

Informal Mentoring Between Faculty and Medical Students

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Abstract

Mentoring skills are valuable assets for academic medicine faculty, who help shape the professionalism of the next generation of physicians. Mentors are role models who also act as guides for students' personal and professional development over time. Mentors can be instrumental in conveying explicit academic knowledge required to master curriculum content. Importantly, they can enhance implicit knowledge about the "hidden curriculum" of professionalism,

ethics, values and the art of medicine not learned from texts. In many cases, mentors also provide emotional support and encouragement. The relationship benefits mentors as well, through greater productivity, career satisfaction, and personal gratification. Maximizing the satisfaction and productivity of such relationships entails self-awareness, focus, mutual respect, and explicit communication about the relationship.

In this article, the authors describe the development of optimal mentoring relationships, emphasizing the importance of experience and flexibility in working with beginning to advanced students of different learning styles, genders, and races. Concrete advice for mentor "do's and don'ts" is offered, with case examples illustrating key concepts.

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Medical school faculty have many responsibilities, and mentoring students and residents is one of their central missions. Although many schools cover professionalism in their curricula and highlight the importance of mentoring as a professional development tool, clear guidelines or directives are rarely provided.^{1–3} Mentoring reflects the capacity to give the self away, an ability also characterized by Erikson as "generativity" in his model of adult social development.⁴ Mentors serve as "keepers of the meaning," a developmental task based upon empirical data from Harvard's Study of Adult Development.⁵ "Keepers" pass on the traditions of the past to future generations with wisdom and justice without taking sides. Those who have received one-on-one guidance in their own career development may bring to bear these experiences as they shape their own personal styles; however, only about one third of new faculty report having specific mentors.⁶ Information and explicit rec-

ommendations for how to develop mentoring skills are needed. In this article we review literature and offer examples and tips on how to be an effective mentor.

A Case Example of Mentoring

The following case example incorporates anecdotes from different real-life mentoring relationships. Dr. R and AP are not specific individuals but rather they are composites who represent the mentoring relationship we describe in this article.

Dr. R, professor emeritus of pharmacology at a medical college in the U.S. Midwest, is a mentor to a junior colleague currently an assistant professor (AP) of psychiatry at an East Coast university. The two met several years ago when AP was a first-semester student in Dr. R's pharmacology discussion group. Dr. R noticed AP's enthusiasm and aptitude for the material, and was impressed with the extra work this student put in to assignments and class presentations. AP would occasionally stay after class to ask about research in this field. Likewise, AP admired Professor R's engaging teaching style that made the subject matter so alive and interesting. Their brief after-class conversations evolved to longer discussions about topics other than just the course content. AP began to raise questions about career choices, work habits, interpersonal dynamics with peers, and political issues within the institution. Dr. R welcomed these inquiries, and enjoyed

being helpful to a younger colleague. Over the next four years, Dr. R and AP met periodically in person or by phone, and exchanged e-mails to discuss issues of professional and personal development. The two of them collaborated on research projects, and the publications that resulted were noted to be a strength in Dr. R's tenure portfolio for promotion to full professor. Their collaboration continued after AP's graduation and the two of them maintained contact during AP's residency. Now, as "Dr. P" on the faculty of an East Coast university, AP frequently seeks Dr. R's advice on how to mentor others. Both take satisfaction in knowing that their influence extends down to the next generation of scholars.

The Mentoring Relationship

Traditional mentoring is a development-enhancing relationship between two persons: a less experienced novice and a more experienced veteran who is typically older.⁷ As the example of Drs. R and P illustrates, the arrangement is mutually beneficial, in that mentors value their investment of time as much as do protégés.⁶ Protégés gain a guide for their career development who can impart implicit professionalism, ethics, and values; mentors can receive personal gratification and professional assistance with their own projects, and often feel rejuvenation in their work via their protégés' enthusiasm. Emotional benefits, such as the enhanced self-esteem that comes from providing

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expert knowledge to another, and the opportunity to develop close, enduring collegueship, are also acknowledged by many mentors. Such relationships tend to be long-lasting and multigenerational, as protégés eventually may serve concurrently as mentors to younger colleagues, trainees, or students.⁸

Clarification of Terms

“Mentoring” is a term defined very broadly in the literature. It is at various times used to describe roles such as small-group leader, academic advisor, preceptor, supervisor, or role model. All of these are important roles that can facilitate the acquisition of practical knowledge. Furthermore, a role model or supervisor may become with time a mentor to a student if there is sufficient exposure and “chemistry.”⁹ In this article, however, we focus our discussion on mentoring defined narrowly as a naturally formed, one-to-one, mutual, committed, nonsexual relationship between a junior and senior person designed to promote personal and professional development beyond any particular curricular or institutional goals. In particular, we focus on the mentor relationship between faculty and medical students.

Also for the purpose of this article, we limit our focus to relationships that develop naturally, as opposed to formal mentoring programs wherein relationships are arranged and students are assigned to mentors. In formal programs, mentors are typically trained, and are most often unknown to the student prior to the match. Such programs offer a number of benefits and provide opportunities for students to find mentors earlier in medical school.¹⁰ However, relationships organized via formal programs are qualitatively different from spontaneous mentoring in such areas as task orientation, trust, mutual commitment, compatibility, intensity, breadth, duration, and structure.^{6,11–14} A number of innovative mentoring programs for medical students have been described elsewhere.^{11,15–17}

Medical students value mentorship: surveys indicate that about 90% to 95% of students rate mentoring as important or very important, or are interested in developing such a relationship.^{10,18} Students develop mentorships most frequently with preceptors or attendings,¹⁹ and with residents.²⁰ In spite of the wide desire for

mentoring, only about one-third of students report having a mentor.^{6,18} Limited personal contacts with professors during the preclinical years, and the short time frame and diversity of experiences during clerkships make establishment of long-term intense connections between students and faculty difficult.^{10,11} Other barriers perceived by students include discomfort asking for mentoring, and failure to meet someone with similar interests.¹⁸ For these reasons, it is critically important for students to proactively seek out opportunities to interact informally with faculty, and to find the courage to directly ask potential candidates for mentoring.^{12,21} Likewise, it is important for faculty to be receptive to requests by students, and to provide mentoring when it seems like a good fit and it is feasible to make the commitment.

Mentor: A Teacher with Integrity

Mentoring involves many of the same skills teaching does; in essence it is teaching taken to a deeper level. On a one-to-one basis, mentors demonstrate techniques, critique and edit students’ performed or written work, review and track students’ progress, and challenge mentees to take steps toward their long-term goals.^{22,23} As teachers do, good mentors communicate clearly and effectively. They recognize different learning styles and adjust their instructional approach to best reach a student. While some students need directive, concrete, task-oriented assistance, others may need help articulating their ideas or clarifying a life purpose. Beyond teaching, mentors invest in their protégés’ personal and professional development. They can recognize potential and take opportunities to promote their mentees’ careers. For example, mentors can recommend students for a summer fellowship, or for jobs in research laboratories or clerkships at institutions where they have connections. They welcome their protégés as junior colleagues and make an effort to enhance compatibility in their interactions.

What the mentor does is important, and also *who* the mentor is matters a great deal.¹⁰ As role models, mentors often impart wisdom indirectly through their behaviors, attitudes, and perspectives. A physician’s degree of respect for patients and colleagues, trustworthiness, and ethics are evident to any observer. An indi-

vidual who listens empathetically, lives in accordance with personal values, and conveys enthusiasm and positive attitude about the profession will inspire trainees to do the same. Good mentors have the ability to engage with a student on a personal and emotional level. They are able to tolerate expressions of emotion in their mentees who may seek advice or reassurance when they are feeling frustration, discouragement, or anxiety. Effective mentors are open to discussing extra-educational topics and are willing to share their own personal experiences and struggles when they are relevant to the current situation.⁶

Experience Makes a Better Mentor

Professional and personal experience are valuable assets. Knowledgeable and competent professionals who are one or more career steps ahead of a trainee are ideal as mentors. Such persons usually have successfully navigated the professional landscape and can advise trainees based on personal experience. A long tenure at one’s institution or field of choice is also an advantage, to the extent that a mentor transmits political savvy and uses his or her influence, power, or authority to advocate for the protégé.

Professors at different career stages offer different aspects of mentoring, and one’s career stage may have implications for the dyad’s dynamics.²⁴ Since they were most recently in a trainee role, junior faculty may identify more closely with students’ perspectives and needs. For example, in the early days as a new assistant professor, Dr. R felt a special affinity for the senior residents and fellows, as their angst regarding the academic job search was fresh in mind. However, the transition from peer to teacher can sometimes be awkward, especially if the two are close in age. Dr. R, for example, found it difficult to challenge older protégés to keep up with technological advancements and the steady stream of new medications receiving FDA approval. Junior faculty, who are fresh out of training, are often well aware of the most up-to-date scientific knowledge; however, they may not feel confident in their mentoring abilities due to their relative lack of experience. Furthermore, because their professional identities are constantly in flux, it can be difficult for faculty early in their careers to step back sufficiently

from personal struggles with work and life balance to offer guidance to others regarding this important area of professionalism.

Midcareer academicians are more established, more experienced, and tend to have increasingly stable personal and professional identities. Ideally, they have focused career paths and growing confidence in their abilities. For example, within ten years of joining the faculty of the medical college in the Midwest, Dr. R established a staffed, grant-funded cancer treatment research laboratory. During this period of time, Dr. R mentored a number of students and advised several on a broad range of goals. The feeling of personal identification with advanced trainees that was so satisfying when Dr. R was an assistant professor changed over time and was replaced with a valuable new perspective that could only come from several years of experience.

Late-career academicians have a wealth of experience and knowledge to share with those in the next generation.²⁴ They have established professional reputations and in many cases wield considerable power and influence within an organization or profession. They may serve on advancement committees, chair a department, or direct a multidisciplinary pain management clinic. Late-career mentors often carry an institutional memory and have a broad historical view of their field. They may value and derive energy from the fresh perspective and enthusiasm offered by a student protégé. While Dr. R, for example, is not as active in research, this seasoned academic physician is a beloved teacher who wins student-elected teaching awards and enjoys an international reputation in oncology. For this reason, Dr. R is the advisor and confidante of many trainees.

Mentoring Requires Flexibility

Mentees have a variety of goals, which may be broad (e.g., “become a successful doctor”), specific (e.g., “pass my anatomy course”), medically related (e.g., “learn physical exam skills”), work-habit related (e.g., “improve time management”), or personal (e.g., “have a life outside of medical school”). Early and periodic discussion of the mentee’s goals, the relative importance of each, and any changes in ambitions and interests, will enable the mentor to gauge his or her ability to be

helpful either directly or through referral to other resources.

Stages of a student’s development

Different mentoring strategies are recommended for students at different stages. Students’ needs change in terms of skills to be developed, longitudinal perspective, role of mentor, and source of educational direction as students progress from beginner to advanced levels of training.^{24,25} Early on, mentors can be most effective by providing specific, skills-based instruction aimed at facilitating the acquisition and mastery of techniques and concrete tasks. New medical students benefit from detailed positive and constructive feedback. During clerkship, for example, Dr. R helped AP develop skills in interviewing and examining patients at the bedside. Additionally, Dr. R expressed enthusiasm for learning about clinical pharmacology and provided helpful examples of good chart documentation. Dr. R observed AP’s performance and discussed areas of strength and weakness. In repeated sessions, Dr. R tracked AP’s progress, noted areas of improvement, and coached AP on priority-setting in situations requiring management of multiple tasks over a short period of time. In the beginning, mentors may need to be directive, to maintain a short-term focus, and to assign concrete tasks and deadlines. For example, Dr. R required history and physical notes to be submitted by the end of the day of admission. Mentors of advanced students, on the other hand, more often play the role of a consultant or sounding board. They guide and support the trainee through conceptual exchange and discussion of abstract ideas and theories. The focus turns to long-term planning and career development. During the fourth year, for example, AP sought help from Dr. R in formulating a research idea for a student grant application. In other sessions, Dr. R listened while AP presented the relative merits of various possible residency sites under consideration. In short, effective mentors tailor their educational approach to the student’s stage of development, and institute a gradual “weaning process” to help mentees become independent and confident professionals.²⁴

Gender and race

Flexible mentoring also entails awareness of a student’s sociodemographic identity. Teachers will be called upon to mentor students of different genders and races

because, in most instances, the proportion of women and minorities among students is higher than it is among faculty. A student’s gender and race can affect medical school experiences and mentoring preferences. Therefore, to prevent misunderstandings, mentors can acknowledge differences and accept education from protégés about their unique perspectives.²⁶

Women are more likely to report experiencing harassment in their training and careers,²⁷ and are less often encouraged to assert power in training situations.²⁸ Compared with men, women tend to prefer mentors who act as role models, exhibit trustworthiness, and demonstrate an ability to live a balanced lifestyle.^{15,29–31} Women are also more likely than men are to prefer a female mentor. While the incidence of mentoring relationships does not appear to differ between men and women, the qualitative experience of mentoring and dynamic of the relationship varies. For example, women tend to receive more psychosocial support from mentors, but less sponsorship and informal networking.^{32–34}

Race as a factor in forming mentor relationships has not been as well studied as gender, but researchers have found that members of traditionally underrepresented or marginalized groups tend to be drawn to those who are racially similar.³⁵ Blacks, more so than whites, will extend their search for a mentor beyond their immediate environment to seek same-race mentoring if it is not available locally.³⁶ On the whole, the number of same-race and same-gender relationships formed by racial minorities and women mentors are out of proportion with the representation of women and minorities among possible mentors.³⁶ For example, 44% of medical students at one institution indicated they had a female mentor, yet women constituted only 24% of the faculty.¹⁸ Thus it is likely that women and minority faculty will be called upon more often to be mentors by students who are increasingly more diverse.

Finally, flexibility in mentoring at all stages is enhanced by being adaptable to various modes of communication. In-person meetings are in many cases most desirable, but telephone contact and asynchronous methods of communication such as e-mail, fax, and the mail may meet the needs of dyads with busy sched-

ules and those at different institutions. For example, AP's classes in the first year began early, with little discretionary time until late in the afternoon or in the early evening. AP often initiated contact with Dr. R via e-mail at the end of the day, which corresponded with Dr. R's family time. Dr. R, on the other hand, rose early and routinely responded to e-mail in the morning. We, the authors, also exemplify asynchronous distance mentoring, as we have worked together on lectures and manuscript preparations using phone, e-mail, and fax to exchange drafts and ideas in different states and time zones.

Mentoring Do's and Don'ts

Effective mentoring relationships require commitment and regular maintenance; this is a shared responsibility. List 1 shows some "do's and don'ts." For mentors, availability is critical; mentees need to know that they can arrange contact when needed. Dr. R made a commitment to respond to AP's calls or e-mails within 24 hours, and to schedule in-person meetings as needed. This availability was reassuring; simply knowing Dr. R was a phone call away helped AP feel supported and less isolated. Furthermore, regular interactions are critical to the establishment of relationships.⁶ Expectations for the frequency and length of meetings should be mutual, and will vary depending on the protégé's goals and the focus of the relationship. For example, mentoring for the purpose of exploring long-term career goals might involve one, one-

hour session per week. In clinical rounds or research laboratory settings, however, briefer, more frequent interactions may be most appropriate.

Also important, mentors need to maintain a focus on the mentee and track his or her progress over time.³⁷ In meetings, mentors can convey respect and confidence in the mentee by primarily asking questions instead of giving advice; independence is fostered when the mentee can verbalize his or her own conceptions.^{24,38} For example, when AP was applying for residency, Dr. R acted primarily as a sounding board. In their meetings, Dr. R mostly listened and subtly guided AP to consider how well each training site matched with personal and professional values. Effective mentors give feedback and identify strengths.²² Maintaining a relationship also involves periodic reassessment of what is going well within the dyad, and areas in which to improve.

Good mentors avoid exclusive focus on their own professional needs, such as by promoting their own agenda instead of the mentee's,³⁹ viewing the mentee as "free labor," taking credit for mentee's accomplishments, or seeking to create a "clone" who mimics the mentor's career path, philosophy, and opinions. In short, effective mentors work to promote the mentee's career and self-sufficiency.

Maintaining a relationship is a mutual responsibility. Both parties need to com-

municate directly and honestly. Mentors can expect mentees to contribute by being on time, meeting deadlines, and following through on commitments.²¹ Reasonable expectations for protégés are shown in List 1. Dr. R used to encourage AP to take responsibility for maximizing their time together by making an agenda and goals for each meeting. In meetings, mentees should be able to accept constructive criticism, admit mistakes, and respond to suggestions; they should acknowledge that the mentor has "been there" and can help them avoid obstacles.⁴⁰ AP regularly requested feedback from Dr. R, listened carefully, accepted it objectively and did not take it personally. Protégés should convey respect and accept a subordinate role.⁴¹ Traditional mentoring relationships are hierarchical and, to a large extent, the benefits derived from them are a function of this hierarchy. As the relationship evolves, mentors can expect and encourage their mentees to accept increasing responsibility and challenge. This is part of the path to developing professional identity. Finally, mentoring relationships should be reassessed periodically. Goals and objectives will evolve, and these changes may have implications for meeting arrangements and focus.

Mentors should be alert to problems that can arise; relationships can become counterproductive if the student becomes overly dependent on the mentor.⁴² For example, if a student cannot or does not make independent decisions but instead looks to the mentor to make each decision, the student will not develop independence. Students should not rely on the mentor exclusively for information and opportunities. Identifying, investigating, and using a variety of resources is a professional skill to be fostered. For example, when AP expressed an interest in learning cognitive behavioral therapy for alcohol dependence, Dr. R facilitated contact with colleagues in psychiatry who offer a training program. A mentee's passivity and acquiescence can also be detrimental. If a student believes it is better to accept the mentor's perspective and not "rock the boat," the student may not develop confidence in his or her own intellectual perspective. Finally, subordinates can sometimes overidealize their mentors.¹⁴ Mentors are greatly admired and respected, and may seem infallible. It may be necessary to remind a mentee that mentors are indeed human and don't

List 1

Recommended "Do's and Don'ts" for Enhancing the Relationship between Mentors and Protégés in Academic Medicine

Mentor Do's	Mentor Don'ts
Be available	Promote your own agenda
Convey respect and confidence	Use "free labor"
Focus on mentee	Take credit
Ask questions	Make a "clone"
Track progress	
Identify strengths	
Give feedback	
Reassess	
Protégé do's	Protégé don'ts
Be punctual	Avoid decisions
Follow through	Rely exclusively on mentor
Set agendas	Acquiesce
Communicate	Overidealize
Accept critique	
Convey respect	
Accept challenge	
Show appreciation	
Reassess	

necessarily have all the answers. Override-ization can lead to disappointment. Mentees who are overly dependent may be reminded that each student is ultimately responsible for his or her own learning. In such cases, it may be beneficial to encourage a mentee to seek multiple mentors in order to gain additional experiences or collaborations with other faculty or professionals. Furthermore, the mentor in some circumstances may suggest counseling or psychotherapy if a psychological problem seems to be contributing to overdependence.

Summary

Good mentoring relationships involve self-knowledge and identification of one's style and limitations. Individuals have relative strengths in their capacity for mentoring and effectiveness does not require embodiment of every ideal attribute. Mentors should be clear with trainees about what they can and cannot offer; part of the role is knowing when to refer someone to another resource that might be more helpful. Mentoring also entails familiarity with the protégé's sociocultural background and stage of educational development, discussion of goals, and awareness of how the structure of the relationship impacts its dynamics. Good mentoring relationships require active maintenance. The dyad works when mentors are committed to their protégés and make time for them. Importantly, a good mentor maintains sight of the overall goal of the relationship and holds the focus for the mentee's personal and professional growth over time.

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