

Chapter 11: Redefining the Role of Clerkship Administrator

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Introduction

Clerkship directors need qualified individuals in the clerkship administrator role to ensure an organized and successful clerkship experience for students. To maximize the effectiveness of the clerkship administrator, the clerkship director should understand the potential of this unique position and play an integral role in hiring a clerkship administrator.

The complexity of clerkship administration has grown as expectations for clerkship curriculum, tracking, and assessment have increased. Medical students are required to maintain logbooks of their experiences, complete documentation akin to paperwork for credentialing, and learn many skills. Attending physicians must comply with increasingly complex standards of supervision and documentation. Clerkship directors can no longer simply assign students to rotations and expect the experiences to be sufficient or to comply with accreditation standards (See also Chapter 15, The Clerkship Director and the Accreditation Process).

The clerkship administrator's role must evolve to help the clerkship director ensure high-quality education in light of changes in medical practice and expectations of educating students. Most clerkship directors have an assistant to process the paperwork; however, the role of the clerkship administrator as secretary is inadequate. This chapter contains ideas and resources for expanding the clerkship administrator role in managing clinical clerkships. We will discuss the fundamental skills a clerkship administrator should have and present ideas for professional development that could enhance the educational programs. The chapter is not meant to be a template for all clerkship administrators; however, the authors feel that clerkship administrators who invest time and effort in their careers can implement many of these principles and ideas

Recruitment: Getting the Right Fit for the Clerkship Administrator

A professional and productive clerkship administrator should play a major role in the day-to-day administration of the clerkship, and should report directly to the clerkship director. The clerkship administrator should become knowledgeable about medical education in general, the student program within the department, and its relationship with other clerkships in the institution. The clerkship administrator is the "first contact" liaison with students and should be approachable, and have an appropriate level of maturity to interrelate with medical students.¹

The Clerkship Directors in Internal Medicine (CDIM) Administrator Advisory Committee prepared a position description as a standard for clerkship administrators.² However, a generic template cannot be created because of the diverse responsibilities of this position.

Essential Skills for Clerkship Administrators

Background qualifications for clerkship administrators should include a bachelor's degree or equivalent experience and administrative experience, including management responsibility.

The clerkship administrator must be knowledgeable about the management of the clerkship as well as other student programs the department offers. The clerkship administrator must demonstrate the basic skills needed to generate and maintain the fundamental elements of the clerkship, such as preparing schedules, organizing lectures, processing evaluations. Clerkship administrators should have the following essential skills:

- Interpersonal skills to deal effectively with personnel at all levels, both within and beyond the university community
- Excellent written communication skills
- Time management and organizational skills to prioritize and complete tasks accurately and independently in a very busy environment
- Problem-solving and decision-making skills to interact effectively with a diverse student population and to resolve conflicts
- Basic bookkeeping skills to detail the expenses of the clerkship
- Ability to maintain accurate, timely records and generate reports
- Basic understanding of medical and adult education
- Professionalism, discretion, and confidentiality

The clerkship administrator and clerkship director are the primary liaisons to students, residents, faculty, school administration, community faculty, and off-campus sites for all issues or questions relating to the clerkship. A clerkship administrator who has a thorough understanding of the curricular goals, policies, and standards of the clerkship will be an asset for recruiting and retaining faculty preceptors and ensuring a valuable educational experience for students.

The clerkship administrator must be able to organize and prioritize necessary tasks, initiate changes, and resolve issues as they arise to ensure smooth daily operations in the student office and the clerkship. Data collection and report preparation are critical for long-term success. The clerkship administrator should have the technical skills to maintain the student data files, create forms to manage the evaluation and grading processes, and gather information on the effectiveness of lectures and overall clerkship performance. The clerkship administrator should also be able to use data to create both short- and long-term reports and trend analysis.

The clerkship administrator should be familiar with the medical school calendar and courses offered, and facilitate counseling for students. The clerkship administrator should have opportunities for professional growth by participating in departmental, institutional, regional, or national meetings to remain informed about current academic trends. Ultimately, the clerkship administrator must serve as a student advocate, should provide primary support for the clerkship director in all clerkship matters, and function as one of the primary representatives of the undergraduate education program.

Complementary Skills for Clerkship Administrators

Additional activities are important to maintain the support structure that underlies the clerkship. The clerkship administrator should prepare the clerkship materials, participate in the clerkship orientation, and administer NBME, OSCEs, or other required examinations. The clerkship

administrator may also provide administrative support for the pre-clinical and clinical courses within the department, schedule lectures, maintain the library, and plan meetings and conference calls. The clerkship administrator should also help organize and attend faculty retreats, faculty development sessions, and other functions the student program office needs to promote student education. As the school prepares for an LCME accreditation site visit, the clerkship administrator should play a responsible role in preparing departmental accreditation materials to submit to the education division of the Dean's Office.

The scope of the clerkship director's responsibilities helps define the clerkship administrator skills that will be most helpful in the administration of the clerkship. Clerkship directors may use the skills we described to enhance skills and professional development for their clerkship administrators, thereby enhancing their contribution as administrators.

Building a Portfolio as a Clerkship Administrator: Defining Roles

Once the clerkship administrator understands the basic elements of the clerkship, his or her professional development should be encouraged. By allowing the clerkship administrator to take more responsibility, the clerkship director will be free to concentrate on directing the clerkship and teaching. Clerkship administrators may fulfill numerous roles in addition to managing the daily aspects of the clerkship. This section addresses some of the roles in which clerkship administrators may choose to participate and develop expertise.

Advocate for Students

Rationale for Role

Advocacy is an essential element of clerkship administration. Broadly defined, an advocate is one who acts on behalf of others. Advocacy from the clerkship administrator's perspective must focus on organized efforts and actions directed at achieving the clerkship's educational goals.

The clerkship administrator can advocate for students individually and collectively. The clerkship administrator is usually the first to encounter individual student concerns. Clerkship administrators should ascertain whether these concerns are unique to one student or part of a broader issue affecting the delivery of educational services to many students. Through individual interactions, observation of group dynamics, and understanding of departmental attitudes, the clerkship administrator will have opportunities to identify and address issues and optimize learning.

Essential Skills for Clerkship Administrators as Advocates

The clerkship administrator must advocate for optimal student learning by providing accurate, reliable, and complete information to students regarding all aspects of the clerkship. Orientation should specifically address the responsibilities and expectations of the students and articulate the educational goals and objectives of the curriculum. Another advocacy function is assisting with faculty preceptor development and training. Working with the clerkship director to assure that each student gets a "good placement," regular and beneficial feedback, and appropriate and fair evaluation is fundamental to the rights of the student, the function of the clerkship, and the definition of an advocate.

Amidei states, "A lot of advocacy is just a matter of seeing a need and finding a way to address it" (page 2)³ Clerkship administrators should play a major role in identifying needs and addressing them creatively, conscientiously, and competently. In addition to responding to

issues raised by students, faculty, and others, clerkship administrators can anticipate student needs and target specific areas for improvement. Once issues are identified, the clerkship administrator works with the clerkship director and then with faculty and, if applicable, clerkship staff to address concerns and issues. Clerkship administrators should be aware of appropriate support systems to enhance student learning and professional development (e.g., written clerkship materials, lists of contacts with faculty and staff, parking passes).

Advisor for Students

Rationale for Role

The role of advisor is one of the clerkship administrator's most important responsibilities. Students make decisions and take action based on the information the clerkship administrator provides, so the information must be accurate, current, and applicable to the student's situation.

Essential Skills for Clerkship Administrators as Advisors

The clerkship administrator must understand the policies and philosophies of the department and school to convey consistent messages to both students and faculty. The clerkship administrator must balance individual requests and needs with clerkship policies and procedures.

Being an effective advocate and advisor is not synonymous with giving students exactly what they request. The clerkship administrator's responsibility is to help match students' special requests with clerkship policies to effectively advance the student's learning. For example, a student may express a strong desire to be placed in the Emergency Department (ED). If the student has had some ED experience, it may be more beneficial to broaden his or her exposure in a different setting. The advocate/advisor helps to make an objective decision and to communicate that decision effectively to the student. Clerkship administrators often function in the role of advocate or advisor, but should collaborate effectively with the clerkship director and avoid functioning autonomously.

Resources Needed for Advisor Role

To fulfill the role of advisor, clerkship administrators need to:

- Understand the needs of the individual student, whether academic concerns or career advice;
- Work on continuous self-development as an advisor; and
- Have access to formal and informal sources of training and dialogue regarding current trends in medicine and education.

Some additional resources about career advising, particularly for students who cannot narrow their decision, are given below:

- Association of American Medical Colleges. Careers in Medicine Student Guide (<http://www.aamc.org/careersinmedicine>)
- Iserson KV. Choosing a Specialty. In: Getting Into A Residency: A Guide a for Medical Students, 6th edition (Galen Press, 2003).

Assisting with Students' Professional Development

Rationale

Lynch et al.⁴ define medical professionalism as “the ability to meet the relationship-centered expectations required to practice medicine competently.” The American Board of Internal Medicine defines professionalism as “a set of values that includes altruism, accountability, excellence, duty, honor and integrity, and respect for others.” (page 1)⁵ Preparing medical students to act professionally is a critical function of the undergraduate learning environment.

Clerkship administrators can play an important role relative to the professional development of students because they encounter students before, during, and after the clerkship. Prior to the rotation, clerkship administrators may communicate with students regarding individual learning objectives and needs related to the clerkship. During the rotation, administrators observe and get to know the students, both directly and through feedback from preceptors and others. After the rotation, interactions include discussions about evaluations, scheduling electives, or career counseling.

As a result of their longitudinal relationship with students, clerkship administrators observe student behaviors that demonstrate attitudes, knowledge, and skills regarding professionalism over time. Clerkship administrators may identify strengths or weaknesses that those who observe in clinical settings alone may miss. For example, a student falling asleep during teaching rounds may be an isolated incident. However, when that same student also has been observed leaving before the end of lectures and has not made an effort to record patient diagnoses on his PDA, the clerkship administrator may identify a pattern of behaviors that indicate the need to further address professional development.

Clerkship administrators play a role in the professional development of physicians in several ways:

- As professionals, clerkship administrators should model professional values (e.g., accountability, excellence, integrity, and respect for others) as they interact with students, perform their job tasks, and interact with other members of the faculty and staff. Modeling is an important teaching strategy in regards to professionalism.
- Medical educators should focus on fostering positive attributes of professionalism in addition to identifying and censuring poor professional behavior.⁵ Clerkship administrators also contribute to a learning environment that encourages professionalism through helping devise strategies for commending demonstrations of professionalism by students, faculty, and others. It is as important to praise students for appropriate behavior as it is to notify the clerkship director and give feedback when their behavior does not meet professional standards.
- Clerkship administrators can help students to link professional attributes to specific behaviors modeled by others. For example, the clerkship administrator may point out that a faculty member is willing to stay late to meet with a student out of dedication to duty. Likewise, the clerkship administrator may have a discussion with a student who has observed a medical professional voicing frustration and help the student reflect on whether this behavior was unprofessional or an acceptable expression of emotion.
- Clerkship administrators work with the clerkship director and others to ensure professionalism training is part of all aspects of the clerkship (See also Chapter 6, Evaluation and Grading of students). Professionalism expectations must be part of, but not limited to, the formal curriculum.⁶ Professionalism should be emphasized in

discussions about patients and families students are currently seeing and in interactions with professionals from other disciplines. Clerkship administrators can participate in creatively devising additional ways of fostering professionalism. They can assist with literature reviews, curriculum development, and implementing assessment and evaluation methods to support professional development in medical students.

Essential Skills

To fulfill the development of professional attitudes and behaviors, clerkship administrators need to:

- Understand the threats to professionalism in medicine and the importance of creating and promoting opportunities to demonstrate professionalism
- Continue their own professional development
- Access formal and informal sources of information to help students in their professional development (e.g., discussions with clerkship director, update knowledge via Web sites).

Professional Development Resources

Additional resources for professionalism in medical education may be obtained through these sources:

- Assessment of Professionalism Annotated Bibliography (www.aamc.org/members/gea/ugmesection/ugmeprofessionalism.pdf)
- National Board of Medical Examiners, “Embedding Professionalism in Medical Education: Assessment as a Tool for Implementation,” report from an invitational conference cosponsored by the Association of American Medical Colleges and the National Board of Medical Examiners, 2003. (www.nmbe.org)

Educational Consultant/Curriculum Manager

Rationale

A clerkship administrator’s focus on education is critical because most faculty divide their time among patient care, research, and education. The clerkship administrators who have expertise as educators may help faculty who lack previous teaching experience.

Essential Skills

To serve as an educational consultant, a clerkship administrator must gather information on relevant educational practices, then synthesize and determine the applicability of that information to the clerkship. In concert with the clerkship director, this information should be addressed by the departmental education committee when applicable. Once refined, facilitate a dialogue with the faculty about applying the information (See Chapter 3, Creating a Clerkship Curriculum).

Books on education provide a basis for learning about and implementing fundamental education principles. Numerous books and education research journals are available to help educators refine their educational skills (Table 1).

The clerkship administrator should seek advice from experts. See the section “Networking: An Essential for Professional Growth” in this chapter for more information about networking.

Communicating effectively with faculty is an essential skill. Some of the resources in Table 1 may be helpful. The clerkship administrator must review large amounts of information and identify what is relevant. Second, the clerkship administrator must present this information to the clerkship director and to the faculty in a clear, concise, and well-organized manner. Finally, the clerkship administrator must be familiar enough with the information to field questions about its relevance and application.

A clerkship administrator is in a unique position to monitor the major components of curriculum (e.g., learning objectives, instructional methods, and assessment). The clerkship administrator can assist the clerkship director in reviewing and assessing elements of curriculum and implementing changes as needed.

The clerkship administrator should be more familiar with the clerkship's learning objectives than anyone else except the clerkship director. The clerkship administrator should also be knowledgeable about how these objectives are achieved and assessed. The clerkship administrator should bring concerns about the curriculum to the attention of the clerkship director and suggest solutions as appropriate.

Educational Consultant/Curriculum Resources

The Internet has become a major source of information and a great facilitator of collaboration. Audiovisual media such as videotapes, CDs, DVDs, and computer software are worth investigating.

Change Implementer

Rationale

As technology and research continue to change the practice of medicine, medical schools must continually adapt their curriculum. While clerkship directors will have the leadership role in curriculum changes, the clerkship administrators will help develop and implement many clerkship changes.

Essential Skills

Time Management: To implement changes, a clerkship administrator needs to manage time efficiently, work harmoniously with others, and manage information effectively. Time management is perhaps a critical clerkship administrator skill because clerkship administrators must prioritize and complete multiple tasks in a timely manner. Small projects can easily be lost in a sea of other small projects. Table 2 lists valuable time management resources.

Interpersonal Skills: A clerkship administrator needs well-developed people skills to implement changes successfully because implementing changes involves relating to people in many different ways. For example, a clerkship administrator will need to inform relevant people of changes in procedure. This may require collaborating with staff in other departments or organizations to secure needed resources. The clerkship administrator will need to be persuasive when changes meet resistance, and know when to compromise, when to be firm, and when to acquiesce. People skills are critical to success in this role; Table 2 includes some books about change.

Information Management and Implementation Skills: A clerkship administrator also needs to manage information to implement changes. The clerkship administrator often obtains or collects needed information directly from students or others. Systems for storing and retrieving the

information should be developed, such as a computer database or a paper filing system.. Sometimes the information also may need to be analyzed, synthesized, or processed in some other manner. Finally, the clerkship administrator may distribute the information to others.

Change Implementer Resources

Change is often met with resistance. Understanding and respecting the reasons for such opposition will help the clerkship administrator ensure that the best approach is used to implement change.

Educational Researcher

Rationale

Most clerkship administrators do not lead educational research; however, many become involved in all aspects of educational research projects. Do changes made to students' experiences improve their education? Do themes in evaluation comments identify weaknesses in the curriculum? Do clerkship grades vary significantly? In answering questions such as these, clerkship administrators can collaborate as educational researchers. The best way to develop skills as a researcher is to work with others who can offer guidance and feedback on projects (See also Chapter 14, Educational Scholarship).

Opinions differ about best methods for educating medical students. By helping to assess various methodologies, a clerkship administrator can help improve medical education. clerkship administrators collect a lot of information about students (e.g., grades, evaluations, and logbooks) that can form the basis for research. Research projects should be created in collaboration with the clerkship director and must be approved by the school's Institutional Review Board.

Essential Skills

Inquisitiveness: An inquisitive mind is a key characteristic for a researcher. Research projects may emerge from questioning observations about clinical rotations, evaluation comments, or grade distributions. Asking the question is the first step in developing a hypothesis, a tentative explanation for an observation that may be studied further through organized investigation.

Detail orientation and organizational skills: Collecting information as completely and accurately as possible is crucial when conducting studies. Being organized also is a critical skill for maintaining consent forms and project data.

"Thick skin": The study results should be written and submitted to a meeting or journal for peer review. Benefiting from the critique requires developing a "thick skin." The methodology or significance may be criticized, potentially causing the author to feel as if the hard work of collecting and analyzing the information was a wasted effort. Criticism should not be taken personally. Critiques are learning opportunities to improve and hone research skills.

Patience: Most meaningful research is not completed in days, weeks, or months. Information will likely need to be collected for several years to have enough data to report results of any significance. To identify trends or analyze the impact of changes, the data set needs to be large and this takes time.

Education Researcher Resources

Support in addition to the personal characteristics described above is essential to conduct research. Seek a mentor, someone in the department or the institution who can assist in refining research hypotheses, editing proposals, and suggesting experts to assist with data analysis. Begin by generating an hypothesis and then review the educational literature to see if this type of study has been done. The staff at your medical library and a search engine such as PubMed (<http://www.ncbi.nlm.nih.gov/entrez/query.fcgi>) are valuable resources. The results of your search will help focus and define the uniqueness of your proposed study.

Educational research must undergo review by the Institutional Review Board (IRB). Research that involves medical students may require consent from the students. Talk with your mentor or staff at your IRB office to determine the forms to complete and whether the study qualifies for exemption from review or expedited review. The IRB Office may have relatively little experience with educational research.

Data analysis may involve a qualitative analysis of evaluation comments or a quantitative analysis of test scores or class ratings. Books and software packages are available to aid in both types of analyses. Specific resources for each are listed in Table 3. However, it is highly advisable to involve experts in these areas to ensure the analyses are done correctly.

Publishing the results of research projects is an art that can be developed by critically reviewing other published research and model the writing style. After a first attempt, set it aside to edit later. Your mentor should be helpful as you write your abstract or manuscript.

The best way to become involved in educational research is to get involved in a project, write an abstract, and submit it for consideration for presentation at a poster session at a meeting. The various clerkship organizations and regional AAMC Group on Educational Affairs meetings are excellent venues.

Networking: An Essential for Professional Growth

Networking is the easiest way for a clerkship administrator to improve knowledge and skills. Merriam-Webster Dictionary defines networking as "...the exchange of information or services among individuals, groups, or institutions." Networking provides an opportunity to broaden available resources and gives access to other key individuals who can enhance a clerkship administrator's professional development.⁷

Strong networks include individuals who have skills and expertise. The critical factor is that these individuals are willing to share their knowledge, skills, and experience with others in the network. These relationships are built gradually.

Networking can be formal and informal.⁸ Staying in touch with colleagues, calling for information, or asking for a favor are examples of informal networking. Getting involved with your clerkship organization, a regional Group on Educational Affairs, or other professional organizations are examples of formalized networking (See Table 4). Involvement in formal networking relationships implies that you will be an active participant as well as recipient.

How is networking different than mentoring? A mentor is an experienced person who lends a helping hand to someone less experienced. This type of relationship could be perceived as a

teacher-student situation. The mentor-protégé relationship is more structured and deliberate because the protégé wants to become more accomplished in a particular skill.

If clerkship administrators have an interest in one of the areas discussed in the Building a Portfolio section, but feel unsure about where to start or what to do, they can use a local network to find someone who is skilled in that area, and ask this individual to mentor for a time. The clerkship administrator and mentor can then set goals with a mutually agreeable time frame to complete the mentorship and proceed with these new skills.

Taking full advantage of the resources available locally, regionally, and nationally will contribute to excellence in the clerkship and to job performance. The wealth of the relationships clerkship administrators can develop locally, regionally, and nationally will help build their career.

The Sky's the Limit

The role of the clerkship administrator in medical education is critical. Though they may be perceived differently in different departments by faculty and other staff, the clerkship administrators' personal perception of their role and responsibilities has a profound impact on how students and faculty perceive the person in the position. A clerkship administrator is the representative for the clerkship director. Both perform important functions in the clerkship.

Successful clerkship administrators are committed to the success of the clerkship. Physicians are responsible for teaching students knowledge, skills, attitudes, and professional behaviors. Clerkship administrators play a key role in administering the clerkship and helping students develop as professionals.

Taking ownership and personal responsibility for the management of the clerkship is extremely important. Clerkship administrators have day-to-day familiarity with how the course is progressing. They are in unique positions to offer insight into the construction of the clerkships, which is much more than simply making schedules and proctoring exams.

Clerkship administrators should take pride in their work and recognize its importance. Their role requires knowledge, expertise, skills, and capabilities that must be acquired with experience and mentoring. Becoming proficient as a clerkship administrator is a significant accomplishment and deserves recognition.

Clerkship administrators cannot achieve these skills alone. Clerkship directors need to encourage clerkship administrators to pursue these interests and advocate with departmental administration for resources that will facilitate their endeavors. An investment of this type will provide the clerkship director with opportunities to pursue the work of directing the course, to teach students, and to conduct outcomes projects. As with sound investments, the returns have the potential to be invaluable.

Because clerkship administrators are responsible for so many aspects of the curriculum, they have many possibilities to progress in their careers by gaining expertise in particular areas of interest. Being a clerkship administrator is fulfilling as a career, and clerkship administrators should be recognized for the potential they bring to medical education programs.

Table 1
Education Resources

Web-based Resources

1. Educator's Reference Desk – includes links to online education information arranged by subject: <http://www.eduref.org/>
2. ERIC (Education Resources Information Center)- An excellent resource for identifying articles in the education literature: <http://www.eric.ed.gov/>
3. Journal of the International Association of Medical Science Educators – another international, peer-reviewed online journal: <http://www.iamse.org/jiamse/>
4. Medical Education Online – another international, peer-reviewed online journal: <http://www.med-ed-online.org/>
5. PubMed (Medline) – resource for identifying articles about medicine and medical education issues: <http://pubmed.gov/>
6. The Gateway to Educational Materials (GEM) – access to over 40,000 educational resources found on various federal, state, university, non-profit and commercial Internet sites: <http://www.thegateway.org/>

Education

1. Ayers W. To Teach: The Journey of a Teacher, 2nd edition (Teachers College Press, 2001). An honest and inspiring account of what it means to be a teacher for those days when the going gets tough.
2. Bligh DA. What's the Use of Lectures? (Jossey-Bass Publishers, 2000). This book challenges the notion that lectures are the least effective means of teaching and demonstrates how to use lectures to their utmost potential.
3. Blood DF, Budd WC. Educational Measurement and Evaluation (Harper & Row, 1972). This provides a practical approach, written for classroom teachers.
4. Bransford JD, Brown AL, Cocking RR, eds. How People Learn: Brain, Mind, Experience, and School (National Academy Press, 2000). This integrates a host of research findings about how people learn and describes their implications for how teaching ought to be done.
5. Bruner J. The Process of Education: A Landmark in Educational Theory (Harvard University Press, 1977)
6. Glasser W. Choice Theory in the Classroom (HarperCollins, 1986). This is an intriguing look at the role of student motivation.
7. Kern DE, Thomas PA, Howard DM, Bass EB. Curriculum Development for Medical Education: A Six-Step Approach (Johns Hopkins University Press, 1998). A clearly written and systematic approach to medical curriculum development, with examples.
8. Kincheloe JL, Steinberg SR, eds. Unauthorized Methods: Strategies for Critical Teaching (Routledge, 1998). This book advocates lesson planning that is “outside the box.”
9. Slavin RE. Educational Psychology: Theory and Practice, 7th edition (Allyn and Bacon, 2003). A good general reference that is readable with plenty of references to the latest research.
10. Stipek DJ. Motivation to Learn: Integrating Theory and Practice (Allyn & Bacon, 2002). This book provides a broad look at several theories of motivation and their practical application in the classroom.

Medical Education Journals

1. Academic Medicine (Lippincott Williams and Wilkins, <http://www.academicmedicine.org/>)
2. Medical Education (Blackwell Publishing, <http://www.mededuc.com/index.asp>)
3. Medical Teacher (Taylor & Francis)
4. Teaching and Learning in Medicine (Lawrence Erlbaum Associates, <http://www.siumed.edu/tlm/>)
5. The Clinical Teacher (Blackwell Publishing, <http://www.theclinicalteacher.com/>)

Communication Skills

1. Piotrowski MV. Effective Business Writing: A Guide for Those Who Write on the Job (HarperCollins, 1996)
2. Strunk Jr W, White EB, Angell R. The Elements of Style, 4th edition (Longman, 2000)

Table 2 Change Implementer Resources
<p><i>Time Management</i></p> <ol style="list-style-type: none"> 1. Covey SR. The 7 Habits of Highly Effective People: Powerful Lessons in Personal Change (Free Press, 2004). This book is really about life management, but has some great insights about time management. 2. Mackenzie AR. The Time Trap, 3rd edition (American Management Association, 1997). This focuses on overcoming the human-nature sources of time-wasting behavior.
<p><i>Interpersonal Communication Skills</i></p> <ol style="list-style-type: none"> 1. Bolton R, Bolton DG. People Styles at Work: Making Bad Relationships Good and Good Relationships Better (American Management Association, 1996) 2. Carnegie D. How to Win Friends and Influence People (Pocket, reissued 1990) 3. Hutton DW. Managing Change in Health Care. In: The Handbook for Managing Change in Health Care, Caldwell C, ed. (ASQ Health Care Series, 1998, ISBN 0873894030). This chapter discusses the human aspect of coping with change and how to manage the emotional impact of changes. 4. Strength Development Inventory (Personal Strengths Publishing, http://www.personalstrengths.com/)

Table 3 Educational Research Resources
<p><i>General</i></p> <ol style="list-style-type: none"> 1. Crabtree BF, Miller WL, eds. Doing Qualitative Research, 2nd edition (SAGE Publications, 1999). To better understand research involving text, this book offers excellent instruction about finding themes in evaluation comments. 2. Wallen NE, Fraenkel JR, eds. Educational Research: A Guide to the Process, 2nd edition (Lawrence Erlbaum Associates, 2001). This book provides a step-wise approach to developing a research question, experimental tools, and data analysis.
<p><i>Literature Search</i></p> <ol style="list-style-type: none"> 1. AAMC CACHE: Competencies Across the Continuum of Health Education (http://www.aamc.org/members/gea/cube.htm) 2. Ingenta (http://www.ingenta.com) 3. PubMed (http://www.ncbi.nlm.nih.gov/entrez/query.fcgi)
<p><i>Data Analysis References</i></p> <ol style="list-style-type: none"> 1. Norušis MJ. SPSS 12.0 Guide to Data Analysis (Prentice Hall, 2004) 2. Taylor JK, Cihon C, eds. Statistical Techniques for Data Analysis, 2nd edition (CRC Press, 2004) 3. Altman DG, Machin D, Bryant TN, Gardner MJ, eds. Statistics with Confidence, 2nd edition (BMJ Books, 2000) 4. StatSoft Electronic Textbook (http://www.statsoft.com/textbook/stathome.html)
<p><i>Data Analysis Software</i></p> <ol style="list-style-type: none"> 1. MINITAB Statistical Software (http://www.minitab.com) 2. N6 in Qualitative Research (http://www.qsrinternational.com) 3. SPSS Statistical Software (http://www.spss.com) 4. StatTools for Microsoft Excel (http://www.rockware.com/catalog/pages/stattools.html)

Table 4
Networking Opportunities

Table 4 Networking Opportunities
<p><i>Campus</i></p> <ol style="list-style-type: none"> 1. Clerkship Administrators (arrange monthly meetings) 2. Educational Support Office 3. Curriculum Office
<p><i>Regional</i></p> <ol style="list-style-type: none"> 1. AAMC Groups on Educational Affairs (http://www.aamc.org/gea) 2. Clerkship Administrators in surrounding states
<p><i>National</i></p> <ol style="list-style-type: none"> 1. Alliance for Clinical Education (http://www.allianceforclinicaleducation.org) 2. Association for Surgical Education (http://www.surgicaleducation.com) 3. Association of Directors of Medical Student Education in Psychiatry (http://www.admsep.org) 4. Association of Professors of Gynecology and Obstetrics (http://www.apgo.org) 5. Clerkship Directors in Internal Medicine (http://www.im.org/cdim) 6. Consortium of Neurology Clerkship Directors (http://www.aan.com) 7. Council on Medical Student Education in Pediatrics (http://www.comsep.org) 8. Society of Teachers of Family Medicine (http://www.stfm.org)

References

1. Pangaro LN. Expectations of and for the Medicine Clerkship Director. *AJM*. 1998;105:363-365.
2. Clerkship Directors in Internal Medicine Administrator Recommendations. www.im.org/AAIM/Development/Docs/ClerkshipAdministrators/ClerkshipAdministratorPositionDescription.pdf
3. Amidei N. So you want to make a difference; advocacy is the key. *OMB Watch*. 2001;2.
4. Lynch DC, Surdyk PM, Eiser AR. Assessing professionalism: a review of the literature. *Medical Teacher*. 2004;26:363-373.
5. Williams BC, Stern DT. Professionalism: What is it and how should we teach it? *SGIM Forum*, 2000;23:1,7.
6. Inui TS. A flag in the wind: Educating for professionalism in medicine. AAMC Publications. 2003; p. 4. (Available at www.aamc.org/meded/start.htm)
7. Chow CA, Networking and Mentoring on Campus. www.minoritynurse.com/features/undergraduate/08-30-00a.html
8. Connect@CalTech, Networking Basics. www.its.caltech.edu/~connect/networking.html.

