

Standard Setting Example #3

Development of Enduring Educational Materials

Structured Summary (serves as a Table of Contents for the Personal Statement and Structured Abstracts)
(Updated 8/27/09)

Faculty Profile: PhD in Basic Science Department

Personal Statement	
Personal Goals	<ul style="list-style-type: none"> · Develop educational materials that fill a void in my field for medical students and their instructors • Teach and inspire future clinicians and educators
Personal Preparation	<ul style="list-style-type: none"> · Experience gained from years of teaching and developing course materials • Keeping current in my field regarding content and methodologies for transmitting information
Personal Reflection/ Process for Improvement	<ul style="list-style-type: none"> • Use learner and colleague feedback to revise follow-up editions · Share what I have learned about the process of developing and publishing materials and inspire colleagues to develop materials
List of Structured Abstracts included in Mini-Portfolio	
1.	1 Textbook* – Doe J, Smith J. Fundamentals of Clinical Neuroscience** . 3 rd ed. Collegiate Press: San Francisco, CA, 2008. Designed to teach neuroscience to first and second year medical students.
2.	Web-based Computer Simulations - http://www.idcom.edu/onlineneurosciencelab**
	Web site for interactive computer simulations of basic and clinical neuroscience for medical students and clinicians, with a particular emphasis on application of osteopathic principles.
Discussion of Breadth	
	I have been instrumental in the development of two different but related products, a widely used, highly acclaimed, clinical neuroscience textbook for medical students and a web-based activity that is used by learners new to the field as well as by more experienced practitioners for CME. For the latter endeavor I have focused particularly on what I have determined is a lack of resources for osteopathic medical students and clinicians.

* A textbook of this caliber may be considered by many as the “gold standard” of enduring educational materials; however, it is important for applicants to understand that this level of achievement is not intended to be a requirement to receive this award. We have included the textbook in this example as a model for the breadth of possible achievements in the category.

** pseudo-titles and citations

Personal Statement (makes reference to your goals in the creation of enduring educational materials, your preparation or background that is relevant to the category, and ongoing efforts to evaluate and improve materials.)

An important personal goal has always been the pursuit of new information. First, as a Ph.D. researcher, I discover and disseminate results that create new knowledge. Secondly, as an educator of osteopathic medical students, I teach the next generation of clinicians and clinician educators about neuroscience and hopefully inspire them to do the same.

My goal as an educator is to teach and inspire my students. I began teaching a Neuroscience course at IDCOM in Year1. I developed syllabi and lectures for the course, but over time I became acutely aware of the tension between expanding content and shrinking curricular time to deliver material, and was frustrated by the absence of a high-quality textbook that could provide essential and clinically relevant material to my students in light of this challenge. Compounding this was the need for more educational materials highlighting the application and correlation of osteopathic principles with basic sciences. Therefore, my motivation to develop enduring educational materials stemmed from the need to fill a void. Thus, outside of my IDCOM duties, I became involved, with other interested colleagues, in the development of a textbook and supplemental educational resources. The textbook alone took us four years of evenings and weekends, but the outcome has been very rewarding. I am most gratified that it has become so widely used and highly acclaimed. The web-based materials have especially filled a void of readily accessible, clinically applicable osteopathic medical correlates to basic science principles in the field of neurosciences.

When I teach in the classroom, I have a limited audience. However, these enduring educational resources allow me to reach a wider range of learners, both students and professionals, across the world.

Since developing these materials, I feel that my ability to use feedback from learners and faculty to update my work and create new products has increased. A byproduct of having successfully written a textbook in my field is that my stature and credibility as an expert has been significantly enhanced among colleagues and learners. As a result, I have had the opportunity to share what I have learned about the writing and publishing

process with colleagues who have appreciated my work and considered writing themselves and I have greatly enjoyed this mentoring experience.

Structured Abstract (Descriptive information about items listed in the Structured Summary including references to documentation of descriptions of quality in an Appendix.)

1. Textbook

Title/Citation - Doe J, Smith J. Fundamentals of Clinical Neuroscience. 3rd ed. Collegiate Press: San Francisco, CA, Year1. (pseudo-citation)

Format – Published Textbook

Goals/Purpose - Intended to be used for teaching basic and clinical neuroscience to first and second year medical students as well as other health professionals. Has been used successfully internationally since its publication in Year1.

Content Areas - Covers basic neuroscience with a strong emphasis on clinical correlation in each section. The following are the major sections that are included.(see copy of book cover and table of contents in Appendix A). For example, Chapters 1-5 are:

1. Introduction
2. Neuroanatomy
3. Neurophysiology
4. Functional Neurobiology
5. Clinical Neurology

The content includes extensive homework problems and answers.

Learner Population - All first and second year medical students in neuroscience; physician assistant students, advanced undergraduates and graduate students interested in clinical neuroscience; and clinicians.

Size - The textbook contains 15 chapters and 4 appendices, totaling 703 pages.

My Role - Drs. John Doe and Jane Smith are completely responsible for the contents of the book. Dr. C. Black is responsible for the figures and for the computer simulations that some of the figures are based on.

Methods - The textbook, written exclusively by the authors, was based on a course taught to osteopathic medical students at IDCOM from Year1-Year15. The textbook, which took 4 years to write, was prepared from authors' teaching notes, course syllabi, and handouts.

Usage - This has been a critically acclaimed book in its field and is quite unique in content and style. It is currently in its third printing, with over 5000 copies, and has been used as a textbook worldwide. The authors are currently negotiating a contract to write a 4th edition.

Peer Review - Some of the feedback from educators adopting the book included:

- "This book is a treasure... It will be an invaluable source for many students as well as workers in the field." – A. White, DO, Chair, Dept. of Neuroscience, Ivy League University School of Medicine
- "While there are other excellent books on neuroscience, there are none that compare with this one in terms of scope and value as a learning/teaching tool." – John Brown, DO . The Quarterly Review of Medical Education, November 2005. vol. 11:189-190.

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“...this is a wonderful textbook of neuroscience for all ‘medical students’, even those who may have acquired the title ‘professor’ by now. It is readable and accessible and elegantly provides the clinical perspective, but never loses sight of the essential biology.” – J. Green *Journal of Clinical Neuroscience*, October 2007, vol. 13(1):335. More feedback may be found in Appendix B.

Structured Abstract - (Descriptive information about items listed in the Structured Summary including references to documentation of descriptions of quality in an Appendix.)

2. Web-based Computer Simulations

Title/Citation - Online Neuroscience Lab

<http://www.idcom.edu/onlineneurosciencelab> (pseudo-web site)

Format - Web site for interactive computer simulations of basic and clinical neuroscience for medical students and clinicians, with a particular emphasis on application of osteopathic principles.

Goals - To enhance learning about neuroscience through visualization, interactivity and instant feedback.

Content - Set of interactive computer simulations that can be used in conjunction with the textbook *Fundamentals of Clinical Neuroscience* by Doe and Jones, Appendix C.

Learner Population – Osteopathic medical students, allopathic medical students, clinicians.

Size - Six comprehensive computer simulations each of which requires learners about two hours to complete. The program includes a learner pre-test and post-test, including questions where learners may evaluate the program.

My Role - I served as a content expert, advising on design of simulations and their educational content. I also helped prepare questions for the learner assessment instruments, and consulted with Dr. Green (the project director) throughout the implementation process.

Methods - Developed educational goals; helped prepare content outlines for simulations; and reviewed and edited final drafts.

Peer Review - Two colleagues, instructors of neuroscience outside of IDCOM, were approached for feedback. Letters included in Appendix D.

Usage - By all students taking “Neuroscience” and other students who accessed the web site. We have a list of the IP addresses of machines accessing the web site so far in Year1, 46% of which came from outside IDCOM: web site hits for Year2=12,042; Year3=8,686; Year4 (as of 1/29/y4)=2,279
