

Standard-Setting Example #2

Development of Enduring Educational Materials

Structured Summary (serves as a Table of Contents for the Personal Statement and Structured Abstracts)

Faculty Profile: DO in a Basic Science Department

| Personal Statement | |
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| Personal Goals. | <ul style="list-style-type: none"> • Provide the best learning opportunity possible for learners • Create quality enduring materials that reflect osteopathic principles |
| Personal Preparation | <ul style="list-style-type: none"> • Years of experience in teaching and educational leadership • Graduate of the Educational Scholar’s Fellowship Program • Attended national workshop focused on writing NBOME questions |
| Personal Reflection/ Process for Improvement | <ul style="list-style-type: none"> • I discuss these projects with colleagues and carefully consider their feedback and ideas • Critiques from learners at all levels to refine materials and develop new approaches |

List of Structured Abstracts included in Mini-Portfolio

1. Textbook - Study Guide J Moss. **Basic Survival for Students of Pharmacology**. 2nd ed. McGraff Hall Publishers: New York, 2004. (pseudo-citation)

2. Textbook Chapter J Moss. **Drugs for Epileptic Disorders** in Pharmacology: Molecular-to-Clinical, 3rd ed. A Grody, B Lerner, C Mieman (eds.), McGraff Hall Publishers: New York, 2004. (pseudo-citation)

3. Questions for USMLE step 1 (USMLE, National Board of Medical Examiners, 3750 Market St. Philadelphia, PA, 19104, Chair of Pharmacology subgroup, Eric N. Pilar, DO) 2003-2004

Discussion of Breadth

My enduring educational materials benefit a diverse range of learners from medical students to instructors and colleagues in Pharmacology. My enduring educational materials meet a variety of educational and informational needs using two very different formats, textbook narrative and multiple choice test questions.

Standard- Setting Example # 2

Development of Enduring Educational Materials
Revised 10/24/11

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).

Introduction - I became involved in education at my COM in Year1, first as a lecturer, and then as a leader. My involvement in developing enduring educational materials was a logical outgrowth of these other two roles. In fact, my goals and philosophy regarding the purpose and process of developing enduring educational materials was directly shaped by my philosophy regarding the purpose and process of teaching and educational leadership. I will first summarize my goals in these areas as the basis for my goals in enduring materials.

Broader Educational Goals - Through my involvements in the classroom at a variety of institutions and with different curricula, I learned first-hand about the importance of focusing instruction on what is most important. I have often seen teachers, myself included, teach what is of interest and value to themselves rather than what is most important for the students to learn at a given point in their training. In this way, we make the students' job inherently more difficult than it should be, forcing them to decide what is important and what is not. As a teacher, I am committed to do more to assist students with this challenge. For example, I have modified my classes over time to emphasize the most important concepts and facts that support the practice of osteopathic medicine, reducing the amount of content presented by as much as 40%. I have also come to realize that learners tend to learn best when they immediately apply and use what has been taught. Consequently, in recent years, I have begun to emphasize in-class learning/application activities that provide clinical correlations that more clearly illuminate osteopathic principles.

Over time, I have also learned the value of developing goals and objectives for each learning experience. My objectives clearly state what I expect students to be able to do as a result of the learning experience—not what I am going to do as the instructor. And finally, I have come to value the role of evaluation in teaching and learning—both to guide student learning and to guide future revisions to the instructional content and format.

My primary goal as an educational leader is to provide the best learning opportunity possible for learners within the framework of the institution. In every aspect, I try to improve the quality of the instruction that we offer to students. One way I enjoy doing this is as a role model to other faculty.

Goals Specific to Development of Enduring Educational Materials - So how do these goals relate to the development of enduring educational materials? I chose to become involved in developing enduring materials because I saw a need for written materials in my field that, from the outset, would point students to the truly important content of the discipline. To this end, I wrote a discipline-based textbook using explicitly-stated goals and objectives. It is designed as a survival guide for learners, and includes study tips and practice opportunities, helping students learn the core content efficiently. After attending a 2-day workshop focused on writing NBOME questions, I became involved in writing multiple choice questions for COMLEX exams for many of the same reasons: I wanted to do my part to ensure that high-stake exams (e.g., COMLEX)

focused on the right things (i.e., the important things) and did so in a fair and equitable manner.

In summary, I value my involvement in producing enduring educational materials because it furthers my commitment to helping create quality educational experiences for learners. The products of my work in this area are not about increasing my reputation or adding to my income. They are about responding to needs I was in a position to meet. In this respect, I have found particularly gratifying the opportunity of sharing what I've learned about developing multiple-choice questions for high-stake examinations with other COM faculty through one-on-one coaching and formal workshops most notably in the Educational Scholar's Fellowship Program, of which I am a graduate.

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

1. Textbook - Study Guide

Title/Citation - J. Moss. **Basic Survival for Students of Pharmacology**. 2nd ed. McGraff-Hall Publishers: New York, 2004. (pseudo-citation)

Format – Textbook for medical and graduate students.

Goals/Purpose – The purpose of the book is to be a study guide for students that are beginners in pharmacology. It is not intended to be a board preparation or board review book.

Content – The entire content of a traditional medical pharmacology course is covered. Each chapter starts with an overview of the drugs and their mechanism of action. Each chapter tries to prioritize the information from the most important to know towards the least important.

Learner Population – The intended audience is medical students in their basic science years. However, a number of faculty have used this to start preparing classes in content areas, since it gives them ideas where to put the emphasis.

Size – The second edition of the book is 285 pages in length.

My Role – The concept of the series was developed prior to my recruitment. This book in the series was entirely of my design and writing.

Methods – Each content area was reviewed and the most important aspects of each drug class was determined. The author had complete responsibility for this interpretation of the field.

Peer Review – The book received peer review before the initial printing and again for the second edition. The publisher occasionally solicits outside reviews.

Usage Statistics – The pharmacology book has been the leading book, in terms of sales, for the series. The second edition has sold 3,703 copies since Nov. 2004. [See Appendix A]

Ratings – The following are comments about the book from instructors who have evaluated it. This information was obtained from the publisher. From a pharmacology instructor at Temple University: he recommends the book to his students first as an introduction to the subject, before they encounter larger, more comprehensive texts such as Katsung or Goodman & Gilman. From a pharmacology instructor at the University of North Carolina: once he went through the book with one of our sales reps, he immediately thought of a few students who would benefit from it.

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

2. Textbook Chapter

Title J Moss. **Drugs for Epileptic Disorders.** in Pharmacology: Molecular-to-Clinical, 3rd ed. A Grody, B Lerner, C Mieman, (eds.) McGraw-Hill Publishers: New York 2006.

Type of Material – Chapter in a pharmacology textbook, which is one of the medium sized books used in medical pharmacology courses

Goals/Purpose – The purpose of the chapter is to present the material on drugs for seizure disorders in the format set out by the book editors.

Content – Each chapter begins with a therapeutic overview followed by a general section on the mechanism of action of the drugs. This is followed by pharmacokinetics and then a special section that relates the mechanism of action to the clinical response. Finally, side effects, clinical problems and toxicity and new horizons are covered. Each chapter ends with a set of self-assessment questions.

Audience – The intended audience is medical students in their first pharmacology course.

Size – The chapter is 10 pages in length.

Role – The chapter was developed by the author and then reviewed by the editor. The chapter had to follow the guidelines in use for the book overall (see content above).

Methods – For the first edition, the content area was reviewed by reading all available textbooks and then reviewing the primary literature. Each subsequent edition has then been updated and revised based on peer review.

Peer Review – Each edition has been peer reviewed by outside experts. Each chapter is reviewed before the next edition and is also carefully reviewed by the assigned editor. [See Appendix B]

Usage Statistics – Book sales figures are not readily available. But, the fact that the publisher has invested the time and energy into 3 editions suggests that the book has done reasonably well.

Ratings of Peers – The only specific review of this chapter comes from the review before each new edition. These have always been quite positive and have only requested updating. [See Appendix C]

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

3. NBOME Questions

Title/Citation – NBOME, National Board of Osteopathic Medical Examiners, Chair of Pharmacology sub-group, Eric N. Pilar, DO

Format - Questions for Step I of the COMLEX 2003-2007

Goals/Purpose – The purpose of developing questions for a national examination is to have a vehicle to determine minimum competence for our physicians.

Content – The content covered in these questions is the entire field of medical pharmacology.

Learner Population – The intended audience is any person taking Step I of the COMLEX

Size – A total of 150 original questions have been written (30 questions per year for 5 years) and probably 100 have been edited or re-written.

My Role – The original questions were written entirely by the faculty member after initial training. The questions were then reviewed by a committee, including the question author, for accuracy and clarity. The questions were then pre-tested and reviewed by a second committee before use on the final examination.

Methods – Each content area was reviewed for the most important information to test. Then a series of questions were developed based on NBOME format.

Peer Review – Each question was carefully peer-reviewed as described in role of faculty. [See letter from Dr. Pilar, Appendix D]

Usage Statistics – Since these questions are highly confidential there are no usage statistics available. However, I have seen the pre-test item analysis for most of my questions and they have performed reasonably well.

Ratings of Peers – Since the committee work is confidential, it is not possible to get peer-review of the original questions. However, I was initially invited to serve 2 years and then was invited for another 3 year term, indicating to me that my contributions to question development were worthy.