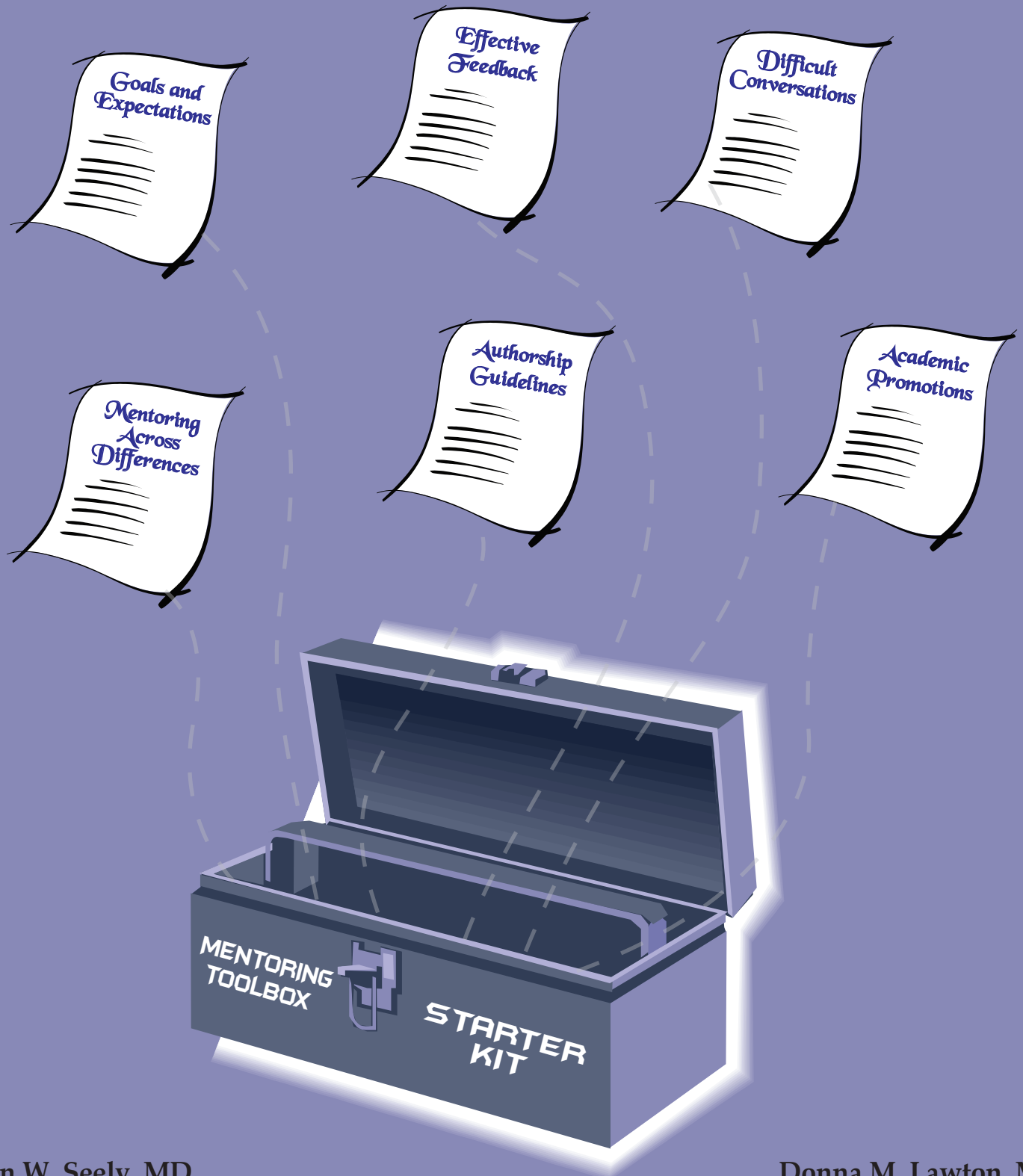


Mentoring Skills for Success: Building your Toolbox



Ellen W. Seely, MD

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Center for Faculty Development
Massachusetts General Hospital*

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- S.M.A.R.T. Goals

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 - “To the point: medical education reviews—providing feedback” by Bienstock JL, et al.
 - “Why medical educators may be failing at feedback” by Bing-You RG, et al.
 - “Giving feedback in clinical settings” by Cantillon P, et al.
 - “Feedback in clinical medical education” by Ende J.
 - “Getting beyond ‘Good job’: how to give effective feedback” by Gigante J, et al.
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V. Mentoring Across Differences

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 - “Generation X: Implications for faculty recruitment and development in academic health centers” by Bickel J, et al.
 - “Academic advancement of women in medicine: Do socialized gender differences have a role in mentoring?” by Mayer AP, et al.
 - “The truth about mentoring minorities - Race Matters” by Thomas DA.
 - “Gender differences in research grant applications and funding outcomes for medical school faculty” by Waisbren SE, et al.
 - Editorial comment on “Gender differences in research grant applications and funding outcomes for medical school faculty” by Bailyn L.

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VII. Academic Promotions

- Helpful resources

GENERAL ARTICLES & SUGGESTED READING

Center for Faculty Development

SUGGESTED READING ON MENTORING

Created by the Center for Faculty Development at MGH

Articles

Detsky AS, Baerlocher MO. Academic Mentoring--How to Give It and How to Get It. *JAMA: The Journal of the American Medical Association* 2007; 297(19): 2134-136.

Sambunjak D, Straus SE, Marusic A. Mentoring in Academic Medicine: A Systematic Review. *JAMA: The Journal of the American Medical Association* 2006; 296 (9): 1103-115.

Books



Getting the Most out of Your Mentoring Relationships: A Handbook for Women in STEM (Mentoring in Academia and Industry)

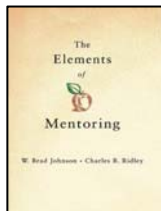
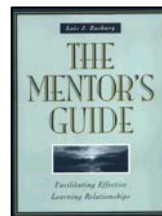
by Donna J. Dean

Traditionally, scientific research in all disciplines has demanded single-mindedness, exclusive devotion, and aggressive self-promotion. The image of the scientist in the laboratory at all hours of the night and weekend is not far from the reality sometimes demanded. Because of the structure of the science, technology, engineering, and mathematics (STEM) curricula and workplace environment, women often work up to 80 hours per week with little time for outside pursuits – let alone extracurricular reading. Yet, precisely because of these demands, it is imperative that they build solid mentoring relationships.

This handbook aims to provide a quick, yet structured guide to mentoring including finding the right mentors, being a good mentee, and making the most out of today's diverse mentoring environments. A handy resource guide will be included for quick reference.

The Mentor's Guide: Facilitating Effective Learning Relationships **by Lois J. Zachary**

This rich and insightful book explores the critical process of mentoring and presents practical tools for facilitating the experience from beginning to end. It is based on Laurent A. Daloz's popular and widely used concept that mentoring is a learning journey, in which the mentor and mentee serve as companions along the way. Now leaders, managers, teachers, and leaders form any career, professional, or educational setting can successfully navigate the learning journey by using the hand-on worksheets and exercises in this unique resource.



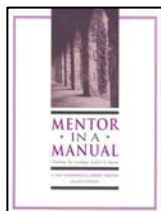
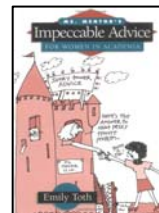
The Elements of Mentoring, Revised Edition **by W. Brad Johnson**

Patterned after Strunk and White's classic *The Elements of Style*, this reference concisely summarizes the substantial existing research on the art and science of mentoring. *The Elements of Mentoring* reduces this wealth of published material on the topic to the fifty most important and pithy truths for supervisors in all fields. These explore what excellent mentors do, what makes an excellent mentor, how to set up a successful mentor-protégé relationship, how to work through problems that develop between mentor and protégé, what it means to mentor with integrity, and how to end the relationship when it has run its course. Succinct and comprehensive, this is a must-have for any mentor or mentor-to-be.

Ms. Mentor's Impeccable Advice for Women in Academia **by Emily Toth**

In question-and-answer form, Ms. Mentor advises academic women about issues they aren't discuss openly, such as: How does one really clamber onto the tenure track when the job market is so nasty, brutish, and small? Is there such a thing as the perfectly marketable dissertation topic? How does a meek young woman become a tiger of an authority figure in the classroom and get stupendous teaching evaluations? How does one cope with sexual harassment, grandiosity, and bizarre behavior from entrenched colleagues?

Ms. Mentor's readers will find answers to the secret queries they were afraid to ask anyone else. They'll discover what it really takes to get tenure; what to wear to academic occasions; when to snicker, when to hide, what to eat, and when to sue. They'll find out how to get firmly planted in the rich red earth of tenure. They'll learn why lunch is the most important meal of the day.

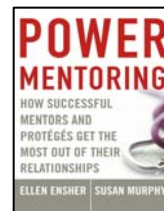


Mentor in a Manual: Climbing the Academic Ladder to Tenure **by Clay Schoenfeld**

The practice of mentoring is often in the current public dialogue of education. And the process of achieving tenure is an area particularly in need of "a wise and loyal advisor." *Mentor in a Manual*, in its 3rd edition, has been a trusted guide for many new faculty members as they begin their academic careers. It is often used as a parting gift to graduates from advisors or major professors. And it serves as a resource for senior faculty as they practice their own mentoring.

Power Mentoring: How Successful Mentors and Proteges Get the Most Out of Their Relationships **by Ellen A. Ensher**

Written to reflect the realities of today's business environment, *Power Mentoring* is a nuts-and-bolts guide for anyone who wants to create a connection with a protégé or mentor, or to improve a current mentoring relationship. Filled with illustrative examples and candid insights from fifty of America's most successful mentors and protégés, *Power Mentoring* unlocks the secrets of great mentoring relationships and shows how anyone (including those who are well established in their careers, or those who are just starting out) can become a successful mentor or protégé. Based on compelling interviews from Ellen Ensher and Susan Murphy's own research, this important resource explains what it takes to develop a "power mentoring" network consisting of a variety of mentors across a range of organizations and industries. The authors provide strategies for establishing such power mentoring relationships, outline the best practices, and offer insights from mentors and protégés in a variety of fields including technology, politics, and the media.



GOALS AND EXPECTATIONS

Center for Faculty Development

Mentoring Goals and Action Plan Outline - Sample

Please consider the following questions as you think about your goals and action plans. Feel free to include additional categories that may be relevant to your relationship.

<p>Expectations:</p> <ul style="list-style-type: none"> • What are the specific outcomes that are desired from this relationship? • At the end of this relationship, how will we know if it has been successful? 	<ul style="list-style-type: none"> • Mentee learn to give a strong presentation • Mentor will be a sounding board and will provide mentee with actionable feedback • Mentor and mentee will meet regularly • Success will be mentee giving a professional talk that is well received
<p>Time Management:</p> <ul style="list-style-type: none"> • How will we allocate sufficient time to meet our needs? • How do we protect this time when other demands encroach upon it? • How do we ensure that either member of the dyad can revisit this issue of time management? 	<ul style="list-style-type: none"> • Get on each other's calendars early, and at the end of each time we meet • Treat our scheduled time as protected time in the same way we do with other prioritized activities, so that we really do keep our commitment to meet • We agree that either of us can and should remind one another of our commitment • If either person feels we are spending too much or too little time together, we want to discuss this openly
<p>Guidelines and Boundaries:</p> <ul style="list-style-type: none"> • What are the norms and guidelines we will follow in conducting the relationship? • How do we protect the confidentiality of the relationship? 	<ul style="list-style-type: none"> • Norms: open communication, honesty, trust, meeting in person whenever possible, mentee sets meeting agenda • Confidentiality: we agree that we maintain confidentiality, and we keep that promise
<p>Strategies for Addressing Stumbling Blocks:</p> <ul style="list-style-type: none"> • What obstacles might we encounter? • What process should we have in place to deal with them as they occur? 	<ul style="list-style-type: none"> • Obstacles: inadequate time, incompatibility, • Processes: protecting our relationship time; discussing how to deal with stumbling blocks as soon as they happen; reaching out to department, to CFD, and/or to facilitators for coaching.
<p>Communication Patterns:</p> <ul style="list-style-type: none"> • How do we work at being active listeners in our interactions with one another? • Based on our individual communication styles, how do we plan to continue this relationship? • What forms of communication (i.e. meetings, email, memos, telephone) will we use? 	<ul style="list-style-type: none"> • Being active listeners: schedule dedicated time, find distraction-free meeting places, ask each other questions • Moving forward in communication: all meetings will be set up today for the next six months • Communication forms: meet in person once a month, more if needed; touch base by e-mail or phone every week; text each other with urgent matters

Mentoring Goals and Action Plan - Sample

Please use the following table to summarize the goals you will work on together in your mentoring relationship.

Goals	Action steps to achieve goals	Deliverables	Timeline
Goal 1: Give a better professional presentation	<ul style="list-style-type: none"> • Mentee identifies skills and gaps and discussed with mentor • Mentee observes mentor give a presentation • Mentee and mentor meet after presentation and debrief tips for mentee to use in mentee's presentation • Mentee incorporates learning into next presentation • Mentor attends mentee's presentation and provides feedback • Mentee incorporates feedback & learning into next presentation 	<ul style="list-style-type: none"> • Mentee delivers a presentation with mentor in attendance • Mentor gives feedback to mentee on what went well and where to improve 	<ul style="list-style-type: none"> • Feb. – mentee attends mentor's presentation & has debrief meeting • March – mentee incorporates learning into practices • May – mentee gives presentation and mentor gives feedback • Aug – mentee incorporates learning & feedback into next presentation
Goal 2: Prepare for HMS promotion	<ul style="list-style-type: none"> • Update CV and have mentor review • Attend CFD promotion seminar • Review HMS and department guidelines • Discuss areas of excellence with mentor and department chair 	<ul style="list-style-type: none"> • CV in HMS format • Area of excellence determined 	<ul style="list-style-type: none"> • March • April • May/June
Goal 3:			

Mentor Name

Mentee Name

Mentoring Goals and Action Plan Outline

Please consider the following questions as you think about your goals and action plans. Feel free to include additional categories that may be relevant to your relationship.

Expectations: <ul style="list-style-type: none">• What are the specific outcomes that are desired from this relationship?• At the end of this relationship, how will we know if it has been successful?	
Time Management: <ul style="list-style-type: none">• How will we allocate sufficient time to meet our needs?• How do we protect this time when other demands encroach upon it?• How do we ensure that either member of the dyad can revisit this issue of time management?	
Guidelines and Boundaries: <ul style="list-style-type: none">• What are the norms and guidelines we will follow in conducting the relationship?• How do we protect the confidentiality of the relationship?	
Strategies for Addressing Stumbling Blocks: <ul style="list-style-type: none">• What obstacles might we encounter?• What process should we have in place to deal with them as they occur?	
Communication Patterns: <ul style="list-style-type: none">• How do we work at being active listeners in our interactions with one another?• Based on our individual communication styles, how do we plan to continue this relationship?• What forms of communication (i.e. meetings, email, memos, telephone) will we use?	

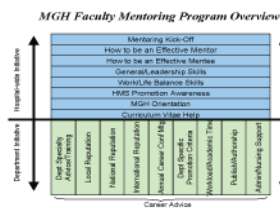
Mentor Name
Mentee Name

Mentoring Goals and Action Plan

Please use the following table to summarize the goals you will work on together in your mentoring relationship.

Goals	Action steps to achieve goals	Deliverables	Timeline
Goal 1:			
Goal 2:			
Goal 3:			

Please Note: Be sure to schedule your next meeting with your mentoring partner before you leave tonight’s session.



MASSACHUSETTS GENERAL HOSPITAL FACULTY MENTORING PROGRAM

Center for Faculty Development

Massachusetts General Hospital Faculty Mentoring Program

Your Mentoring Relationship: How to Make the Most of Your Time Together

*Page 4 has tips on
'S.M.A.R.T.' goals setting,
however, there are other
helpful tips here.*

Table of Contents

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2. Goal Setting	4
3. Effective Meetings	5
4. Steps to Active Listening	6
5. Effective Time Management	7-9
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1. Introduction

As part of the faculty mentoring program, enclosed please find concrete information and tools to help address various ways you can work together in your mentoring relationship. We believe this material will not only help you in managing your relationship with your mentoring partner, but additionally will help you in various aspects of your work with all your colleagues.

Center for Faculty Development

2. Goal Setting

As part of your action plan, you set goals for your mentoring relationships. As you continue to set new goals and refine existing ones, be sure to begin with the end in mind

- If you don't know where you're going, you'll end up somewhere else.
- Don't look back. The past is no longer an option. Focus on today and tomorrow.

Strategies for setting and achieving goals

- Setting Goals
 - detail specific steps needed
 - establish dates (by when) and person (who's responsible)
 - identify potential barriers and action steps to overcome them
 - identify resources (people, information) needed to accomplish goals
- Achieving Goals
 - visualize the outcome
 - allow for setbacks
 - don't lose sight of the big picture
 - celebrate small successes

As you think about:

- Goal setting
- Tackling challenges
- Creating opportunities

Use the **S.M.A.R.T** process to support you in obtaining smart goals for smart results.

<i>Specific</i>	Write your goal/idea as detailed as possible.
<i>Measurable</i>	Identify quantitative targets for tracking your progress and results.
<i>Attainable</i>	Make certain that it is possible to achieve the desired result.
<i>Realistic</i>	Acknowledge practical requirements necessary to accomplish the goal.
<i>Timed</i>	Build in specific deadlines.

Remember, goals should also be:

- ***Your goals for the mentoring relationship***

3. Effective Meetings

Meetings are an important part of our daily work as well as an important part of your mentoring relationship. In your meetings with your mentoring partner as well as in other meetings, the following strategies can help set the stage for success.

Before The Meeting

1. Define the purpose of the meeting and your goals for it.
2. Develop an agenda. See more detail on the next page on what to include in an agenda. The meeting agenda is a roadmap for the meeting. It lets participants know where they're headed so they don't get off track. Most importantly, the meeting agenda gives a sense of purpose and direction to the meeting. All agendas should list the following:
 - Meeting start time, end time, and location
 - Agenda items
 - Detail for each agenda item
 - Priority of agenda item
3. The length of time anticipated for each topic
4. Distribute the agenda and circulate background material, lengthy documents or articles prior to the meeting.
5. Choose an appropriate meeting time. Set a time limit and stick to it, if possible. Remember, your mentoring partner has other commitments. He/she will be more likely to want to meet if you make it productive.
6. Choose an appropriate location. An office or perhaps the cafeteria, where you can use your card provided by CFD for coffee.

During The Meeting

1. Start on time. End on time.
2. Review the agenda and set priorities for the meeting.
3. Stick to the agenda.
4. Encourage discussion and feedback to get all points of view and ideas. You will have better quality decisions.
5. Keep conversation focused on the topic. Tactfully end discussions if they are getting nowhere or becoming destructive or unproductive.
6. Be an active listener
7. Keep minutes of the meeting for future reference in case a question or problem arises.
8. Summarize agreements reached and end the meeting on a positive note.
9. Set a date, time and place for the next meeting.

After The Meeting

1. Write up and distribute minutes within 3 or 4 days.
2. Follow-up on agreed-upon decisions and action items .
3. Put unfinished business on the agenda for the next meeting.

4. Steps to Active Listening

Active listening is an important part of effective meetings as well as effective interactions with all people. We offer these steps to active listening as a way for you to get the most out of your relationship with your mentor as well as everyone else you talk with!

1. Above all, stop talking! Bite your tongue and really hear what the person is saying.
2. Avoid labeling or judging what a person is telling you. It is not important, initially, whether you agree or disagree with what the person is saying. Appropriate responses are:
"Is that so?"
"Tell me more."
"Explain that with more detail."
"Yes, I see."
"Go on, I'm listening."
3. Show that you are listening by repeating what you just heard the person say. Repeat the person's last feelings. Use your own words.
Example: *"So, you're telling me that you feel isolated in your department."*

This is the most effective way to respond and the hardest one to actually do.
4. Even though the talker seems to be asking a question or seeking advice, the real need is to "get it all out." Resist the temptation to interrupt with a "solution."
5. After the active listening period is over, you can come up with alternatives. Active listening takes time, but not too much time. The first few minutes are simply warm up, feeling the listener out and feeling comfortable in the situation. Next is the heart of the exchange. When the speaker becomes repetitive, you both can go on to alternatives.
6. Focus on the person who is talking. This is true whether the conversation is in person or by phone. We do this with our verbal and non-verbal behaviors. For example, in person, establish eye-contact; on the phone, don't type during the conversation. A lot of energy and mental concentration is required.
7. Respond to feelings rather than intellectual content.
 - Intellectualizing is distancing, feeling is touching.
 - Value the person's feelings as his or hers, not necessarily yours,
 - Trust in the person's capacity to handle his/her feelings, to work through them, and to find solutions. You don't always need to have a "solution."
8. Be patient. Allow plenty of time. Don't interrupt. Tolerate silences. Silence during a conversation is when most thinking is taking place.
9. Be yourself. These skills will come naturally as you work together. Don't force it - - it may sound affected or ungenune. This is not an overnight happening. It requires constant growing and improving.

5. Effective Time Management

Steven R. Covey's "Time Management Matrix"¹

Stephen Covey provides a time management matrix of how our time is often allocated. The following adaptation summarizes the key points. Everything we do in our work goes into one of these categories or quadrants. It is important to think about what you decide to do with your time so that you can get the most out of it. An understanding of important and urgent is helpful in understanding the four quadrants.

In defining urgent versus non-urgent items, something urgent is an activity that you or others feel requires immediate attention. To help understand important versus non-important items, an important activity is one that you (or others) find valuable and that contributes to your (or their) own values, and high-priority goals.

	<i>Urgent</i>	<i>Not Urgent</i>
<i>Important</i>	Activities: <ul style="list-style-type: none">• Crises• Pressing problems• Deadline-driven projects	Activities: <ul style="list-style-type: none">• Prevention• Relationship building• New Opportunities• Planning, recreation
<i>Not Important</i>	Activities: <ul style="list-style-type: none">• Interruptions, some calls• Some mail & reports• Some meetings• Proximate, pressing matters• Popular activities	Activities: <ul style="list-style-type: none">• Trivia, busy work• Some mail• Some phone calls• Time wasters• Pleasant activities

As Covey notes, activities in the quadrant that are important but not urgent are at the heart of effective personal management. They include things such as building relationships and long-range planning. It is in the area where your relationship with your mentoring partner can be very helpful.

¹ See *The 7 Habits of Highly Effective People* by Stephen R. Covey for more detail.

The following provides concrete examples for each of the quadrants.

	<i>Urgent</i>	<i>Not Urgent</i>
<i>Important</i>	Crises or Problems <ul style="list-style-type: none">• Care for very sick patient• Work on project due today	Opportunities <ul style="list-style-type: none">• Work on vita• Work on research paper• Meet with mentoring partner
<i>Not Important</i>	Interruptions <ul style="list-style-type: none">• Respond to all e-mails• Respond to all phone calls	Trivia <ul style="list-style-type: none">• Spend time on trivial questions• Engage in time wasters or procrastination

We offer this time management matrix as a way to help frame mentoring as an opportunity for you. We hope you focus on mentoring as an opportunity as well as the opportunities within your mentoring relationship.

The following page presents additional tips on effective time management.

Effective Time Management Tips

Spend time in Planning and Organizing:

- Think and plan
- Organize in a way that makes sense to you

Set Goals:

- Decide what you want to do
- Take a “SMART” approach
- Goals give you required direction

Prioritize:

- Prioritize and identify what you value
- Flagging/Highlighting can be very helpful
- Once prioritized, concentrate on those that would add value

Use a to do list:

- Find out what is urgent and important
- Put them in order of preferences
- Once completed delete them from list

Be Flexible:

- Allow time for interruptions and distractions
- Save larger blocks of time for priorities
- Ask yourself questions and get back to your goal

Consider your Biological Time:

- Find out which is the best time for you to do your best work
- Are you a morning person?
- A night owl?
- Late afternoon?

Do Right Things Right:

- Doing things right is effectiveness
- Doing things right is efficiency
- Focus first for effectiveness
- Concentrate on efficiency

Eliminate the Urgent (if possible):

- Urgent tasks have short term consequences
- Important tasks are long term and goal related
- Attach a deadline to each of the item

Conquer Procrastination:

- Learn to say “NO”
- Reward yourself

6. Summary

As you consider the tools and techniques provided in this workbook to help you address various ways you work together, we hope you find this material helpful in your mentoring relationships and beyond. We encourage you to focus on the opportunities in your mentoring relationship and apply this material in a useful way.

We wish you all the best as you continue working with your mentoring partner. As always, please feel free to reach out to us at cfid@partners.org or (617) 724-0818 and let us know how we can further help you.

EFFECTIVE FEEDBACK

Center for Faculty Development

Effective Feedback

Archer, JC. State of the Science in Health Professional Education: Effective Feedback. *Medical Education* 2010; 44 (1): 101-08.

Bienstock JL, Katz NT, Cox SM, Hueppchen N, Erickson S, Puscheck EE. To the point: medical education reviews—providing feedback. *American Journal of Obstetrics & Gynecology* Jun 2007; 196 (6): 508-13.

Bing-You RG, Trowbridge RL. Why Medical Educators May Be Failing at Feedback. *JAMA: The Journal of the American Medical Association* 2009; 302 (12): 1330-331.

Cantillon P, Sargeant J. Giving feedback in clinical settings. *BMJ* 2008; 337: a1961.

Ende J. Feedback in Clinical Medical Education. *JAMA: The Journal of the American Medical Association* 1983; 250 (6): 777-781.

Gigante J, Dell M, Sharkey A. Getting Beyond 'Good Job': How to Give Effective Feedback. *Pediatrics Official Journal of The American Academy of Pediatrics* 2011; 127 (2): 205-7.

Rudolph JW, Simon R, Rivard P, Dufresne RL, Raemer DB. Debriefing with Good Judgment: Combining Rigorous Feedback with Genuine Inquiry. *Anesthesiology Clinics* 2007; 25 (2): 361-76.

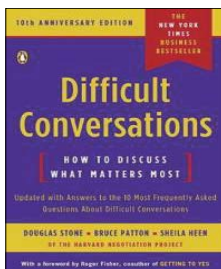
Center for Faculty Development

DIFFICULT CONVERSATIONS

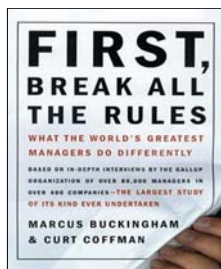
Center for Faculty Development

Difficult Conversations

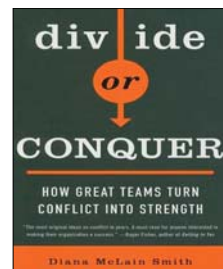
Suggested reading:



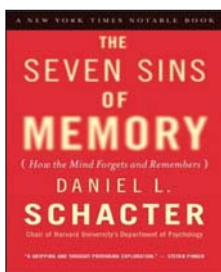
by Douglas Stone, Bruce Patton & Sheila Heen



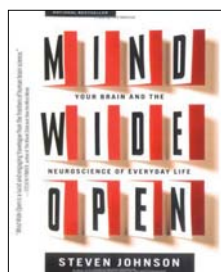
by Marcus Buckingham & Curt Coffman



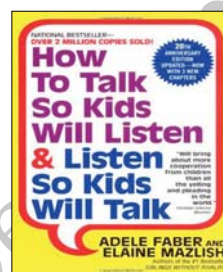
by Diana McLain Smith



by Daniel L. Schacter



by Steven Johnson



by Adele Faber & Elaine Mazlish

Check out programs offered by your institution on this topic:

MGH Center for Faculty Development

<http://www2.massgeneral.org/facultydevelopment/cfd/within-mgh.html>

BWH Center for Faculty Development and Diversity

http://www.brighamandwomens.org/Medical_Professionals/career/CFDD/EventsandPrograms/default.aspx

BIDMC Office for Academic Careers and Faculty Development

<http://www.bidmc.org/MedicalEducation/AcademicCareersandFacultyDevelopment.asp>

CHA Center for Professional Development

<http://www.challiance.org/providers/cpd.shtml>

CHB Office for Faculty Development

http://www.childrenshospital.org/cfapps/research/data_admin/Site2209/mainpageS2209P12.html

DFCI Office of Faculty Development

(617) 582-8714 Christine Power's phone #

MCL

No real office, just a Chief Academic Officer

HMS Faculty Development

<http://www.fa.hms.harvard.edu/faculty-resources/faculty-development/>

MENTORING ACROSS DIFFERENCES

Center for Faculty Development

Mentoring Across Differences

- Bickel J, Brown AJ. Generation X: Implications for Faculty Recruitment and Development in Academic Health Careers. *Academic Medicine* 2005; 80 (3): 205-10.
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AUTHORSHIP GUIDELINES

Center for Faculty Development

AUTHORSHIP GUIDELINES

INTRODUCTION

Authorship is an explicit way of assigning responsibility and giving credit for intellectual work. The two are linked. Authorship practices should be judged by how honestly they reflect actual contributions to the final product. Authorship is important to the reputation, academic promotion, and grant support of the individuals involved as well as to the strength and reputation of their institution.

Many institutions, including medical schools and peer-reviewed journals, have established standards for authorship. These standards are similar on basic issues but are changing over time, mainly to take into account the growing proportion of research that is done by teams whose members have highly specialized roles.

In practice, various inducements have fostered authorship practices that fall short of these standards. Junior investigators may believe that including senior colleagues as authors will improve the credibility of their work and its chances of publication, whether or not those colleagues have made substantial intellectual contributions to the work. They may not want to offend their chiefs, who hold substantial power over their employment, research opportunities, and recommendations for jobs and promotion. Senior faculty might wish to be seen as productive researchers even though their other responsibilities prevent them from making direct contributions to their colleagues' work. They may have developed their views of authorship when senior investigators were listed as authors because of their logistic, financial, and administrative support alone.

Disputes sometimes arise about who should be listed as authors of an intellectual product and the order in which they should be listed. When disagreements over authorship arise, they can take a substantial toll on the good will, effectiveness, and reputation of the individuals involved and their academic community. Many such disagreements result from misunderstanding and failed communication among colleagues and might have been prevented by a clear, early understanding of standards for authorship that are shared by the academic community as a whole.

Discussions of authorship in academic medical centers usually concern published reports of original, scientific research. However, the same principles apply to all intellectual products: words or images; in paper or electronic media; whether published or prepared for local use; in scientific disciplines or the humanities; and whether intended for the dissemination of new discoveries and ideas, for published reviews of existing knowledge, or for educational programs.

The Faculty Council of Harvard Medical School has endorsed the following statement. Although authorship practices differ from one setting to another, and individual situations often require judgment, variation in practices should be within these basic guidelines.

AUTHORSHIP

1. Everyone who is listed as an author should have made a substantial, direct, intellectual contribution to the work. For example (in the case of a research report) they should have contributed to the conception, design, analysis and/or interpretation of data. Honorary or guest authorship is not acceptable. Acquisition of funding and provision of technical services, patients, or materials, while they may be essential to the work, are not in themselves sufficient contributions to justify authorship.
2. Everyone who has made substantial intellectual contributions to the work should be an author. Everyone who has made other substantial contributions should be acknowledged.
3. When research is done by teams whose members are highly specialized, individuals' contributions and responsibility may be limited to specific aspects of the work.

4. All authors should participate in writing the manuscript by reviewing drafts and approving the final version.
5. One author should take primary responsibility for the work as a whole even if he or she does not have an in-depth understanding of every part of the work.
6. This primary author should assure that all authors meet basic standards for authorship and should prepare a concise, written description of their contributions to the work, which has been approved by all authors. This record should remain with the sponsoring department.

ORDER OF AUTHORSHIP

Many different ways of determining order of authorship exist across disciplines, research groups, and countries. Examples of authorship policies include descending order of contribution, placing the person who took the lead in writing the manuscript or doing the research first and the most experienced contributor last, and alphabetical or random order. While the significance of a particular order may be understood in a given setting, order of authorship has no generally agreed upon meaning.

As a result, it is not possible to interpret from order of authorship the respective contributions of individual authors. Promotion committees, granting agencies, readers, and others who seek to understand how individual authors have contributed to the work should not read into order of authorship their own meaning, which may not be shared by the authors themselves.

1. The authors should decide the order of authorship together.
2. Authors should specify in their manuscript a description of the contributions of each author and how they have assigned the order in which they are listed so that readers can interpret their roles correctly.
3. The primary author should prepare a concise, written description of how order of authorship was decided.

IMPLEMENTATION

1. Research teams should discuss authorship issues frankly early in the course of their work together.
2. Disputes over authorship are best settled at the local level by the authors themselves or the laboratory chief. If local efforts fail, the Faculty of Medicine can assist in resolving grievances through its Ombuds Office.
3. Laboratories, departments, educational programs, and other organizations sponsoring scholarly work should post, and also include in their procedure manuals, both this statement and a description of their own customary ways of deciding who should be an author and the order in which they are listed. They should include authorship policies in their orientation of new members.
4. Authorship should be a component of the research ethics course that is required for all research fellows at Harvard Medical School.
5. These policies should be reviewed periodically because both scientific investigation and authorship practices are changing.

Adopted on December 17, 1999.

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Source: <http://hms.harvard.edu/public/coi/policy/authorship.html>

ACADEMIC PROMOTIONS

Center for Faculty Development

Academic Promotion



Website: <http://www.fa.hms.harvard.edu>

For General Questions:

Phone: (617) 432-1540 • Email: OFA@hms.harvard.edu

For Promotion-Related Questions:

Phone: (617) 432-7112 • Email: OFA_Promotions@hms.harvard.edu

For OFA Faculty Development Programs:

Phone: (617) 432-1198 • Email: HMSOFA_Programs@hms.harvard.edu

Other Helpful Links:

HMS/HSDM Criteria for Promotion and Appointment

<http://facultypromotions.hms.harvard.edu>

HMS/HSDM Curriculum Vitae

<http://cv.hms.harvard.edu>

MGH Center for Faculty Development

<http://www2.massgeneral.org/facultydevelopment/cfd/promotion.html>

BWH Center for Faculty Development and Diversity

http://www.brighamandwomens.org/medical_professionals/career/cfdd/EventsandPrograms/DemystifyingPromotions.aspx

BIDMC Office for Academic Careers and Faculty Development

<http://www.bidmc.org/MedicalEducation/AcademicCareersandFacultyDevelopment/HarvardMedicalSchoolPromotionProcess.aspx>

CHA Center for Professional Development

<http://www.challiance.org/providers/cpd.shtml>

CHB Office for Faculty Development

http://www.childrenshospital.org/cfapps/research/data_admin/Site2209/mainpageS2209P12.html

DFCI Office of Faculty Development

<http://www.dana-farber.org/res/office-of-research/office-of-faculty-development/>

McLean Hospital

<http://www.mclean.harvard.edu/>