

Section 3. Characteristics of Effective Mentors and Mentees.

This section contains information and exercises to help describe mentor and mentee characteristics, ideal expectations of mentors and mentees, benefits and challenges of becoming a mentor, addressing mentoring challenges, and checklists to streamline the mentoring process.

The Mentor's Role

What is the role of the mentor in facilitating the learning of the mentee? There are many things on which the mentor needs to focus to establish and maintain a healthy and productive mentoring relationship:

- The mentee's professional and personal development
- Keeping confidentiality, as the relationship between mentor and mentee is outside the hierarchy of direct reporting relationships
- Maintaining the ability to motivate and be enthusiastic, by inspiring confidence in the mentee, and providing the mentee with an honest assessment of his or her skills
- Staying committed to the process and relationship, in terms of accessibility, availability, dependability, and time devoted to the mentee
- Ensuring good communicating and listening, by providing guidance, feedback, knowledge of the field in keeping up with research and/or the discipline, as well as current technology
- Maintaining a positive outlook, particularly at times when the mentee feels no progression
- Embracing respectfulness, honesty, passion, and patience as personal qualities
- Setting of professional and realistic goals
- Expressing a willingness to share knowledge, skills and expertise.

Benefits of Becoming a Mentor

There are both personal and professional benefits of becoming a mentor. These benefits, while not all inclusive, consist of the following:

- A lasting career network
- A way to "give back" to the school and the profession
- A way to recruit employees for the mentor's industry and/or company
- Creativity generated by issues and ideas generated by someone younger and newer: getting a different perspective of the project and new ideas (intellectual challenge)

- Development of new talent
- Enhances professional life and intellectual growth as well as professional development
- Expand your network via engagement in collaborations with other peers
- Feedback loop to students and school regarding curriculum needs
- Feeling of accomplishment (helping mentee reach academic/professional goals, enriching a student's experience)
- Improve teaching and learning skills
- Recognition at the college for participation (service to university) and opportunity to present collaborations at local/state/national meetings
- Satisfaction from imparting wisdom and experience to others in the profession without a huge time commitment
- Serve as a role model to others
- Share your knowledge in the field.

Challenges of Being a Mentor

There are challenges to being a mentor. Mentoring another is dedicated work. There are specific challenges that faculty members face when in the mentor role. These include the following:

- Balancing workload as an educator, service responsibilities, and research project
- Compatibility with mentee (poor match between mentor and mentee)
- Cultural differences
- Investment of time
- Lack of academic knowledge (mentee)/expectations not met
- Lack of communication
- Lack of resources
- Lack of support
- Time constraints
- Unclear boundaries

Case Study 3.1 helps illustrate the challenges of being a mentor. Focus upon mentor roles and challenges as you read.

Case Study 3.1 Motivating Different Students

One semester, Professor Eli had two students approach him for mentorship. One of the students, Alexandra, had been in two of Professor Eli's classes and he had known her to be an excellent and committed student. Student and professor communicated well; the professor decided the student would be an ideal mentee. Professor Eli and Alexandra immediately started working together on a research plan that incorporated a topic that Alexandra was interested in. They outlined the mentoring goals: the project was mutually agreed upon, including the steps that were to be taken and on deadlines for feedback regarding the specific parts of the project. Ultimately, Alexandra could not keep up with the work requested, and eventually completely stopped working on the project.

The other student was a freshman named Hector who approached Professor Eli to work on an honors project. Although Professor Eli did not know the student, he was impressed by his strong interest and motivation to pursue this opportunity. Professor Eli suggested a number of research ideas to the student and asked him to think about them while reading the assigned material. Hector's motivation seemed to increase as the professor explained how getting hands-on experience in new technologies would give him an edge both in class and after graduation. After reading the material, the student chose one of the research ideas, and asked Professor Eli to help him implement it. Throughout the semester, they had biweekly meetings to discuss the project to ensure student commitment. Both Professor and student keep in touch via email. Professor Eli prepared a small lab in his office and gave the student access to it to start experimenting. Although the student was not initially comfortable with the new technology, he was able to catch up quickly. With guidance and advice, Hector was able to finish the implementation, and then start working on the actual demonstration setup. With the help of the department's lab technicians, they were able to move the setup to the demonstration area and have a fully functioning presentation. Hector not only presented at the College, but also in another University-wide honors conference, where he received a lot of compliments.

Professor Eli took away from that semester that a student who does well in class because they can clearly appreciate the benefit of doing so, might not do well in research when they do not perceive a clear benefit from it. Interest in a specific topic can certainly help, but might not be enough. The choice of the research topic is crucial because it provides the incentive to rigorously do the work and successfully finish the project.

Reflection: In comparing the ways Professor Eli encouraged Alex and Hector, can you describe any ways that he could have encouraged Alex in the manner that he encouraged Hector? How may a personal and professional timeline and reflection upon cross-cultural communication help the mentor-mentee relationships?

Student Perspectives of Responsibilities and Challenges of Being a Mentee

There exist mentoring benefits and challenges to mentees. While the perspectives of student mentees may differ from those of their mentors, the responsibilities of mentees include, but are not limited to the following:

- Be respectful of the mentor's time
- Clarify expectations, goals, values
- Commit to making the time to meet on a regular basis
- Communicate agenda and goals with the mentor prior to meeting
- Have multiple mentors
- Keep both the resume and cover letter up to date
- Keep the content of mentor-mentee conversations confidential
- Look for opportunities to teach the mentor
- Practice active listening and self-reflection
- Provide each other with honest, direct and respectful feedback
- Take the initiative
- Support ones peers.

The possible challenges of a mentoring relationship include the amount of commitment necessary, inaccessibility of mentor or mentee to communicate or to work, investing what may be considered as too much time in a project, and the matter of personal issues constantly being brought up to the professional relationship. These challenges are just the tip of the iceberg when addressing mentoring challenges. Case Study 3.2 helps to illustrate such challenges.

Case Study 3.2 Motivation in Mathematics

Professor Hilliard, a mathematics professor, had mentored a student, Chris, on a project in pure mathematics throughout the course of an academic semester. Professor Hilliard was excited about having a mentee, and believed that the overall experience would be positive. The project was designed to introduce Chris to some basics in Commutative Algebra facilitating a future introduction into Algebraic Geometry and the field of Resolution of Singularities. These objectives were developed with the student's interests and background in mind and the results were presented at a poster session at the College at the end of the semester.

When Chris joined the project, Professor Hilliard was aware of Chris' familiarity, or lack of, with the material. Chris was very excited and committed and his willingness was evident. But, as time progressed, Professor Hilliard did not appear to hear Chris' concerns about the weight of the material and the amount of background needed for him to be brought up to speed on the project. Combined with his regular semester load, Chris' spirit and efforts were dampened. Chris had an adequate undergraduate background in mathematics however research in pure mathematics was not easily accessible and much specialized groundwork and time was needed to get a glimpse of the base camp of this massive mountain. Chris became overwhelmed.

In the end, Professor Hilliard helped Chris to accomplish his goal of completing the project but didn't feel that Chris gained much from it. While he believed he had done his job as a mentor, he wasn't able to fully to convey to Chris the scope of pure mathematics.

Reflection: Did Professor Hilliard's understanding of mentoring in pure mathematics appear to deepen because of this experience with Chris? If so, in what way? In what ways could the relationship have been more enriching for both mentor and mentee?

Developing a mentoring culture that has required conscientious, consistent, and dedicated discipline, focus, and patience may ease the many details of a mentoring relationship. Exhibit 3.1 identifies those details faced when designing and implementing a mentoring relationship according to the literature on mentorship (Zachary, 1994a; 1994b; 1997; 2000), and our own experience.

Exhibit 3.1 Details to Consider: Designing and Implementing a Mentoring Relationship

DETAIL 1: Define the Purpose of the Mentoring Program

Questions:

- What are our academic departments and general institutional reasons for developing a mentoring program?
- What is/are the goal/s of the mentoring program?
- Whom will the program serve, and why?
- How are program participants chosen or recruited?
- How will the program benefit all of the participants?
- What learning outcomes should be realized as a result of participation?
- How do we decide to demonstrate success of the program in terms of outcomes measurement?
- Do our vision, mission, goals, and objectives mirror those of our academic departments and general institution?

Task: Develop a clear, concise mission or purpose statement for the mentoring program.

DETAIL 2: Ensure Consistent and Visible Local and Administrative Support

Questions:

- What would consistent and visible support from local and administration look like?
- What do we call our local support (committee, group, members)?
- Who must be involved at both levels?
- How would they be involved at both levels?
- What would they be doing at both levels?
- How long would they be supportive?
- Who are the current supporters of the mentoring program?
- Who will establish policies and procedures for the mentoring program?
- What are our personnel needs?
- Who are the point persons?
- How should confidentiality and special circumstances be handled?
- What are the specific roles and responsibilities of the oversight committee?
- Who else or what other office has the potential to support the effort?
- Is training of administrative supporters necessary, and what does it look like?
- How do we implement and sustain the program?
- For how long do we sustain the program?

Task: Create an action plan for engaging local and administrative support in launching, marketing, and ongoing support that is consistent and visible.

DETAIL 3: Name the Participants and the Endeavor Itself

Questions:

- What should the endeavor be called (“effort, initiative, movement, process, program”)?
- Are we all on the same page as to what to name the endeavor and the participants?
- What should the participants be called (“learners, mentors, mentees, protégés”)?

Task: Decide on names for the participants and the mentoring endeavor.

DETAIL 4: Define the Mentee Pool of Participants

Questions:

- Who are the prospective mentees?
- How do we find the mentees (call-out, departmental/institutional selection, requirement, self-selection)?
- What specific characteristics or needs should mentees have?
- How far along in a program of study should the mentee be?
- What outcomes are desired for mentees?
- What are the eligibility requirements for mentees?
- What is the extent of commitment for mentees?

Task: Identify the target mentee population for the mentoring program.

CHALLENGE 5: Create the Mentor Pool of Participants

Questions:

- Who are the prospective mentors?
- Who should serve as mentors?
- Who should not serve as mentors?
- What specific characteristics should mentors have?
- How will mentor candidates be recruited?
- How will mentor candidates be selected and screened?
- What training should mentors have?
- Will everyone who applies be accepted?
- What happens to mentor candidates who are not accepted?

- In terms of obligations and commitment, what does it mean to be part of the mentor pool of participants?
- How do we support mentors in terms of time, space, and rewards?
- How important is it to let people know those mentors in the pool?
- From which academic disciplines should the mentors come?
- How do we advertise the names and disciplines of the mentors?
- Should the mentor pool be replenished, and if so, how and how often?

Task: Identify procedures for creating and maintaining the mentor pool.

DETAIL 6: Identify Mentoring Program Roles and Responsibilities

Questions:

- What is the role of the mentor and what are the specific mentor responsibilities?
- What is the role of the mentee and what are the specific mentee responsibilities?
- What is the appropriate role of the director and that of other administrators?
- What is the role of the academic departments and the general institution?
- Are there other silent individuals as partners affected or involved in the mentoring relationship, and what are their roles?
- What does mutual accountability for the mentoring relationship mean?
- What should be the duration of the mentoring relationship?
- Should there be minimum and maximum goal achievement time frames, and if so, what should they be?
- How many mentors should a mentee be engaged with at one time?
- How many mentees should a mentor be engage with at one time?
- Who has the responsibility to make the initial contact?
- What does the initial contact look like, and how is it recorded?
- What defines “regular interaction” among the mentoring relationship partners?

- Should education, seminars, or training take place for all mentors, mentees, and directors, and if so, will it be mandated or voluntary?

Task: Create a description of the roles and responsibilities for all parties involved in the mentoring relationship.

DETAIL 7: Matching Mentors and Mentees

- What are the criteria for making mentor-mentee matches?
- How far in advance will mentor-mentee matches be paired?
- Who will make the mentor-mentee matches?
- What happens once a mentor-mentee match is made?
- What system is in place if a mentor-mentee match does not work out?

Task: Create protocols for matching mentors and mentees.

DETAIL 8: Building an Education Initiative

Questions:

- What kind of education is needed for both mentor and mentee?
- Is there a specific academic unit that may be charged with mentor and mentee education?
- What is the knowledge to be conveyed and by whom?
- Should mentors and mentees hold brainstormings, regular meetings, roundtables, and seminars?
- Are there any educational initiatives (round-tables, seminars, workshops) outside the academic departments and institution that mentor-mentee pairs can attend?

Task: Construct a unit charged with mentor education, and draft a mentor education schedule for mentors and mentees with topics to be covered.

DETAIL 9: Identify Ways to Celebrate, Recognize, and Reward Mentoring Success

Questions:

- How should mentoring be celebrated, recognized, and rewarded?
- How often should mentoring be celebrated, recognized, and rewarded?
- Should all participants be recognized and rewarded?
- Should excellence in mentoring be especially recognized?

Task: Develop a mentoring celebration, recognition, and reward plan.

DETAIL 10: Identify Progress, Continuing Improvement, and Outcomes Methodologies

Questions:

- What do we want progress, continuing improvement, and outcomes to look like?
- How do we monitor feedback and its numbers?
- How do we foster accountability?
- What are the criteria for and measurement of success?
- How do we revisit and reevaluate progress, continuing improvement and outcomes?
- What targets do we set for the future (number of hours invested in relationships, mentor-mentee relationships, number of research projects, number of research presentations)?

Task: Define the criteria and determine the measurement and evaluation processes.

DETAIL 11: Plan the Implementation of the Mentoring Program

Questions:

- What will full implementation of the mentoring program look like?
- Will there be pieces of the mentoring program and what will they look like?
- How long will it take to put each piece of the program in place?

Task: Create specific time line for full program and program piece(s) implementation.

DETAIL 12: Anticipate Mentoring Program Barriers

Questions:

- What barriers might get in the way of a successful mentoring program?
- Are there key issues facing the organization that may impact the mentoring program?
- How will we work to overcome barriers?
- How will administration support overcoming barriers?

Task: Develop a contingency plan for overcoming barriers to mentoring program.

DETAIL 13: Plan a Message Campaign

Questions:

- Who needs to know what about our program?
- What venues for communication are available?
- What is the timeline for the internal and external communications plan?
- What strategies do we need or currently have in place to do an internal and external analysis of the program?
- What will we do with analysis data to improve our program?

Task: Prepare a comprehensive strategic plan to spread the message about the program.

Approaches for an Effective Mentor/Mentee Relationship

Once we have reflected upon the details inherent in building mentoring programs, an approach to building a mentoring relationship may ensue. To begin, the mentor needs to realize that it takes two individuals, but that the responsibility of the learning rests upon the mentor. Simply, the mentor needs to be prepared and ready to mentor, as doing so affects the development and growth of the relationship. To that end, the mentor needs to be accessible and available to the mentee. This accessibility and availability is both emotional and physical. The mentor must also provide constructive and effective feedback that is specific, timely, and thoughtful.

The following exercises help the mentor gauge how interested and motivated he or she is in mentoring. It presents strategies for those initial conversations with the mentee. The considerations for the mentor help paint a picture of understanding what needs to be determined, done, and spoken of to get the mentoring relationship off on a positive note. A readiness checklist support where the relationship stands between mentor and mentee before the learning truly gets out of the gate.

Exercise 3.1 Initial Strategies and Considerations for Building a Mentoring Relationship

Mentor Action	Strategies for Information Gathering	Mentor Considerations
Take time getting to know each other	Obtain mentee's résumé prior to initial conversation, or create one during the initial conversations	Establish rapport; exchange information; identify life journeys; address issues of culture and their importance
Talk about mentoring	Ask about any perceptions of with what mentoring is, and ask about any experiences of mentoring relationships, and what was learned	Talk about what mentoring is, and your own mentoring experiences, both positive and negative
Determine mentee's goals	Ask what the mentee wants to learn from the experience, and provide the mentee with an opportunity to speak about broad goals	Determine if the mentee is clear about own goals and objectives, and if the goals and objectives are attainable and measureable
Determine mentee's expectations and relationship needs	Ask what the mentee expects or wants out of the relationship	Be sure you are clear about the mentee's perspective, or encourage the mentee to more clearly express expectations and needs
Define the concrete deliverables and expectations	Ask the mentee what would demonstrate personal and professional growth or success	See if you have an area of experience or expertise that serves the mentee's learning goals, and consider other networking opportunities for the mentee
Honestly share assumptions, boundaries, expectations, limitations, and needs	Ask for feedback and discuss implications for the relationship	Decide what you are able and willing to contribute to the relationship
Discuss options and opportunities for learning	Ask how the mentee would like to achieve own goals, and what is the most useful kind of assistance you can provide	Discuss communication styles and ways of learning, and their implications, as well as modes or types of assistance.

Adapted from Bell et al (1996); Kram (1985); Zachary (2000).

Exercise 3.2 Mentoring Readiness Checklist

Check off all items that apply to you in terms of your prospective mentoring relationship.

1. ____ I have a sincere interest in helping the mentee to succeed.
2. ____ To me, there is a mutual compatibility and interest between us.
3. ____ Our assumptions, expectations, and goals about the mentoring process are the same.
4. ____ The mentor role is clear to me, and I have made it clear to the mentee.
5. ____ The mentee role is clear to me, and I have elicited feedback to clarify it for the mentee.
6. ____ I am the right person to help this mentee.
7. ____ I can absolutely commit to helping this mentee.
8. ____ I am willing to use my network of contacts, or find new ones to help this mentee.
9. ____ I can commit adequate attitude, effort, and time to the mentoring process that is consistent.
10. ____ I am open to communicating in different ways to support the relationship.
11. ____ I have access to the kind of opportunities that can support this mentee's personal and professional growth.
12. ____ I have the emotional and physical support that I need to engage in meaningful mentoring.
13. ____ I am committed to developing my own mentoring skills, through continuing education.
14. ____ I am committed to my own personal and professional growth.
15. ____ I have a mentoring development plan in place, with all the documents needed to record the relationship journey.

Adapted from Bell et al (1996); Kram (1985); Zachary (2000).

Challenges of Mentoring in the Sciences

Faculty members engaged in facilitating education in the biological and health sciences may face unique challenges in the mentor role. The challenges of mentoring in the biological and health sciences may include the following:

- Fear of students in approaching mentors due to biased expectations or identity threat
- Lack of academic knowledge on the part of the mentee
- Lack of academic options in every department
- Lack of interest of students in mentor's research field
- Lack of resources (equipment, materials, space)
- Lack of support for mentors
- Not knowing the approaches, challenges, or successes of mentors in their own disciplines.

The next section of the Handbook addresses developing a mentoring program of undergraduate research. This section discusses how to start developing a mentoring plan. It contains specific tools and resource links designed to implement a mentored undergraduate research program.