

Methods of Social Work Research, SW 323
(Preparation for Evidence-Based Practice)
Spring 2004

INSTRUCTOR: Dr. Leonard Gibbs, Telephone 836-3638, lgibbs@uwec.edu

OFFICE HOURS: Tues. 2:00 p.m. – 3:00 p.m.; Thur. 10:40 a.m. – 11:40

INTRODUCTION

Everything we do in this class should help you to make better judgments and decisions in your life affecting practice. To this end, we will be doing the following: (1) contacting a practitioner in any helping profession to solicit a question about a method's effectiveness; (2) applying principles of research to that question to plan, but not execute, an evaluation study; (3) recognizing where single-subject or group designs are most appropriate for particular evaluation questions; (4) incorporating the best measure into our evaluation study's plan; and (5) learning how to avoid common errors in thinking that can harm clients.

I'm excited about our course, and I hope you will be too. This semester you and I will be using: *Evidence-Based Practice for the Helping Professions*. It's the third book that I have written primarily for our students in this course, but for others elsewhere too. When you read our text you will see the names of my former research and fieldwork students whose work gives the book vivid detail. I will ask you for permission to quote your work also.

We do have some preliminary evidence that my teaching methods are effective elsewhere. Duncan Whyte, at the University of South Carolina, has evaluated effects of our Reasoning in Practice Games (RIP) on 136 MSW students' thinking about practice. His Solomon four-group design found statistically significant effects on thinking about practice, as measured on our Professional Thinking Form. His work is not yet published. Stephanie Baus, at Tulane University is now doing her dissertation to evaluate our approach to this course among her research students at Tulane.

COURSE OBJECTIVES

By the end of the semester, you should be able to:

1. Understand how to apply scientific thinking to avoid being taken in by muddled quack thinking that can harm clients (CSWE B5.7.1; UWEC.SW.1), as measured by PRIDE1, PRIDE2, HITTT, MITTT and CITTT.
2. Recognize five evidence-based practice question types and be able to pose only one of these, i.e. an Effectiveness Question, that clarifies the question you get from a practitioner. This question may come from a member of **any** helping profession and is called a Client Oriented Practical Evidence Search (COPES) Question.
3. Formulate a clear, answerable Evaluation Research Question about a method's effect on clients that meets twelve criteria for clarity as measured by a Clarity of Question Stamp. (CSWE 5.7.9; UWEC.SW.9)
4. Plan an evaluation study that incorporates a single-subject or group design. (CSWE 5.7.9; UWEC SW.9)

5. Begin the process of evidence-based practice by searching for the current best evidence to answer your COPES question. These skills will help you later in the Fieldwork Course (SW481) with your Evidence-Based Practice Exercise. (CSWE 5.7.9; UWEC.SW.9)
6. Apply the first five steps in the evaluation research process, but do not execute a study. (CSWE 5.7.9; UWEC.SW.9)
7. Apply basic computing procedures in the classroom to demonstrate concepts including: number needed to treat, number needed to harm; inter-rater reliability; hypothesis testing; the relationship between positive predictive value, negative predictive value, and base rate when assessing risk.
8. Utilize the Quality of Study Rating Form to reliably rate evaluation studies, and become familiar with forms for rating evidence regarding prevention, risk, assessment, and description (including qualitative studies). (CSWE 5.7.9; UWEC.SW.9)
9. Compute three indices of treatment effect size reliably (CSWE 5.7.9; UWEC.SW.9).
10. Write in concise English (CSWE 5.7.10), as measured by Criteria for Scoring Assignments 1 and 2.
11. Understand the importance of qualitative (exploratory) research (CSWE 5.7.9; UWEC.SW.9).
12. Identify common errors in reasoning that violate principles of science called “practitioners’ fallacies” (CSWE B5.7.1; UWEC.SW.1), as measured by PRIDE1, PRIDE2.
13. Demonstrate by acting out with a partner, or partners, how practitioners’ fallacies might occur in social work practice (CSWE B5.7.1; UWEC SW.1), as measured by Professional Thinking Exercise.
14. Understand how a bias or stereotype (either positive or negative) can violate tenets of clear thinking (CSWE B5.7.4;UWEC.SW.2B).

REQUIRED TEXTS:

Gibbs, L.E. (1991). *Scientific reasoning for social workers: Bridging the gap between research and practice*. Columbus, OH: Macmillan. (I own the copyright on this book; so you can get it for the cost of duplication.)

Gibbs, L., & Gambrill, E. (1999). *Critical thinking for social workers: Exercises for the helping professions*. Thousand Oaks, CA: Pine Forge (Sage). (Purchase)

Gibbs, L. (2003). *Evidence-based practice for the helping professions: A practical guide with integrated multimedia*. Pacific Grove, CA: Brooks/Cole, Wadsworth, Thomson Learning. (Rental) **N. B. Keep the card inserted in the book. Tape it to your book so you will have it for your passcode.**

SUGGESTED (NONREQUIRED) TEXTS (Do Read Ahead Each Week):

Gambrill, E. (1990). *Critical thinking in clinical practice*. San Francisco: Jossey-Bass. (In the long run, you may want to purchase a book to continue to sharpen your thinking about vital issues in social work practice. This is the book for you.)

Hacker, D. (1991). *The Bedford Handbook for Writers*. (3rd ed.). Boston: Bedford Books of St. Martins Press.

Sackett, D. L., Straus, S. E., Richardson, W. S., Rosenberg, W., & Haynes, R. B. (2000). *Evidence-Based medicine: How to practice and teach EBM* (2nd ed.). Edinburgh: Churchill Livingstone.

GRADING: All grades will be on a +, - grading scale including: A+, A, A-, B+, B, B-...Grades are assigned according to such grades on each assignment, not on the basis of a cumulative total of points for the semester.

PLAGIARISM: Taking the idea of another, particularly directly the words of another person without giving that person credit (without a reference) is plagiarism. Plagiarism is reason to fail the course because it implies intellectual dishonesty, something researchers and practitioners should never be. See the *NASW Code of Ethics, 4.08, Acknowledging Credit* section.

RESPONSIBILITY FOR CONTENT: You are responsible to get content and materials from class. If you are absent for any reason, see that you get notes from a partner and handouts from me, or better yet, make arrangements to have a partner collect handouts and take notes for you. *Do come to another lab rather than miss yours for the week.*

LABORATORY ASSIGNMENTS

(Help your classmates during lab., but do your own work on assignments.)

Assignment No.	Title	Final Course Grade
1	<i>Clarifying Your Problem and Constructing a Working Bibliography</i> (give a copy of Assignment 2 and 2 to the practitioner who posed your question to thank the practitioner for their help)	20%
2	<i>One Hypothesis, Measurement of Concepts</i> within the Hypothesis— Obtain or develop a measure (to be copied and copy sent to practitioner)	20%

PROFESSIONAL THINKING EXERCISE (Exercise #10 in the Gibbs & Gambrill book, *Critical Thinking for Social Workers*)

10%

Write a brief paper to describe one practitioners' fallacy, and I will videotape your enactment of the fallacy. The winners of the Fallacy Film Festival get a prize (usually a book) and recognition from the class.

7th WEEK AND FINAL EXAMINATIONS These examinations will cover assigned readings and lecture material. They are multiple-choice in format.
20% (10% each)

QUIZZES Quizzes will be given in lab and occasionally in lecture whenever a window of time opens up. These quizzes will cover assigned reading and lecture. Quizzes will emphasize being able to apply principles of analytical thinking in practice. Quizzes stress application of analytical thinking to real professional problems that are likely to be encountered in the field. You can do well on the quizzes by studying the practice fallacies and by thinking about how scientific reasoning might be applied.

20%

ATTNEDANCE Please sign your name on the daily attendance sheet. The integrity of records in social work is vital. False entries into case records has been cause for students to fail their fieldwork placement. Consequently, anyone signing an attendance sheet for someone else will result in failure for the course for the person forging the signature.

10%

RESPONSIBILITY Students in the labs are expected to maintain tight security about quizzes. Please report any violations to me. Only in the severest of circumstances (death of immediate family, incapacitating and excused illness) will late lab. assignments or make-up examinations be acceptable. Five points will be removed for each day that assignments are late. All assignments and the examinations must be completed for a passing grade.

REFERENCE LIST References in the back of the manuscript for *Evidence-Based Practice for the Helping Professions* are so current that this reference list will serve for our class this semester.

REGARDING DISABILITIES For any student needing help for a disability, please stop by my office by the end of the first week of the semester.

COURSE OUTLINE AND CLASS SCHEDULE

1. **Jan. 26-30** **OVERVIEW, PRETEST, MATERIALS HANDED OUT, MOTIVATION**

Lecture content: Course Objectives, Course Overview, Initial Readings, Researchable Question

Some Lessons from the History of the Helping Professions (How to Avoid Harming or Killing Your Clients)

Lab content: PRIDE1 Pretest (HV9105.N52S332003, at circulation desk), Introductions

Readings:

Gibbs. *Scientific Reasoning for Social Workers*, Chapter 1

Gibbs. *Evidence-Based Practice for the Helping Professions*, Preface (pp. xix-xxii), Chapter 1

Gibbs, *Critical Thinking for Social Workers*, Definitions for RIP Game A. (For Next Week's lab. pp. 89-114)

Homework: Please read the Definitions for the RIP Game A

2. Jan 31.-Feb. 4 MOTIVATION (Cont.)

Lecture Content: Some Lessons from the History of the Helping Professions (How to Avoid Harming or Killing Your Clients)

Watch the HITTT videotape, learn the steps of EBP, Do Exercise 1-1 (pp. 19-21) and Exercise 1-2 (pp. 21-24) in our EBP text all by yourselves.

Lab Content: *Critical Thinking for SW RIP Game A and Ex. 1 in Critical Thinking for Social Workers*

Readings: Gibbs. *Scientific Reasoning for Social Workers*, Chapter 2.

SUGGESTIONS FOR HOW TO CONTACT A HUMAN SERVICE PRACTITIONER INITIALLY TO ASK THEM TO POSE A RESEARCHABLE QUESTION (Handout)

To: Human Service Practitioners ... Our request for Researchable Questions (Handout)

Read Assignment #1 and its scoring criteria (attached), and the sheet marked " SUGGESTIONS FOR HOW TO CONTACT A HUMAN SERVICE PRACTITIONER INITIALLY..." The sooner you get your question, the better.

3. Feb. 7 - 11 SCIENTIFIC REASONING

Lecture Content:

Motivation (cont.), Why Scientific Thinking is Essential to the Helping Professions. Overview of Evidence-Based Practice, Arguments for and Against Evidence-Based Practice

Lab Content: We examine example Assignments #1 and #2, Soliciting Researchable Question, RIP Game B if time.

Readings: 1. Gibbs, *Scientific Reasoning for Social Workers*, Chapter 3

2. Gibbs, *Evidence-Based Practice for the Helping Professions*, Chapter 2, *Arguments and Counterarguments Regarding Evidence-Based Practice*, pp. 253-256

Homework: Watch the HITTT, CITTT and MITTT (Ch. 2 of EBP) to review their fallacies. If you cannot load the CD onto your own computer, you can view all three using the computer and overhead projector in HSS 251. These will probably help you with a later quiz.

4. Feb. 14 - 18 **ASSIGNMENT #1: OVERVIEW AND CRITERIA FOR SCORING**

Lecture Content:

We'll walk through an example paper showing how prior students began with a COPEs Question, located evidence regarding their question and formulated a Researchable Question. **Hopefully, you will now have a question for your Assignments #1 and #2 to discuss.**

Well-Built Questions (Client Oriented Practical Evidence Search, COPEs) questions to Guide Your Electronic Search for Literature Related to Your Researchable Question

Exercise 3-1 in *Evidence-Based Practice for the Helping Professions*

Characteristics of Scientific Thinking, Arguments Regarding Objectivity, Clinicians Fallacies, we view the best of Fallacies Film Festival videotapes.

Lab Content: **We meet in the Crim. Classroom of the Library.1. Do have a COPEs Question.**

Readings: Scientific Reasoning for Social Workers,
Chapters 5 & 6

Evidence-Based Practice for the Helping Professions
Chapter 3

Homework: Read Ch. 3 of EBP thoroughly so you can formulate COPEs Questions when we do Exercise 3-1 in class.

5. Feb. 21 - 225 CAUSAL INFERENCE IN PRACTICE, MAKING CASUAL REASONING EXPLICIT, SEARCHING ELECTRONICALLY

Lecture Content: Did the method cause change?
How experiment design can help us to answer this question.

Searching electronically for answers to our COPEs Questions. We'll do Exercise 4-1 (pp. 126-131), in *Evidence-Based Practice for the Helping Professions* in class.

Lab Content: **Come with your COPEs Question.** We'll use well-built questions (COPEs) and methodological filters to effectively access databases to literature (i.e., PsychLit, EBSCOHOST, ERIC, HaPI, Cochrane Library, SWAB,

Government Documents) and sources on the World Wide Web. We'll use primarily our book's web site.

Readings: Gibbs, *Evidence-Based Practice for the Helping Professions*, Chapter 4.

6. Feb. 28 –Mar.4

STEPS IN THE RESEARCH PROCESS

Lecture Content: **On Tuesday I am in New York giving an all-day Faculty Development Institute with Eileen Gambrill and Stephanie Baus (telling the world about our class and what you are doing). I will leave a great challenge for you to solve as two teams to see if you can match the performance of a class that had more training than you have (their effort is on a CD., much fun, great challenge, wish I could watch you.)**

Eight Steps in the Research Process, DOPE Study (Please read the Gibbs & Johnson study before lecture so that you are familiar with it as we use the article to illustrate steps in the research process. This is the Gibbs & Johnson study below).

Videotape: Videotape of Instructions to Subjects in DOPE/NO DOPE Study; Slides of Tables from the Study

Lab Content: RIP Game B, pp. 121-138 in *Critical Thinking for Social Workers* I will leave reinforcers with the understanding that you will play the game to the very end of class to see who is victor and will leave a report of attendance and details of the game.

Required Readings: Gibbs, L.E. & Johnson, D.J. (1983). Computer assisted clinical decision-making, *Journal of Social Service Research*, 6(3/4), 119-132.

RIP Game B fallacy definitions.

7. March 7 - 11 STUDY DESIGN

Lecture Content: **Study Design, Single-Subject and Group Studies, Random Assignment in Experiments**

SEVENTH WEEK EXAMINATION THIS WEEK IN LECUTRE ON THURSDAY

Lab Content: 1. Play Reasoning in Practice Game C
if time permits

2. Help with Assignment #1

Readings: *Scientific Reasoning for Social Workers*,
Chapters 5 & 6 (Review)

Evidence-Based Practice for the Helping Professions, Chapter 9

RIP Game C fallacy definitions

8. March 14-18

RATING STUDY QUALITY

Lecture Content: I Explain the The Quality of Study Rating
Form (QSRF) and QSRF-P to Rate Study Quality and
Treatment Effect Size on Tuesday.

Special Instructions: For class and for Lab., please print out the articles for the QSRF Exercises 5-2 (pp. 159-160), for the META form Exercise 6-1 (pp. 178-181), Risk Exercise 7-2 (pp. 198-200 **Only the Shumway-Cook, Bauer & Woollacott article**), and finally Descriptive Studies Exercise 8-1 (pp. 210-211). We will refer to these exercises during the rest of the semester.

The Address for INFOTRAC (COLLEGE) IS: <http://www.infotrac-college.com> The Passcode is on the card that you taped inside your book or one I can give you.

Lab Content: 1. Working on Researchable Questions in
class to assure they meet criteria on the Clarity of Question
Stamp
2. We play a RIP game if we haven't gotten through Game C.

Readings: 1. Gibbs, *Evidence-Based Practice for the Helping Professions*, Chapter 5
with particular attention to QSRF and QSRF-P. Please read
Chapters 5 and 6 and print the articles before class on
Tuesday.

Required Exercise: We'll do Exercise 5-2 in class; so you will need to print out
the article for it (i.e. Proudfoot, Guest, Guest, Dunn, &
Gray, see above).

Suggested Exercise: If your review finds a meta-analysis do read the chapter on
the META Form and its instructions particularly carefully.

Spring Break March 21-25

9. Mar. 28–Ap.1

MEASUREMENT

Lecture Content: **Reliability, Validity, Question Wording, Instrument Construction**

- Lab Content:**
1. How to locate references to measures
 2. Work on Assignment 2 - Statement of a Hypothesis, Measurement of Concepts within the Hypothesis
 3. Choose a Fallacy for Professional Thinking Exercise

Required Readings: None. Work on Assignment #2

12 . Nov April 18-22 MEASUREMENT CONTINUED

Lecture Content: **Measurement of Treatment Outcome, Problems with Measuring treatment Outcome, Ethical Issues Regarding Protecting Human Subjects (Videotape Regarding Institutional Review Board Criteria), Case Examples and Testimonials as a Form of Evidence**

- Lab Content:**
1. Students Discuss their Measurement Procedures
 2. Discussion of Outcome Measures Actually Used to Evaluate the Effects of Treatment
 3. **Practice Clinician's Fallacies for videotaping in Professional Thinking Exercise (Fallacies Film Festival)**
 4. We view a videotape regarding ethics in experimentation with human beings if time.

- Required Readings:**
1. Read Exercise #10 in the Gibbs & Gambrill Workbook (Fallacies Film Festival)
 2. **Homework:** Exercise #10 in the Gibbs & Gambrill workbook. (Just read this to clarify how this week's material relates to the assignment that I'll give you later to be completed by the 15th week)
 3. *3. Scientific Reasoning for Social Workers*, Chapter 10

13. April 25-29

ASSESSING RISK IN SOCIAL WORK PRACTICE

(This exciting method of decision-making is just percolating into Social Work.)

Lecture Content:

The Concept of Probability, Making Probabilities Explicit in Risk Assessment, Superiority of Statistical Over Clinical Prediction Regarding Long Run Accuracy, How to Evaluate a Risk

Assessment Instrument, Positive Predictive Value, Negative Predictive Value

Thursday I may still be at Belmont University giving their university's research symposium keynote address, but I may be able to slip out soon enough to be back.

Special Instructions:

If you haven't already, please print Risk Exercise 7-6 (pp. 198-200 **Only the Shumway-Cook, Bauer & Woollacott article**).

Lab Content: 1. Exercise 7-2 in *Evidence-Based Practice*...

2. Exercise 14 in *Critical Thinking for SW*

2. Work on Professional Thinking Exercise (#10)

Required Reading: *Evidence-Based Practice*. Ch. 7

14. May 2 - 6 SURVEY DESIGN, MAKING GENERALIZATIONS AVOIDING STEREOTYPES, ETHICAL ISSUES IN HUMAN SERVICES RESEARCH, QUALITATIVE STUDIES

Lecture Content: Hasty Generalization, Racial & Ethnic Stereotypes, Prejudice, Needs Assessment, Sampling, Random Assignment and Random Selection

PROFESSIONAL THINKING EXERCISE DUE IN LECTURE THURSDAY, May 6th

Special Instructions:

Please print out the articles for the exercise for Qualitative Studies Ex. 8.2 in EBP book by Pilkington regarding life after stroke. We will rate this study in lecture.

Lab Content: 1. Discuss Assignment #2

2. I Videotape Your Professional Thinking Exercise

Required Readings: Chapter 8, in *Evidence-Based Practice*

National Association of Social Workers (1996). Code of Ethics. NASW, 750 First St. NE, Washington, D.C., 00002-4241.

15. May 9 - 13

FALLACIES FILM FESTIVAL, COURSE EVALUATION, SUMMARY

ASSIGNMENT #2 DUE IN CLASS TUESDAY, May 11th

Lecture Content: Fallacies Film Festival, Course Summary

Lab Content: 1. Discuss ethical issues in research.

2. Suggestions for Improving *Evidence-Based Practice for the Helping Professions*.

Required Readings: *Evidence-Based Practice for the Helping Professions*, Chapter 10.

HANDOUT
RESEARCHABLE QUESTION
(Can be completed by student over phone)

RETURN TO:

Leonard Gibbs
Social Work Department
UW-Eau Claire
Eau Claire, WI 54701

Name of Agency: _____

Name of persons who could clarify the "Researchable Question"

Address of agency: _____

Agency phone number: _____

Type of clients served by agency: _____

What important question concerns you about your agency and its effectiveness? You may wonder which of two new approaches to treating residents who have Alzheimer's Disease has the longer period of self-sufficiency for your residents. You may wonder if preschool children who are exposed to sex education films falsely report sexual abuse more frequently than do children who are not exposed to such material. Such questions concerning effectiveness are very important and generate interest for students in our Research Methods course.

Please use the space below, and the back of this page if you like, to state your question as clearly as possible. Please include the following: (1) client type and characteristics that distinguish the client (presenting problem, age, sex, race, economic status), (2) an intervention or treatment method, (3) any alternate or competing treatment method, and (4) what you hope to achieve as an outcome resulting from the intervention. If you can, define key words in your question that might be unfamiliar to students. Students may want to call you, not for help with the assignment, but to clarify practical aspects of your agency so they can plan a study that might actually work in your agency. **Students will not actually do a study, only plan one.**

SW 323 - Methods of SW Research

Your Name: _____

Your Lab Section: (Circle One) A01 A02 A03

Agency that suggested the Researchable Question: _____

Name of Human Service Worker or Administrator who suggested the Researchable Question: _____

Phone Number for this Person: _____

ASSIGNMENT 1 - DUE _____

CLARIFYING YOUR PROBLEM AND CONSTRUCTING A WORKING BIBLIOGRAPHY

Assignments 1 and 2 concern the toughest problems in science. If you can tackle problem formation (clear COPEs question, clear research question, specific and testable hypothesis with adequate measurement of key concepts, you are in a position to contribute to knowledge that may increase the effectiveness of social work. However, you will only plan a study. Actually executing the study would take more time than we have.

In preparation for Assignment No. 1, discuss the problem with the person who has submitted the Researchable Question. Try to clarify the question as much as you can, and learn about the resources of the agency that might be used to answer the question. Get literature that pertains to the question from the library, or from interlibrary loan if references are not available here. (Interlibrary loan requests take from one to two weeks to come back; so start on these references early.) Search the literature for evidence about how others have approached a problem like yours and how they have measured concepts (variables) related to your study. This literature review will also help you with Assignment 2. Your best references will score high on the Quality of Study Rating Form (QSRF), QSRF-P or META form.

Once you have clarified the problem as much as you can, type up to a five page double-spaced summary of your thinking, Word size 12 print at the smallest. This page number does not include the references. You will lose 6 points for each page over the page limit. Please number your pages.

This paper should include at least a brief paragraph on each major topic of the “outline for Assignment 1” beginning with the topic “Specific Statement of the Problem.” Each topic should be marked in the text of your writing with a bold faced heading. Strive in each topic to address issues raised in readings and in lecture regarding the topic. Write as briefly, simply, and directly as you can.

When you hand Assignment 1 in, it will contain:

- (1) this sheet with background information filled in;
- (2) a copy of the Researchable Question form filled out by the practitioner who posed the question (or by you over phone);
- (3) your discussion in the order of topics in the outline;
- (4) your list of references following APA format;
- (5) your best reference and QSRF, QSRF-P or META form (whichever is appropriate).

CRITERIA FOR GRADING ASSIGNMENT ONE

All point values are maximum value. If you do not find enough sources within a few hours of searching, widen the topic of your search. Some areas are rich in studies; some are not. You will learn even if your reference list includes sources that only remotely relate to your topic.

Pay close attention as we examine this assignment's grading criteria, and take notes when I describe how point values are computed for each section. Then, when you get your paper back, you will know how to interpret these point values. I will also discuss typical scores by section of the papers in class.

ATTACHED:

Assignment One Cover Sheet (1)

Researchable Question from Human Service Worker (1)

I. Specific Statement of Problem (1)

A. Discussed with Practitioner (10)

State what the practitioner actually said in a paraphrase or a quotation of the instructor's words as you discussed together the question and how to clarify it. Be specific about the background of the question, its importance, numbers of clients affected.

B. Clarify problem (10)

Name your independent variable and your dependent variable. Why do you think the treatment should work (review the literature, cite others). How did you clarify your question's key elements? Which databases were most helpful? Which search terms were most effective? You can give a brief search history here.

C. Selected one problem from among many (10)

Based on your resources, personal values, personal experiences, or whatever reasons, why did you select this one particular Researchable Question? You may cite literature that documents the extent of the problem and/or give personal reasons that matter to you.

D. List your COPES Question (10)

COPES questions contain four key elements to be well-built.

E. Clarity of Research Question Formulation (44)

Pose your question according to criteria on the stamp. Indent your study question to the right, and double-space it. Try to meet all of the criteria on the Clarity of Question Stamp. Leave enough space for my rubber stamp so that I can score your question. Circle the name of your dependent variable.

II. Study Feasibility (1)

A. Evaluation research or descriptive research (10)

Tell why your study is an evaluation study, not a descriptive one. I will define these terms in lecture.

B. Materials and methods available (20)

List all of the materials (video cameras, rooms, scoring sheets, special equipment, paper) and methods (where and how the treatment will be administered) that you will need to accomplish your study. Next to each material, list that material's cost.

C. Outcome of intervention measurable (10)

Be as specific as you can at this point about how you will measure the dependent variable (treatment outcome) in your study. If information is available on your measure's reliability and validity, do cite that.

III. Scope of the study (1)

A. How many subjects? Why this number? (10)

B. Time to do study (10)

What will the beginning and ending dates be for treatment and outcome? Why were these intervals chosen? Be sure to include length of follow-up if appropriate.

IV. Relevant Literature (1)

A. Discussion and critique (up to 40 points) Give a brief and highly specific description of your best evaluation study first. (Attach the Quality of Study Rating Form (QSRF) and discuss the strong and weak points of your best reference. Be specific to support any inference about study quality. Compute standardized mean difference, absolute risk reduction and number needed to treat (ES1, ES2 and ES3) if you can.

B. Number of journal references (10) You may list sources in the list at the back of the paper that are not listed in the text as sources that you consulted. You may not, of course, use material in the text of the paper that you do not cite in the text of the paper and in the list in the back of the paper. I will give full credit if all references follow APA format.

C. Attach a copy of your one best reference (2 points)

Total number of points possible is 202.

Assignment 2 - Due _____

**STATEMENT OF HYPOTHESIS, MEASUREMENT OF CONCEPTS
WITHIN THE HYPOTHESIS BY OBTAINING OR
DEVELOPING A MEASURE**

YOUR NAME: _____

Assignment #2 follows the same format as did Assignment 1. There will be three boldface headings including: Problem Formulation, (2) Statement of a Hypothesis, and (3) Measurement of Concepts within the Hypothesis. Try to devise a way to meet as many criteria as you can for a good hypothesis and good operational definition. Hand in all of the materials that you submitted for Assignment 1 along with Assignment 2, and be sure to include a copy of your measure, not just someone's critique of it. The criteria listed here and its headings will help me to follow what you are doing on the assignment. Five **double-spaced**, typed pages (excluding pages of your measure and references) are the maximum for this assignment. Note well: You will lose 6 points for each page over the five-page limit. Use size 12 Word print at the smallest. You may want to add a few references on a sheet titled "Additional References Regarding Measurement of Key Variables."

Prior students advise that you start to look for a measure right away. Try the stacks: R853; C55; Q35.

N.B. You may find helpful this reference. Mitchell, J.V. (1985). The Ninth Mental Measurement Yearbook. Lincoln, Nebraska: Buros Institute.

Also, some measures are available in bound volumes in Darlene's office. They should prove helpful for many of us.

1. Your assignment #2 **will contain the following as you work down through the pile (note that steps 4 and 5 including your thank-you card and all below it should be in a condition to pull off and to give to the person who posed your question):**

- Top (1) Assignment #2 cover sheet (this page)
- (2) Additional References (articles, measures since Assignment #1 was completed)
- (3) Assignment #2 (i.e. Problem Formulation, Statement of Hypothesis, Measurement of Key Concepts within the Hypotheses)
- (4) Your measure
- (5) CARE Form
- (5) A thank-you card for the person who posed your question
- (6) A copy of what you think will most help your practitioner to use your work to help their clients

(Be sure to number your Assignment #2 pages: use standard (12) size font)

CRITERIA FOR RATING ASSIGNMENT 2*

1. Points will be assigned to your work in each section according to the following criteria:
 - a. Problem Formulation. Read Chapter 6 of *Scientific Reasoning*., or any other readings that have helped you with this assignment, and relate how the reading applies to your statement of hypothesis and procedures (10 pts). Add anything you might have learned since Assignment 1 about your question, e.g. new references, new ideas, specific points learned from your further reading in research methods, sources that came in for Assignment #1 too late to be included in Assignment #1. Do not merely list how your proposed study meets criteria on the clarity of question stamp.
 - b. Statement of Hypothesis: (4 points each for the clarity of question stamp that includes 13 criteria—two new criteria include a specific p value and statement about mean difference or proportion). This stamp closely resembles the Clarity of Question Stamp for Assignment 1 but just includes two new criteria. The hypothesis can be formulated from your question in Assignment 1 by just changing a word or two in the question to make it into a statement.
 - c. Measurement of Key Concepts in the Hypothesis: Take one key variable, your dependent variable, and define that variable in very specific terms using a measure that you have developed, or find a measurement that someone else has developed that would serve as a dependent measure in your hypothesis. You must physically lay your hands on the measure in order to critique it. Do not be fooled into thinking you have a measure and then find out that it is just someone's critique of a measure. Measures include all the items of the measure, scoring instructions, and ideas for administering the measure. In addition to a description of your measure and its scoring directions. Please state who will administer it, where, when, and how often. (20 points).

Remember to insert your measure into its place in this assignment—follow the outline above.

Discuss the strong points and weak points of the measure. (If you have developed your own measure, you might want to discuss the strong and weak points of your measure and critique someone else's measure also. Critiquing a measure that a student has developed is very difficult. This will assure an equal chance for points compared to those who have an extant measure). You might want to include criticisms that other authors have made of the measure that you have located, criteria for a good operational definition, knowledge of question wording, concern for the specificity of instructions to those administering and scoring the instrument, and try to look all the while even handedly for good and weak points in the measure. (40 points)

Discuss the reliability of the instrument. Here I will be looking for your understanding of reliability and factors related to it. Define the word "reliability". (5 pts). State how you would plan to measure the reliability of your chosen or self-developed measure. (10 points).

Define validity (5 points) and plan a procedure for measuring the validity of your instrument. (10 pts)

2. Be sure to attach your measure at the end of your assignment #2.
3. Two points for attaching the thank-you card immediately above copies of your Assignment #1 and #2.
4. Two points for attaching a copy of your best reference for the person who posed your question
5. Two points for attaching a copy of your measure for the person who posed your question.
6. Draw your design's paradigm using symbols from our text; define the symbols beneath the paradigm; in a little key explain your paradigm from left to right in a short paragraph, and list which confounders are or are not ruled out by your design. (20 pts)

SUGGESTIONS FOR HOW TO CONTACT A MEMBER OF A HELPING PROFESSION TO ASK THEM TO HELP YOU POSE AN EVALUATION QUESTION

During the semester we will be doing two assignments to plan, but not execute, and evaluation study. Your efforts on these assignments will depend on your soliciting a question from a practitioner in any helping profession (e.g. social worker, teacher, clinical psychologist, nurse, physician, dentist, physical therapist, special education teacher...).

Because our course is at a basic level, I am limiting the question type only to a question regarding the **Effectiveness** of a method that your practitioner is using now, or is considering using to more effectively help clients. Choose a professional who works with clients that interest you. For example, you might be interested in work with women who have been physically abused; so you might contact a practitioner who works at a women's shelter. You might be deeply concerned about a dear friend who has a Merkel cell carcinoma on her leg; so you might contact a physician who is a friend of your family. You might be concerned about alcohol and other drug abuse; so you might contact an AODA counselor. You might be concerned about your little brother's inattentiveness in school; so you might contact a school social worker or school psychologist about treatment for such a problem. Do contact a practitioner who is likely to pose a question that really interests and matters to you personally.

All you will need to ask for on your initial contact with your practitioner is for four elements of a question including: (1) the name of the client type; (2) the name of the intervention or treatment that the practitioner is doing or thinking of doing to help the client; (3) the name of an alternative action (might be no treatment or standard treatment now offered); and (4) what outcome the practitioner and client value as an outcome. For example, a school social worker might want to help several parents of first through fifth grade kids who are concerned about how to more effectively manage their child's behavior. The school social worker wonders whether to work with the parents individually or in a group. Here is a related COPES question:

For parents of 1st through 5th grade children, who want to improve their parenting skills, if parents participate in group or individual parent effectiveness training, which would have the greater impact on their child's following household rules? (Incidentally, the Cochrane Library of Systematic Reviews favors the former and behavioral treatment methods)

Do search your heart and interests regarding which practitioner to contact. For example, some of our students have had a personal problem (eating disorders, outbursts of anger, poor study habits) and wanted to use themselves as subjects in counseling to plan their own single-subject experiment to deal with their problem. Others knew personally a human service worker who was able to pose a question (e.g. older sister who works as a nurse in Texas who wonders which HIV infection prevention program for kids frequently treated for sexually transmitted diseases would best prevent STD). Other students who work or had worked in a human service agency simply asked a supervisor for a question (e.g. at the Eau Claire Academy staff were wondering which stop smoking program would best help staff to kick the habit). Other students were interested in a particular type of client and called a fieldwork agency serving those clients to pose whatever effectiveness question interests the worker there. Some contacted a family friend (physician) to ask for a question about the effectiveness of some treatment procedure.

I urge you to ask the practitioner of your choice to pose their own question about the effectiveness of a treatment and not to impose on them your own question, unless you both mutually agree on the question.

Here are some steps that I suggest you follow to solicit your effectiveness question:

1. Determine for yourself what interests you. What client type? What is important to you? What agencies apply methods that truly interest you?
2. Locate a helping professional who works with clients who interest you (could be a relative who is a nurse, could be a teacher, could be a friend's parent, someone with whom you have worked, could be someone in research laboratory knows etc.)
3. Clarify what you need to know and have a sheet with blanks for the four elements of your COPEs question: client type, course of action or treatment, alternate course of action, what the practitioner wants to accomplish with the clients.
4. Call the practitioner and explain that:
 - a. You are a student in a Methods of Research course;
 - b. The course is interesting because it allows you to try to answer a question that matters to you; (include why you are interested in the practitioners' work);
 - c. State that you need question about a treatment method's Effectiveness that lists the client type, treatment method, alternate method (or none), and a client outcome.
 - d. State that you will **only plan an evaluation study**, and will not ask that any data be collected.
 - e. State that, in exchange for helping you pose an Effectiveness question, you will give them a copy of your papers that include a literature review regarding their question, a copy of the best article regarding their question, and the best outcome measure that you can find.
 - f. Try to get more than one Effectiveness question that includes all four elements listed above. We will discuss these questions in our methods laboratory to clarify it and to help you pick one.
 - g. Try to get some idea from your practitioner about why the question matters, how many clients are affected, what their lives are like, why it matters to know the answer to the question.
 - h. Whatever happens, thank the practitioner for their time. If they give you a question or two, tell them that you will probably need to contact them at least once later to further clarify their question and to report in on what you are finding and to better plan, **but not execute**, a study.

Some final advice

Practitioners are not used to posing questions about their work. Expect them to have no idea of how to pose a well-built question (unless you run into someone who has had our research course before). Expect that they will confuse a question of Effectiveness with a question of Risk, Assessment, Description and Qualitative formats. Expect that they will ask incredibly vague questions that mix features of multiple questions. Expect that they will confuse questions of value (what is fair, good, and right based on an underlying belief about what should be) and a question of fact (posed in "if-then" format asking if we do **X** (treatment) then will **Y** (Outcome) result? Our job is to solicit only one kind of question, one that concerns Effectiveness. Do be careful to let them know that you will not be collecting any data, only that you will be planning

how they might do a study. Tell them that your paper might help them to improve their practice and maybe get support for funding.

Do pay attention to example papers that I will show you, ones that demonstrate how previous students begin with the practitioner's question, clarified a COPES question, then included a research question specific to your study, an hypothesis, design, and measures. We will be discussing and clarifying COPES questions in laboratory.

Do make sure that the question **comes from the practitioner**, not from yourself, though you may share an interest in what concerns the practitioner.

Worksheet for Soliciting a COPES Question from a Helping Professional

Client Type (Client Problem, Identifying Information e.g. age, sex, race,)	Action Taken (Treatment)	Alternate Action (e.g. Different Treatment, No Treatment, Same Treatment Always Used In Agency)	What You Want to Accomplish (Valued Client Outcome)
Example Question			
If juvenile offenders served by a juvenile probation officer	Are exposed to a delinquency prevention program like the Scared Straight Program at Rahway Prison in NJ	Or are not exposed to this program	Then will the former have a lower rate of delinquency and less severe delinquency?
Elements in Your Practitioner's Question			
Question 1			
Question 2			
Based on Sackett, D. L., Richardson, W. S., Rosenberg, W., Y Haynes, R. B. (1997). <i>Evidence-based medicine: How to practice & teach EBM</i> . New York: Churchill Livingstone, Table 1.2 p. 27.			

EVIDENCE-BASED PRACTICE EXERCISE:
Department of Social Work
University of Wisconsin—Eau Claire
Sprint 2005

PROCEDURE: Read this assignment once to get the general picture. This assignment will walk you through the steps of EBP, step-by-step if you will just begin at the beginning and work your way through it.

BACKGROUND Central ideas from: Gibbs, L. (2003). *Evidence-based practice for the helping professions: A practical guide with integrated multimedia*. Pacific Grove, CA: Brooks/Cole, Wadsworth, Thomson Learning.

There is a tremendous difference between education and indoctrination! One approach to educating field interns shows you how to pose your own questions and to answer them, so you can become an independent and life-long learner. Indoctrination involves teaching knowledge and skills as a collection of truths. We favor education. No instructor can begin to imagine all of the problems that you will face during your career, but we as your instructors can help you to prepare for the future by teaching you to pose vital questions that matter to your client and then how to answer these questions. This is the central idea of your evidence-based practice (EBP) assignment: you care enough about your clients to want to answer vital practice-related questions as a learning process, not by blindly following tradition and authority.

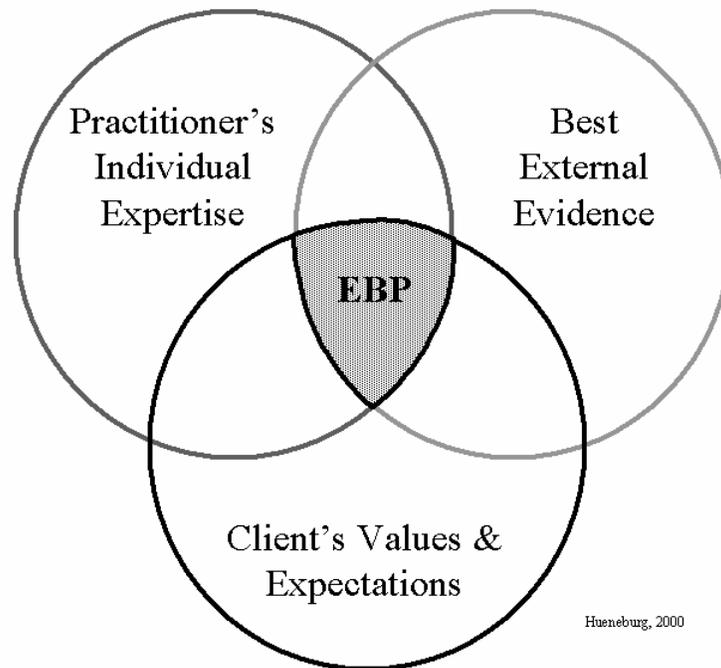
You can count on my help to guide you through your EBP assignment. It's a new approach to making judgments and decisions in practice. You'll have my complete support. I have set office hours from 2:40-to 4:00 every Wednesday exclusively for field students (I have not published them) to continue helping you as an individual or in a small group with any fieldwork concern. During this time slot I will work with you for at least an hour individually early in the semester to get you started on the EBP assignment, then probably for another half hour later in about the 9th and 10th weeks. Please feel free to call me at 836-3638 at work or 835-3042 at home. You'll need two or three COPES questions (see below) before I can meet with you.

I am placing the forms for my book, *Evidence-Based Practice for the Helping Professions*, on the W drive. Just look under SW, then lgibbs, then FormsforEBP.

DEFINITION OF EVIDENCE-BASED PRACTICE

Placing the client's benefits first, evidence-based practitioners adopt a process of lifelong learning that involves continually posing specific questions of direct practical importance to clients, searching objectively and efficiently for the current best evidence relative to each question, and taking appropriate action guided by evidence (Gibbs, 2003, p. 6). Evidence-Based Practice involves the intersect in the diagram below, but it begins and ends with clients (Sackett, et al, 1997, p. 2).

Figure 1: BP Is the Point of Intersect Between Three Factors



Adapted with permission from R. B. Haynes, D. L. Sackett, J. M. Gray, et al. (1996).
Transferring evidence from research into practice: 1. The role of clinical care research
evidence in clinical decisions. *ACP Journal Club*, 125, A14-A16.

PURPOSE FOR THIS ASSIGNMENT

This assignment provides a brief overview of Evidence-Based Practice and will help you to integrate EBP into your work.

ETHICAL ISSUES REGARDING THIS ASSIGNMENT

Recall that in *Methods of Social Work Research* we discussed Institutional Review Board criteria for getting permission from human subjects who might participate in research. Generally, such permission involved minimizing risks, describing any risks to subjects, avoiding harm, getting informed consent, and the right to not participate in the research without prejudice. Also, recall that we discussed the spirit of evidence-based practice that requires us to work in *collaboration* with our clients as partners.

What we are doing in practice will often require that we collect data, just as a matter of good practice. Such data collection is a part of quality practice or quality assurance and expected of good practice (e.g. collecting data about client progress in treatment, sharing with them results of assessment measures). As such, this does not constitute research, but still, it is absolutely essential that we discuss the purpose of our data collection, what will be involved in its collection, the right not to participate or withdraw participation, and what we intend to do with the data we collect from our clients. Taking care in such matters is just good practice and

expected from practitioners who respect their clients and want to integrate data collection into their services. In such cases, we will not require a cover letter and consent form. The distinction here is between quality practice and research, two different things. See: website

Oh the other hand, we are required to use a cover letter and informed consent where we are working with vulnerable populations (e.g. hospital patients, school children), where it is agency policy, and where the data collected from clients may be published. In this case, we will need to work out a cover letter and consent form specific to your situation. We will discuss each individual EBP project relative to these issues.

GENERAL SUGGESTIONS FOR DOING THIS ASSIGNMENT

This exercise will guide you in step-by-step fashion; so you can walk sequentially through each EBP step, but you still need to thoroughly read this assignment to follow its steps. This exercise requires that you write a brief paper (no more than a total of ten pages) summarizing what you did at each step, and it also requires that you make a brief formal presentation that summarizes your paper (Practice Action Summary) to your seminar mates.

Step 1: Become motivated to apply evidence-based practice (All steps but step 1 from Sackett et al., 1997)

Knowing our students as I do, I have absolutely no doubt about what motivates you--you want to help others. Recall that caring is a necessary but not a sufficient condition to helping. It helps to remember how fallible our own personal experience can be as a guide to practice. Note how:

- The history of the helping professions provides many examples of iatrogenic (harmful) effects produced inadvertently by caring practitioners across the helping professions. Chapter 1 in *Scientific Reasoning for Social Workers* (Gibbs, 1991) summarizes evidence that the following treatment programs have produced iatrogenic effects: the Juvenile Awareness delinquency prevention program that led to higher delinquency levels among program participants than among controls, retinopathy of prematurity (complete or partial blindness) caused by excessive oxygen levels for premature babies, encounter groups where suicide levels were higher among encounter group participants, and aged persons whose death rate was substantially higher among those treated by intensive social casework than among those not getting intensive casework. Apparently, a motivation to help others is a necessary condition, but not a sufficient one.
- We need to exercise caution when hearing of new methods to help clients. Practitioners in the helping professions often try new methods, gain experience with these methods, then teach others to use the methods—all without a systematic trial! Use caution when hearing the argument: “It worked for me.” For example, in our own profession many uncritically adopted recovered memory therapy, only to find that external evidence demonstrated that “...recovered memory therapy may be harmful to clients” (Stocks, 1998, p. 423). Neurosurgeons, who had years of experience with intracrainial/extracrainial surgery to prevent strokes, were shocked to learn of a randomized trial demonstrating that strokes and death were higher among patients who got their surgery than among controls (Vertosick, 1998).
- We need to guard against the “soft-hearted therefore soft-headed” fallacy. The fallacy states that one cannot be empathic, warm-hearted, and skillful interpersonally

and be an analytical, scientific and rational thinker. Of course we can be both! Evidence-Based Practitioners are both as shown in the intersect in Figure 1.

This exercise represents advances to come.

- **Did you know that there are new internet circuits that can transmit the text of the entire Library of Congress in seven seconds? (Wall Street Journal, March 28, 2000) We have formulated this new exercise because we anticipate an information revolution that will sweep the helping professions. Never before has such good evidence become so quickly accessible through the WWW, CD-ROMs, and databases. We want you to leave your training with us ready to participate as a leader in this information revolution.**

Step 2: To define a problem, pose a COPES question in collaboration with your field instructor that fits into one of the five categories below. (The client can be an individual, group or community). *Accomplish this step by sharing the “Getting an Early Start” Letter from the back of this assignment with your field instructor; read the letter together carefully, and follow the letter’s instructions.*

This assignment requires that you start with a question. We are looking for COPES questions (Brown, Sept. 16, 1999). COPES questions have these three features: Client Oriented, Practical, and Evidence Search. Client Oriented implies that the question concerns a matter of central importance to the welfare of your client. Practical means that the problem has some chance of resolution by means that are within your power to manipulate. Evidence Search implies that your question states the following: your client type clearly, the action that you might take, an alternate course of action, and your intended result (See Table 1). Questions that clearly state these four dimensions are called “well-built” questions (Armstrong, 1999), because they are so specifically stated that they can guide your electronic search for an answer.

The examples immediately below define each question type. These examples are a bit unspecific, like ones that you may generate initially. They can be made more specific by defining their four elements (see Table 1).

Five types of questions typically emerge in practice. They include:

1. **Effectiveness Questions** concern how well an intervention is expected to work for a particular type of client, for example, “What method, if any, will most effectively forestall the onset of Alzheimer’s Disease among nursing home residents like those here at Lakeside?” “Which method has been most effective as a way to help interdisciplinary teams in schools to work effectively together?” “If workers are periodically tested for drug use at manufacturing companies among those insured by our health maintenance organization, is it likely that accident rates will be lower than where drug testing is not done?”
2. **Risk/Prognosis Questions**, concern the likelihood that a particular type of client will do something undesirable within a given period of time, for example, “How likely is it that a client like mine here in child protective services, who has already abused her daughter, will reabuse her daughter within the next year?” “What is the likelihood that a sex offender like Joe will commit a new offense within the two

years of his parole?” “ If I place sexually abused siblings in the same adoptive home, is it likely that they will continue the abuse on each other?”

3. **Description of Problem Frequency Questions**, concern what is generally true of a group of similar clients regarding their needs for services, or regarding their perception of their services, for example, “What are the most frequent reasons for readmission to a hospital for aged persons discharged to community living with community support services?”
4. **Description Qualitative Questions**, concern in-depth efforts to understand the nature of client experiences, perceptions, and understanding, for example, for women newly diagnosed with HIV/AIDS what do they say are their greatest immediate practical concerns?”
5. **Assessment Questions** concern standardized measures or procedures to determine whether a client has a particular type of problem or strength, for example, “What is the quickest, easiest to administer, least obtrusive, and most accurate assessment tool to see whether a client has alcoholism here at Sacred Heart Hospital?” What is the best instrument to screen for depression among the elderly at Syversen Lutheran Home?”
6. **Prevention Questions** concern the most effective way to prevent the initial occurrence of some problem or undesirable event, for example, “Which is the most effective way to prevent teenage pregnancy among students at South Middle School? Which is the most effective way to teach kindergartners and first graders not to wander off with someone not authorized to take the child from school? What is the most effective way to prevent HIV infection among low income residents of Dade County?”

The questions above were stated generally. A COPES question contains four elements.

Table 1: Five Question Types and Four Elements in Well-Built Questions

	Client Type and Problem	What You Might Do	Alternate Course of Action	What You Want to Accomplish
Across: Four Elements In a Well-Built Question <hr/> Down: Five Question Types	How would I describe a group of clients of similar type. Be specific.	Apply a treatment; act to prevent a problem; measure to assess a problem; survey clients; screen clients to assess risk.	What is the main alternative other than in the box to the left?	Outcome of treatment or prevention? Valid measure? Accurate Risk Estimation, Prevented Behavior, Accurate Estimation of Need
Example Evaluation Q. (See above)	If disoriented aged persons who reside in a nursing home	Are given Reality Orientation Therapy	Or Validation Therapy	Which will result in Better Orientation to Time, Place, Person?
Example Prevention Q. (See above)	If sexually active high school students at high risk for pregnancy	Are exposed to Baby-Think-It-Over	Or to Didactic Material on Proper Use of Birth Control Methods	Then will the former have Fewer Pregnancies During an Academic Year, Knowledge of Birth Control Methods?
Example Assessment Q. (See above)	If aged residents of a nursing home who may be depressed or may have Alzheimer's Disease or Dementia	Are administered Depression Screening Tests	Or a Short Mental Status Examination Tests	Which will measure will be the Briefest, Most Inexpensive, Valid and Reliable Screening Test to Discriminate Between Depression and Dementia?
Example Description Q. (See above)	If family members of persons diagnosed with	And receive a Short Client Satisfaction Questionnaire		Which will the clients list as their area of Areas Of

	Aphasia meet in a support group	of all support group participants		Greatest and Least Satisfaction?
Example Risk Q. (See above)	If crisis line callers to a battered women shelter	Are administered a risk assessment scale by telephone	Or we rely on practical judgment unaided by a risk assessment scale	Then will the Risk Assessment Scale have higher reliability and predictive validity?
Determine Your Question Type, Then Insert Elements of Your Question in Spaces on Right				
This table follows Sackett, D. L., Richardson, W. S., Rosenberg, W., & Haynes, R. B. (1997). <u>Evidence-based Medicine: How to practice and teach EBM</u>. New York: Churchill Livingstone.				

Meet during the first two weeks of the semester with your field instructor to pose a vital question that matters to the welfare of clients. State your questions in boxes like those across the bottom of Table 1. Use Box 1. to give background for your COPES question. Your COPES question should concern:

- A problem of importance to your client,
- a common problem that you will likely encounter again,
- something that has a chance of resolution if you do something to help
- a problem that interests you,
- a problem that you can pose as a well-formulated question that will be specific enough to guide your electronic search ,
- a problem that will allow you to make some observations yourself by collecting very simple data

Box 1: Your Question Regarding Practice

Background: How did your question arise? (Hopefully, but not always, this will include input from the client(s) as your partner in the helping process).
Why is it worth answering?
State your question specifically (including client type, course of action, alternate course of action, and intended result, according to bottom columns in Table 1).
Question Type (See definitions above): Effectiveness [] Risk/Prognosis [] Description of Problem Frequency [] Assessment [] Prevention []
Your best answer before searching for external evidence.
Resources Used (e.g., field instructor, intuition, reading)
Your answer, based on a review of external research (fill this in after completing Step 5).
This table follows Sackett, D. L., Richardson, W. S., Rosenberg, W., & Haynes, R. B. (1997). <u>Evidence-based Medicine: How to practice and teach EBM</u> . New York: Churchill Livingstone.

Before the 3rd week of classes, **please pose several well-built questions before coming to see me for our appointment. I will help you. Once we have posed a well-built COPES question, go on to step 3.**

Step 3: Track down the best evidence with which to answer your question: Get Informed Regarding the Problem:

In 1980 we did a randomized control trial in our fieldwork class to evaluate on-line searching methods compared with the old hard cover abstract’s method for locating useful evaluation studies—you remember the DOPE study? Fieldwork students, as subjects in the study, posed a question regarding the effectiveness of an intervention for their particular client type and setting. We found no statistically significant difference across the groups regarding number of studies found, quality of studies, nor appropriateness of studies regarding each student’s evaluation question (Gibbs & Johnson, 1983). The one difference concerned time spent to locate studies—on-line methods took far less time! This savings in time, and ability to search from your office, makes evidence-based practice possible. Do the following in Step 3:

- A) State your well-built COPES question as specifically as you can with a mind to searching for evidence regarding it—underlined key terms in the question can each top a column of synonyms in Box 4 below.
- B) Decide which databases, World Wide Web addresses, or CD-ROMs will most likely contain evidence regarding your question. Box 2 lists a few sources, but we recommend consulting your reference librarian for more. You may access the book’s website: <http://www.uwec.edu/Academic/curric/lgibbs/evidhome.htm>. Its User Name is *swresearch* and Password is *copestquest*. Its domain in NT is UWEC, otherwise LUCY. Please do not share this prepublication address with anyone. In March of 2004 the address will be www.uwec.edu/lgibbs
- C) Develop a search strategy. You might consult the thesaurus for a database to locate synonyms for terms in your question. We recommend descriptors in Box 3 to find the best evidence for each question type. If a search yields no hits with these descriptors, construct new less-rigorous searches using some of the most appropriate search terms.
- D) Systematically conduct your search for the best evidence regarding your question. Keep a Search Log in Box 4.

Box 3: A Few of the Many Useful Databases for Practitioners (See the website for more <http://www.uwec.edu/Academic/curric/lgibbs/evidhome.htm> then enter *swresearch* and then enter *copestquest* or consult my book’s website at <http://www.evidence.brookscoble.com/>

Database	Contents
Social Work Abstracts (SWAB)	Slected abstracts of use to Social Work practitioners
Psych.Lit.	Psychological Literature regarding abnormal behavior, learning theory, therapy
Medline	Medical diagnosis and therapy (accessible for free on the World Wide Web under: pubmed)

ERIC	Documents on microfiche regarding issues in education (accessible for free on the World Wide Web under: ericir.syr.edu/)
Science, Social Science and Humanities Citation Index	These are useful for tracking an author whose work contains a given topic.
HaPI	CD-ROM in Library containing measures.
Cochrane Database	Contains answers to 663 questions from primarily health and mental health.
CINAHL	Nursing and Allied Health
World Wide Web Content	WWW Addresses
Social Work	http://www.nyu.edu/socialwork/wwwrsw/
Medicine	Pubmed http://www.obgyn.net/medline.htm

Box 4: Some Useful Descriptors for Locating Better Evidence Regarding Five Questions (The website above has MOLES that will work for you in your search. You can cut and paste these MOLES onto the website's worksheet. MOLES are also listed on Page 99 of our EBP book.)

Table 4-3: Methodology Orienting Locators for an Evidence Search (MOLES) (Gibbs, 2003)

<i>Effectiveness Questions</i>	<i>Prevention Questions</i>	<i>Risk/Prognosis Questions</i>	<i>Assessment Questions</i>	<i>Description Questions (With Qualitative Studies a Subset)</i>	<i>Syntheses of Studies (These work primarily with Effectiveness and Prevention Questions but may work with others.)</i>
<i>Random*</i> OR <i>Controlled Clinical trial*</i> OR <i>Control group*</i> OR <i>Evaluation stud*</i> OR <i>Study design</i> OR <i>Statistical*</i> <i>Significan*</i> OR <i>Double-blind</i> OR <i>Placebo</i>	<i>(Random*</i> OR <i>Controlled Clinical trial*</i> OR <i>Control Group*</i> OR <i>Evaluation Stud*</i> OR <i>Study Design</i> OR <i>Statistical*</i> <i>Significan*</i> OR <i>Double Blind</i> OR <i>Placebo)</i> AND <i>Prevent*</i>	<i>(Risk Assessment</i> OR <i>Predictive Validity</i> OR <i>Predictive Value</i> <i>Receiver Operat*</i> OR <i>ROC</i> OR <i>Sensitivity</i> OR <i>Specificity</i> OR <i>False positive*</i> OR <i>False negative*</i> OR <i>Prognos*)</i> AND <i>Predict*</i>	<i>(inter-rater</i> OR <i>Inter-observer</i> OR <i>True positive*</i> OR <i>Specificity</i> OR <i>False Positive*</i> OR <i>False negative*</i> OR <i>Sensitivitiy</i> OR <i>predict*</i> OR <i>Receiver operat*</i> OR <i>ROC)</i> AND <i>(assess*</i> OR <i>diagnos*)</i>	<i>(Random*</i> <i>Select*</i> OR <i>Survey</i> OR <i>Representative Sample)</i> AND <i>(Client satisfaction</i> OR <i>Patient satisfaction</i> OR <i>Needs assessment)</i> Qualitative Studies Qualitative Study OR Qualitative Analysis OR Content Analysis OR In Depth Interview* or In-Depth Interview* OR Participant Observation OR Focus Group*	<i>meta-anal*</i> OR <i>meta anal*</i> OR <i>metaanal*</i> OR <i>Systematic Review*</i> OR <i>synthesis of studies</i> OR <i>Study Synthesis</i>
<p><i>Suggestions: The MOLES appear in rough descending order of their utility; so you might start with those at the top and, if you find few references, add more MOLES downwardly with the OR command to enlarge the MOLES set. Also, some of the columns at their bottom include another set connected by the AND command. These additional terms generally mark the topic for their respective question type. MOLES reflect my search experience, ideas from Gibbs (1991), and ideas in McKibbin, Eady and Marks's (1999). PDQ Evidence-based principles and practice Hamilton: B.C. Decker.</i></p>					

* We use the “*” to mark a symbol (possibly different in each database) that means “search for any word that has the root word to the left of the symbol.” For example, prevent* means prevention, preventing, preventable, as well as, prevent. #Such terms are called “methodologic filters” in Evidence-Based Medicine (Sackett et al., 1997, p. 63) and you’re familiar with them as terms to identify studies” in Scientific Reasoning for Social Workers (Gibbs, 1991, p.175)

Search Log

List your client type here _____

List your specific COPES question here

- A. Circle key words in your question above that will help you to limit your search placing these terms in the top space in Box 4 below.
- B. List synonyms in Box 4 below.
- C. Decide on the likely most useful evidence source (database, CD-ROM, WWW address, textbook, Box 2).
- C. Keep a log of your search strategy in Box 6.

Box 5: Search Term Planning

First Circled Word*	Second Circled Word	Third Circled Word	
List Synonyms for Word Above+	List Synonyms for Word Above	List Synonyms for Word Above	Words to find best evidence from Box 3 above.

*Words referred to here are the ones you circled in your question above. You may have fewer words than the spaces allow.

+These synonyms can come from your readings, general knowledge, the database's thesaurus, SW encyclopedia, etc.

Box 6: Record of Search Strategy*

Source (Database, WWW Address, CD- ROM)	Search Terms Connected by OR (i.e. terms in columns of Box 4)		Search Terms Connected by OR	AAN D	Search Terms Connected by OR	Hits & Minutes Spent on Each Search
						Hits___
						Hits___
						Hits___
						Hits___
						Hits___

*You may want to copy this form because searches quickly fill several.

Attached Boxes 1, 4 and 5 to your assignment, and state what you learned from your search:

Some Hints for Searching:

- Start with a general topic and narrow it using a few terms to locate better studies (Box 4) adding more if you are still overwhelmed with too much.
- Keep a careful log of your search so you can avoid wasting time backtracking to document it.
- Print out the best references when you see them and keep them for later reference.
- As you find documents that are right on topic note key terms that identify the topic and use these terms in your searching.
- Consult with me or with reference librarians early so you can get started and done with this assignment.

- You may find nothing or fragmented and very poor evidence. This is a finding! If you keep a careful log of your search this will constitute a fair and competent performance on this step.

Step 4: Assess the best evidence regarding your question to see which is most valid:

Evaluate Alternate Solutions to the Problem: This step implies assessing evidence quality so you can select the most credible source(s) to guide you in Step 5 (Application). In this step, rate the quality of the evidence that you find relative to the criteria that are specific to your question type. I suggest that you read only the chapter of *Evidence-Based Practice for the Helping Professions* that applies directly to your question type (i.e. if your question concerns risk, then read Chapter 7 concerning how to use the CARE form for rating risk assessment procedures). I suggest that you synthesize evidence in tabular form (e.g. for effectiveness studies, Author, Description of Study, QSRF criteria, Total Quality Points, Number Needed to Treat). I have placed all six (QSRF, QSRF-P, META, CARE, QSQ and SRF) forms that accompany our book on the W drive. If you read the chapter that pertains to evidence corresponding to your type of question, then you can get the forms directly from the W drive.

Step 5: Apply the results of your assessment of the evidence to your practice: Make an Effort to Solve the Problem

All of your efforts in this exercise have been directed to what you will do in this Step 5. If you do not actually make a conscious decision about your practice at this point and take action based on that decision, the effort on this exercise has not been useful. The exception to this is that your search may have discovered that your proposed intervention may be harmful, not effective, or so poorly evaluated that the literature does not guide you. When faced with weak evidence, it makes no sense to take action based on it.

Step 5 concerns what you actually have done in your daily work as a result of the evidence you found. To accomplish Step 5, record the answer to your question, based on what you have found, in the bottom cell of Box 1. Then describe what you have done. Typical efforts to take action are listed in the middle column of Box 7 below.

Box 7 Five Question Types and Corresponding Actions by Evaluative Data Type

Type of Question	Possible Action (Step 5)	Relevant Evaluative Data (Step 6)
<u>Effectiveness</u>	<ul style="list-style-type: none"> • Try an intervention to solve a problem. 	Collect data to see if the problem improves.
Risk/Prognosis	<ul style="list-style-type: none"> • Administer a risk assessment scale. • Make a list of risk factors for future reference in your decision making. • Examine the content of your agency's screening test for risk factors. 	<ul style="list-style-type: none"> • Make a prediction that clients will behave in a particular way in the future; make observations to see if you were right. • Collect data among your clients to see whether they fit the profile of high or lower risk. • Identify high risk clients, intervene with them, and see if the risk behavior happens.
Description of Problem Frequency/ Client Satisfaction	Find out what clients think of their services or what they need from your agency.	<ul style="list-style-type: none"> • Conduct a small survey of client need. • Conduct a small survey of client satisfaction.
Assessment	<ul style="list-style-type: none"> • Apply a rapid assessment instrument. • Conduct an assessment interview including indicators from your literature review. • Conduct an assessment interview following your agency's format. 	<ul style="list-style-type: none"> • See if your assessment instrument agrees with experts' judgments. • See if another worker can independently agree on the problem. • See if one form of assessment agrees with another regarding client problem. • See if your assessments of a problem agree independently with clients'.
Prevention	<ul style="list-style-type: none"> • Take action to prevent a problem. 	Collect data about whether the event you sought to prevent happened.

Step 6: Evaluate the outcome of your practice against performance criteria: Evaluate Your Problem's Solution (Chapter 9 in our EBP book will help you here.)

The far right column of Box 7 above describes the type of data that you might collect specific to each question type. Make observations to judge whether your action was effective, or whether your observations were accurate. You might record what happened as a result of your effort to solve the problem? Did the client's behavior change? Did the group achieve its objective. Did the community's problem diminish? This may include a small single-subject or multiple baseline study. You might make a record of client behaviors over time. You might make records of how clients answered Assessment and Risk/Prognosis questions. You might do a small survey. Be specific. I will help you to think through this section. This section does not need to be an extensive data collection problem.

Step 7: Teach others to do EBP. Write up what you do. Here are a few suggestions:

- Share this exercise from start to finish with others in your agency.
- Advocate that your agency get access to the WWW, to databases, and to CD-ROMs.
- Help your field instructor to get a computer account with the university by having them fill out a form that we get from Computing and Networking Services called "University of Wisconsin—Eau Claire, Application for Use of Computing Resources (for off campus applicants only).
- Exchange your final presentation, Practice Action Summaries (PAS), to learn from each other.
- Encourage your fellow workers to construct PAS summaries regarding their central questions regarding practice.
- Conduct an in service training session in your agency around your PAS.
- Demonstrate searching on the WWW and on databases to persons in your agency. You can get a data projector and a loaner computer for you to use in your demonstration by calling 836-2651.

TIMETABLE FOR ACTIVITIES

Here’s a list of What to Do and When to Do It:

Who	What to Do	When to Be Done
Block Interns		
	Steps 1 and 2	February 16rh
	Steps 3 Through 7	April 20st
	Hand In Your EBP Paper Including All Steps	Same Date as Other Sections
	Practice Action Summary PAS Prepared	April 20
	PAS Presented	May 4 or May 11

Suggested Outline for Your Evidence-Based Practice Paper and For Your Practice Action Summary (Take no more than seven pages of your EBP paper for Steps 1-4, and no more than three more pages for Steps 5-7, a total of no more than ten pages of text, (tables and forms not counted.)

I. Motivation: Become motivated to apply evidence-based practice.

Background (i.e. your agency’s mission, how you got interested in the question, what’s at stake for your clients, potential costs and benefits)

Other Reasons for Your Interest in This Topic.

- Question’s Importance
- Numbers of Clients Affected
- Alternative Actions Possible
- Possible Consequences of Actions Taken

II. The Question/Problem: Convert your information needs into a brief, specific, answerable question (Define the problem).

Client Description (Pick One)

Individual Client

- Client’s Name (We Suggest Pseudonym to Protect Confidentiality)
- Their Age
- Their Gender
- Their Occupation/Social Role
- Brief Social History
- When they Began Service at Agency
- Reason for Referral or Problem Leading to Service
- Brief History of Problem Including Efforts to Alleviate It

- How Client Perceives Problem
- How You Perceive Problem
- Client Strengths
- Client Resources
- Group as Client
 - Number in Group
 - Members' Ages
 - Members' Gender
 - Members' Occupations/Social Roles
 - Brief Background of Each Group Member
 - Group's Purpose
 - History of Group's Efforts
 - Group Members' Perceptions of Problem
- Community as Client
 - Approximate Number in Community and Limits of Its Area
 - Community's Perception of Problem
 - Demographic Characteristics (Race, Ethnicity, Age Distribution)
 - Livelihood of Community (Major Industry and Occupations)
 - Organizational Structure
 - Political Climate
 - Perceptions of Community Members Regarding Problem
 - Resources Related to Problem

Your Question

Importance for Your Client

(Topics in Box 1 can help you to organize your thinking here. Be sure to state your question type and why it's so.)

III. The Evidence: Track down the best evidence with which to answer your question (Get informed regarding the problem).

- Restatement of Your Question
- What You Want to Know
- Key Words In Your Question
- Synonyms for Key Words In our Question
- Tabular Summary of Your Search
 - Sources Searched (Databases, WWW Addresses, Search Engines, CD-ROMs)
 - Terms Searched (Including Topic and MOLES (Methodologic Filters))
 - Number of Hits In Each
- Summary of Impressions Regarding Search Effectiveness

IV. Best Evidence Assess the best evidence regarding your question to see if its conclusions are valid Evaluate Alternate Solutions to the Problem.

Restate Your Question Type
List Criteria for Good Evidence
Compare Sources Relative to Criteria for Good Evidence
(Table?)
State Which Sources are Most Credible and Why
State Implications for Practice (What Evidence Suggests You
Do)

- V. Application: Apply the results of your assessment of the evidence to your practice. Make an Effort to Solve the Problem (Most have trouble with this part of the Exercise; so this part tended to distinguish most between the high scoring and average papers.)

What did you actually do?

What did others do as a result of your review?

- VI. Results: Evaluate the outcome of your practice against performance criteria: See if the Problem Has Been Solved.

Was the evidence just too weak to take any action? (If so why?)

Did the Client Behave Differently?

Did Others Observe Changes?

Did the Client Report a Difference?

Were You Able to Gather Objective Data?

How did the client answer your questions in an Assessment or Risk/Prognosis interview.

- VII. Teaching Others: Teach others to do EBP

Did You Share This Exercise?

Did You Advocate That Your Agency Get WWW, Databases, etc.?

Did You Help Your Field Instructor to Get a Computer Account?

Did You Exchange PASs?

Did You Conduct an In Service Around Your PAS?

Did You Demonstrate Searching On the WWW? Databases?

GRADING

Most (75%) of your grade on the Evidence-Based Practice Exercise will be based on your paper, as outlined above; the rest of your grade (25%) will be based on a brief (probably about 20 minutes) Practice Action Summary (PAS) that will be presented to your seminar mates.

Regarding the paper, here are some suggestions:

1. Get interested in a question and get started early.

2. Plan your paper with the PAS in mind, possibly including brief tables (Boxes that summarize evidence quality, search history, and visual summaries to help your audience understand the problem and how your evidence applies).
3. The single weakest area in the past has been Application.
4. Get excited about this assignment because it teaches you to use revolutionary technology in your practice.

Regarding the PAS, here are some suggestions:

1. Dress formally for your presentation, because you are learning how to do a professional presentation before your peers, a skill you'll need later.
2. About half have used Power Point very effectively, some in combination with overheads that can be made in the Department. I'll help with both.
3. Practice giving your PAS before a patient roommate, and time yourself—not using allotted time, or running out of time, were the most vexing problems last semester.
4. Do provide an outline as your initial visual and explain how its points apply to your client as an overview.
5. Your evidence may single out the single best source, or it may include a tabular summary of the best evidence and its implications, ideally both.

Final Examination

Team 1: Kristin, Mariah, Anna, Jennifer, Brad, Matt, Mark (go to HHH218)

Team 2: Todd, Nate, Brittany, Bethany, Shannon, Elizabeth, Sarah (Enter the elevator at the library; go to 2nd floor; cross the lounge area to the North; take a right at the Interactive Media Center sign; go round the desk to Room L2110)

Team 3: Marla, Christine, Brian, Jessica, Becky, Abbie (Come with me to the ITECH Room Old Library 1108 (ask at the front desk of General Access Computer Lab. OL1108 to go to the ITECH room)

Have one person record the group's work on this sheet for all making sure all sign the examination sheet, and bring the final examination to HHH218 where I will arrive as soon as I can get there.

Background: This examination tests your thinking and skills regarding two immensely complex social problems: how to intervene in the lives of juveniles who may be headed for delinquency and a career of crime, and how to prevent alcohol misuse in young people. You have rudimentary knowledge of how to pose and answer questions on the spot, as the need arises, to make a well-reasoned judgment and decision. Do apply the process that we have studied in class to make your recommendations. I know you are just fledglings at the process, so you will need to work as a team to accomplish your task for maximum success. Do work through the problem in sequence answering each question in turn. This examination is as real-to-life as I can make it to test your thinking. Good luck!

(Please work as a group on just one question at a time. Budget your time and spend about half the time on each question. You have one hour, no more.)

Question #1 Delinquency Prevention (30 minutes only, no more)

Assume that you have taken a job as a probation-parole officer working with juvenile clients who have been adjudicated by a local juvenile court. Your supervisor at your agency has asked you for your opinion about whether juveniles, who are served by your probation-parole agency, should participate in a delinquency prevention program patterned after a the one in the popular video titled: "Scared Straight." This video shows an innovative program put on by "lifers" serving a life sentence that is intended to literally scare the delinquents straight.

1. What is your COPES question here?

2. Please record your search plan here including terms to mark key concepts and to include appropriate MOLES.

3. Please record, if necessary on additional sheets, the most successful search histories or history for your group including the databases searched, terms applied, and numbers of hits, to locate your best document.

4. How credible is your best source relative to criteria on the appropriate evidence rating form? Please include a brief paragraph to summarize your assessment of the evidence quality.

5. What would you tell your supervisor about trying a program like the Scared Straight program on your clients to head off their delinquency careers?

6. Can you calculate (NNT) Number Needed to Treat for any studies?

Question #2 (30 minutes only, no more!)

Several students in our class will be entering teaching as a profession. My hat's off to them. Let's assume that one of you has taught for several years, and you now find yourself the principal of a middle school and high school that includes grades 7 through 12. You are concerned about alcohol misuse among young people through direct experience with several tragic situations. One group of students experimenting with vodka, and one drank a fatal dose of the stuff. Others among your precious student body will not live to graduate, because they were involved in another mishap related to alcohol misuse. You wonder what primary prevention program (primary means preventing the initial occurrence of a problem) would most effectively prevent alcohol misuse among young people. You have been given the mandate by the school board that you must try something. What approach would you try?

7. What is your COPES question here?

8. Please record your search plan here including terms to mark key concepts and to include appropriate MOLES.

9. Please record, if necessary on additional sheets, the most successful search histories or history for your group including the databases searched, terms applied, and numbers of hits, to locate your best document.

10. How credible is your best source relative to criteria on the appropriate evidence rating form? Please include a brief paragraph to summarize your assessment of the evidence quality.

11. What treatment does this source support most? Can you come up with an NNT?

Please sign your names below.

Letter to Solicit Questions from Agency

To:

From: Len Gibbs, Ph.D.
Department of Social Work
University of Wisconsin—Eau Claire
Eau Claire, WI 54701
Telephone: 836-3638

Re: Practical Applications of Evidence-Based Practice (New UWEC Special Topics Course)
Gibbs 2003 (lgibbs@uwec.edu)

Date: August 24, 2003

Thank you for being willing to help one student in the EBP course to pose a question of importance to your practice. This letter will help you to get the picture of what the student will be asking for when he or she calls you in early September.

I am excited about the new course as a way to improve practice, and I think students see its potential too. Though I limited it to 15, majors from social work, psychology, special education, communication disorders, pre-medicine, nursing, public relations and health care administration have signed up.

I think we can give you something in return. There's an advance coming to the helping professions that you have probably heard about called "evidence-based practice". The engine behind EBP is electronic access to information, in real time, as problems in practice arise. Evidence-based practice refers to the integration of the current best evidence, your practical experience, and the wishes of the client. EBP starts with a well-built question.

Good questions are essential to practicing and to teaching evidence-based practice. Please help your student to pose a few well-built questions during the first two weeks of September. This will allow your student maximum time to pursue an answer for you (they have signed in blood to get back to you with their answer). Your student will call you soon.

We are looking for questions that can augment and extend what we already do that might, if answered accurately, allow us to give better services to a wide number of clients. We are looking for questions that have central importance for your clients—here the term "clients" refers to individuals, small groups of clients, and communities. We are looking for Client Oriented Practical Evidence Search (COPES) questions. COPES questions are Client-Oriented because they begin and end with the client. They concern a problem that, if answered, will have Practical significance by leading us to do something that really might make client's lives better. COPES questions are so specifically stated that they can guide an Evidence Search. A well formulated COPES question meets the general criteria listed below (after Sackett et al., 1997):

- The question concerns a real problem of importance to your clients.
- The question concerns a problem that affects as large a number of clients as possible, so knowing the answer would likely affect many clients.
- The question concerns a problem that will likely arise again with other clients.

- The question is likely answerable by searching current best evidence in the literature.
- The question concerns something of practical significance that you can do something about.
- The question is posed specifically enough to guide an electronic search for its answer (see attached example grid).

COPES questions fall generally into five types regardless of the helping profession involved. These five questions, and an example of each, appear below as follows:

Effectiveness Questions concern how well an intervention is expected to work for a particular client type. For example, for an eighty year-old man with mild to moderate dementia and a history of MI and a stenosis (narrowing) of his left internal carotid artery, would carotid endarterectomy or expectant medicine (aspirin) result a lower probability of stroke and death?

Prevention Questions concern the best way to prevent the initial occurrence of some problem or undesirable event. For example, will introducing the baby-think-it-over to high risk high school students prevent pregnancy among those so introduced compared with those not so introduced?

Assessment Questions concern standardized measures or procedures to determine whether a client has a particular problem? For example, what is the cheapest, fastest to administer, most reliable, and most valid measure to determine whether an aged resident of a nursing home has symptoms of depression?

Description of Client Need or Client Satisfaction Questions concern what is generally true of a group of clients regarding their needs for services or their perception of the quality of their services. For example, among hospital patients about to be discharged, will a brief discharge interview or a brief discharge interview plus a discharge packet (that explains further treatment options and procedures), will patients who get the latter be more satisfied with their treatment on a post discharge survey?

Risk Questions concern the likelihood that a particular type of client will do something undesirable or have an undesirable consequence within a given period of time. For example, for sex offenders undergoing a pre-sentence investigation, which sex offender risk scale will have the highest positive predictive value and inter-rater reliability?

Helping your student caller to pose a question involves determining which of the question types fits and then stating four key elements in the question to make the question specific. Stating all four elements in the question will greatly facilitate posing a specific well-built question (Sackett, 1997, p.27). These four elements appear in the four right columns of the table below and demonstrate how one might state the key elements for the five question types listed above. Please pose two questions if you can.

Thank you!

	Client Type and Problem	What You Might Do	Alternate Course of Action	What You Want to Accomplish
Across: Four Elements In a Well-Formulated Question Down: Five Question Types	<i>How would I describe a group of clients of similar type. Be specific.</i>	<i>Apply a treatment; act to prevent a problem; measure to assess a problem; survey clients; screen clients to assess risk.</i>	<i>What is the main alternative other than in the box to the left?</i>	<i>Outcome of treatment or prevention? Valid measure? Accurate Risk Estimation, Prevented Behavior, Accurate Estimation of Need</i>
Example Evaluation Q. (See above)	<i>If disoriented aged persons who reside in a nursing home</i>	<i>Are given Reality Orientation Therapy</i>	<i>Or Validation Therapy</i>	<i>Which will result in Better Orientation to Time, Place, Person?</i>
Example Prevention Q. (See above)	<i>If sexually active black adolescents in the inner city who are at risk of HIV infection</i>	<i>Who are exposed to peer led prevention methods</i>	<i>Or to didactic prevention methods</i>	<i>Then which method will result in less self-reported risky sexual behavior?</i>
Example Assessment Q. (See above)	<i>For persons who have traveled to infection areas for SARS</i>	<i>Will diagnostic method A</i>	<i>Or diagnostic method B</i>	<i>Which will be the fastest, least costly, most valid (highest positive predictive value relative to definitive electron microscope test)?</i>
Example Description Q. (See above)	<i>If family members of persons diagnosed with Aphasia meet in a support group</i>	<i>And receive a Short Client Satisfaction Questionnaire of all support group participants</i>		<i>Which will the clients list as their area of Areas Of Greatest and Least Satisfaction?</i>
Example Risk Q. (See above)	<i>For convicted sex offenders being evaluated for sentencing</i>	<i>(RRASOR)</i>	<i>Or the Minnesota Sex Offender Screening Tool (Mn-SOST)</i>	<i>Be the most reliable, rapid, and most valid (highest positive predictive value relative to later behavior)?</i>
Determine Your Question Type, Then Insert Elements of Your Question in Spaces on Right				
<i>This table follows Sackett, D. L., Richardson, W. S., Rosenberg, W., & Haynes, R. B. (1997). <u>Evidence-based Medicine: How to practice and teach EBM</u>. New York: Churchill Livingstone.</i>				

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