Establish meetings with these individuals and help your protégé think of questions they might ask.

Learning from ones' mistakes is often the most difficult part of being a mentor. Allow your protégés to make their own mistakes, and help them learn from them. Also, help your protégés learn from your mistakes, so they do not have to experience the same pain.

- Think through a time when things did not go so well. What happened? Why did it happen? What could have prevented it from occurring?
- Have you had an opportunity to apply what you have learned from that experience? If so, what happened? What did you do differently from the first time?

Have them practice a presentation before giving it to a group. Ask the "tough" questions and make sure they are prepared. Ask them to profile the audience for you and see what questions are anticipated. Give them feedback on their presentation style and format.

Be a sounding board. Let your protégé talk through strategy with you so they can define it clearly.

► **Career Tip.** Sometimes the best thing a mentor can do is simply listen.

What we learn from our mistakes is more important than making the mistake in the first place. In fact, if we don't make some mistakes, we won't be able to learn as much, or as quickly. Help your protégé by sharing what you have learned, and by talking with them about what they have done or are about to do.

Mentors provide protégés with valuable knowledge and insight. They can also help connect protégés with others who are critical to their career advancement. This is particularly helpful for females and minorities trying to break through the glass ceiling.

The following questions are designed to facilitate a discussion about networks.

Who is in your communication network and how did they join it?

Who is in your expertise network and why are they in it?

Who is in your trusted network and what have they done to earn a spot there?

The following are some characteristics of successful mentors:

- Communicate politics within the organization
- Reveal unspoken corporate rules and values
- Point out areas necessary for advancement
- Show how to influence and persuade others in positions of authority
- Demonstrate how to earn the respect of peers and executives
- Share expertise
- Listen actively to protégé's goals
- Share vision and insight
- Provide support and encouragement
- Build protégé's self-worth and confidence
- Help protégé take safe risks
- Prepare protégé for dealing with setbacks and failure
- Provide honest and constructive feedback
- Make contact with protégé's manager—get them involved
- Establish a process for regular contact using phone, email, or other means
- Ask probing questions
- Require your protégé to document his or her lessons learned and accomplishments
- Provide visibility for protégé
- Set expectations of performance jointly
- Offer challenging ideas, raise the bar
- Provide direct feedback on negative behaviors and observations

Successful mentors do not:

- Agree to get a protégé a promotion or raise
- Take responsibility for protégé's actions
- Make promises on behalf of their management or the company
- Wait for the protégé to do everything
- Create situations that may cross the line into less than a professional relationship
- Forget that the perceptions of others are as important as the reality of the situation
- Use the protégé as means to get extra work done
- Forget to be sensitive to the differences between you and your protégé

PROTÉGÉ'S ROLES AND RESPONSIBILITIES

The protégé also has roles and responsibilities to ensure the mentorship yields benefits. The protégé should keep a journal of the meetings and document expectations and discussions with the mentor. It is the responsibility of the protégé to initiate and schedule routine interactions with their mentor.

The protégé should share job experiences to help the mentor gauge what would be the most helpful for them. The protégé should be open and sharing of personal performance on the job, and if possible, provide the last job review and rating as discussion aids. The protégé should be the one who creates a development plan and documents and monitors progress against that plan.

The protégé should not expect the mentor to solve problems for them but to help them work through the potential solutions and identify the best path forward. As a protégé, it is up to them to determine their game plan, focus, and priorities. The mentor is there to help as the protégé determines actions, but the ultimate decisions are up to the protégé.

THE PHASES OF THE MENTORING PROCESS

The actions and objectives of the mentor and protégé change as the relationship goes through each phase. The three major phases of the mentor/protégé relationship are shown in Figure 7-2.

The first phase is the "Getting to know and trust each other." Like any relationship, time should be spent at the beginning just getting to know each other. A good way to do this is to simply talk and share experiences. Some recommended things you might share with each other are your areas of technical focus, degrees, and where you went to school. Other good items to share are your likes and dislikes about the engineering fields. Looking at each

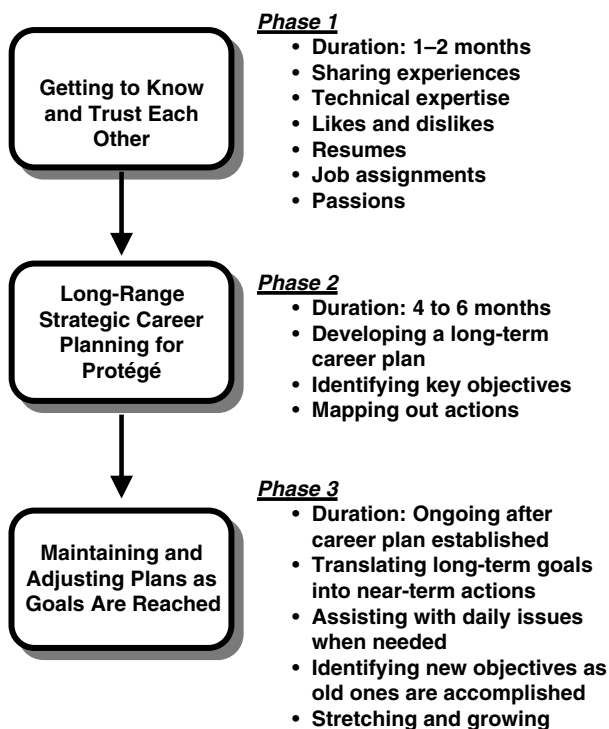


FIGURE 7-2 Phases of the mentoring relationship.

other's resume is an excellent way to spend some time getting to know each other. Asking the protégé about their job assignment will provide insight into their daily activities and the issues he or she is facing in the near term. Also consider sharing your passions and discussing the ideal job.

The first phase should last about 1 to 2 months during which you meet about 2 to 3 times. Take notes on your protégé answers, so you can refer back to them in future conversations. It also sends the protégé a very strong message that you consider what they are saying is important and you are taking notes.

An excellent action the mentor can do in the first phase is to contact the protégé's supervisor and spend time discussing protégé performance. This action will provide valuable insights for the mentor and should reveal the strengths and development area for the protégé.

► **Career Tip.** Meet with the protégé's supervisor to discover strengths and weaknesses.

The second phase involves generating a long-range strategic career plan for the protégé. This phase usually lasts 4–6 months. During this phase, the

mentor guides the protégé in constructing a long-range career plan and determining the near and far-term actions. Have the protégé write up the plan and clearly identify the actions needed. Break down the goals into near and far-term actions. For example, simply establishing a goal of getting a Master's degree is too vague. Break this goal down into easy obtainable steps with dates. For example, this goal can be broken down into:

1. Identify major
2. Talk to people in company who have recently returned for a Master's degree and discuss actions they should be taking
3. Obtain the university criteria for entry into the Master's program
4. Identify the funding source and apply
5. Register and get accepted into Master's program
6. Develop degree plan
7. Start first class

Please refer to Chapter 2 "Developing a Successful Career Plan," for guidance with this.

The final phase is the "maintaining the plan" phase. In this phase, the mentor and protégé are meeting to discuss progress toward career objectives. Refining the plans as goals are accomplished and identifying new goals to replace them. In addition, the mentor may be helping with the protégé's job issues or more challenging tasks.

The mentor should be helping guide the protégé through difficult situations and the more challenging assignments. Not simply giving the answer to the problem but helping the protégé brainstorm solutions and evaluate the optimum solution to peruse. Sometimes the problems may seem trivial to the mentor and the best action the mentor takes is to just tell the protégé what to do to instantly fix it, but this is not mentoring. The mentor should only do this as a last resort and clearly identify that in the future this is not going to be a common practice.

YOU CAN MENTOR; IT'S EASY!

Setting up and running a mentoring program for your engineering society or company is easy and very rewarding. You can do this! It is very rewarding to see people develop and become leaders. Please remember that mentoring is not an exact science but a journey. You will travel on uncharted paths and discover new actions along the way and sometimes you will even go down dead-end paths.

All protégés are not alike and there is no one magic formula for all protégés. You, as a mentor, will have to experiment with various methods and techniques until you discover the best ones that a protégé responds to.

Your protégés will all have different career plans and objectives. Trying to mentor people into your exact likeness and desires will not work. David Clutter and Belle Ragins provide many excellent tips for mentoring people from diverse backgrounds in their book *Mentoring and Diversity* [10]. And finally, protégés are going to fail and make mistakes. You cannot take responsibility for their failures just as you cannot take credit for their success. You are like road signs along the journey of life guiding them as they go. However, it is the protégé who drives the car and determines which way to go and how fast. Good luck and please mentor someone!

A WORD OF CAUTION ABOUT FINDING MENTORS FOR WOMEN

The world of engineering appears to be dominated by men but every year more women are majoring in engineering. The chances still remain greater for most women to have men for mentors than other women. Unfortunately, good mentoring relationships between a male mentor and female are extremely hard to develop and maintain.

If you are a woman and develop a male mentor, be alert for the relationship shifting to something more than friendship. If this happens, then it is obviously time to change mentors. If you become involved it diverts your energies from your primary goal of career advancement. It can quickly ruin your mentor's career and yours. This type of involvement is to be avoided.

A good male mentor should challenge you and encourage you to make bold strides rather than timid little steps; his advice should be the same regardless of your gender.

Women looking for good mentors may want to take a different approach. Organizations such as Women in Engineering or Women's Engineering Societies are made up solely of women in engineering. Their goals and objectives are networking for women engineers, and therefore are excellent places to find mentors.

Women mentors can provide tips on what it is like to be a woman in the engineering field. They can provide the guidance and coaching necessary for women to overcome the "Good Old Boys" barriers, how to handle sexism, and deal with the "overly friendly" male supervisor. For a woman in a male-dominated field, having several female mentors is a necessity.

A FINAL NOTE ON MENTORING

Most people become squeamish when faced with the task of developing a mentor. To this I say what do you have to lose? The answer is absolutely nothing, with everything to gain. Remember, several good mentors are necessary for career development.

You will need to have many mentors throughout the course of your career; no one single person can provide all the guidance necessary. You may also have several different mentors at one time and as your career progresses mentors will come and go.

SUMMARY

At all stages in our careers, each of us should depend upon and utilize mentors. Finding and developing the right mentor can significantly increase your chances for career success. Mentors can help you develop the necessary technical and business skills you need to progressively rise to the top. The best place to begin looking for a mentor is outside your department; any senior manager in a position to influence your career positively is a potential candidate.

When looking for a mentor you should be looking for someone with whom you are comfortable and compatible in ideology. The mentor should share similar views to yours about company strategies and success in the corporate world. Finding a good mentor is not an easy task and cultivating a good relationship will take time.

Utilize your mentor during times of trouble, at the beginning of a project, at the end of a project, and nearly anytime you need advice or help on assignment. It is easy if you are a senior person to mentor people and the experience can be fun and rewarding. The mentor's roles are to fully engage your protégé, provide guidance but not tell them what to do, expand their thinking, and share your experiences. The protégé's role is to keep a journal of the meetings and document expectations, schedule routine interactions with their mentor, share job experiences, and development of a career plan. The protégé should not expect the mentor to solve problems but provide guidance. The mentoring process takes time and periodic meetings are recommended for effective mentoring.

Have you identified any career actions you want to take as a result of reading this chapter? If so, please make sure to capture these ideas before you forget by recording them in the notes section at the back of the book.

DISCUSSION TOPICS

- 1 Make a list of several people in your company who you think might make good mentors for you. Pick one and approach him or her about some problem you have and ask for guidance. Watch their reaction. Is it what you need in a mentor?
- 2 Can you identify a good technical mentor? How about a good business-oriented mentor?
- 3 What organizations outside of your company can you identify as good sources of mentors?

- 4 For women engineers, contact your local Society of Women Engineers. Can you think of any other organizations that might be a good source of mentors?
- 5 Topics of discussion:
 - Do mentors last forever?
 - How do mentors change as your career advances?
 - What are good qualities in a mentor?

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