

Evaluation II. Design and Methods (172:282) Spring 2006

Description

The focus of this 3-credit course is on research designs and methodology for evaluation of public health programs. The course includes causality, evaluation theory, threats to validity, selection and comparison of research designs, sample selection and size, survey and scale construction, quantitative and qualitative data collection and analysis, data management, and reporting. The course is based on a case study of an infant mortality prevention program. The lectures, readings, and lab assignments all build towards the final project, which will be a report of evaluation findings. The class format is mainly lecture and group discussion, with three sessions devoted to hands-on work with SPSS and public use data sets (e.g., Census) in the student computing lab.

This course is primarily intended for advanced graduate-level students in public health; however, it may also be of interest to students in social work, education, criminal justice, medicine, psychology, and other related fields.

Prerequisites include Evaluation I (172.181), biostatistics or another statistics course, or the consent of the instructor.

Location & Time

Tuesdays 4-6:40 pm
Classroom: 1135 MERF
Computing lab: E178 GH

Course objectives

The expected outcomes of this course are that students will be able to:

- ✓ Understand the role of theory in evaluation;
- ✓ Describe and understand the prerequisites for causality;
- ✓ Describe alternative research designs, including experimental and quasi-experimental approaches, along with their strengths and weaknesses;
- ✓ Understand the four types of validity and be able to discuss threats to validity and how to control for them;
- ✓ Analyze evaluation data using SPSS and interpret findings;
- ✓ Understand the relevance of cultural competence in designing and conducting evaluation research; and
- ✓ Consider more complex multiple-method designs that include alternative approaches.

Instructors & teaching assistant contact info and office hours

Instructor

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noon

You are welcome to meet with either the instructor or the TA anytime during the semester for any reason. Please stop by our offices at Westlawn or call or email for an appointment – email is usually preferable. Kellee McCrory is the Iowa Center for Evaluation Research coordinator. If you cannot reach Anne, please contact Kellee directly to set up an appointment at 384-4231 or kellee-mccrory@uiowa.edu.

Class format

Each class will cover a distinct topic or set of topics. Students are expected to read the assigned materials prior to class. Typically, class will begin with a lecture on the topic that complements the readings and, when possible, incorporate real-world examples. During the discussion portion of the class, small student groups will be assigned to prepare and ask questions about the readings to stimulate a colloquium on the day's topic. Fifteen minutes will be set aside at the end of each class to field questions about the lab assignments, journaling, or other related issues. Three classes will be held in the student computing lab – E178 GH – 1-2 weeks prior to the due date for the lab assignments for SPSS instruction and questions.

Evaluation of student performance

The four basic course requirements and their weightings are:

- ✓ Class discussion (25%).—Thorough preparation including attendance, completing and reflecting on readings, and consistent, high-quality participation, including leading the discussion and conducting brief presentations on readings as noted in syllabus.
- ✓ Lab assignments (30%).—3 lab assignments.

- ✓ Journal (15%).—Students will keep a journal in which they will record their thinking about the readings, labs, discussions, and other aspects of the course.
- ✓ Final project (30%)

Grades will be letter grades (A, B, C, D, and F), following University procedures.

Texts and materials

Three required texts will be used along with additional journal articles; these texts are available at Iowa Book, journal articles will be provided. Iowa Book is located at 8 South Clinton Street, Iowa City; you can check availability at www.iowabook.com; click on *textbooks* and then on *on-campus courses*.

- ✓ Windsor, R.; Clark, N.; Boyd, N.R.; and Goodman, R. (2003). Evaluation of Health Promotion, Health Education, and Disease Prevention Programs. Boston: McGraw-Hill.
- ✓ Shadish, W.; Cook, T.; and Campbell, D. (2002) Experimental & Quasi-Experimental Designs for Generalized Causal Inference. Boston: Houghton-Mifflin.
- ✓ Norusis, Marija. (2005) SPSS 13.0 Guide to Data Analysis. Prentice-Hall.

If you have not taken Evaluation I, I strongly recommend that you review one or more of the following:

- ✓ Valente, T. (2002) Evaluating Health Promotion Programs. Oxford: Oxford University Press.
- ✓ Chen, H. (2005). Practical Program Evaluation. Thousand Oaks, CA: Sage Publications.
- ✓ Rossi, P.; Lipsey, M.; and Freeman, H.E. (2004). Evaluation: A Systematic Approach. Seventh Edition. Thousand Oaks, CA: Sage Publications.

These books can be borrowed from the library or my office. All are available from websites such as Amazon or they can be ordered from Iowa Book.

Optional materials include:

- ✓ SPSS, Version 13 (student version). Should be available at the IMU bookstore. You can also order it online through www.academicsuperstore.com. SPSS v. 13 (full version) is also available in the student computing lab located in E176GH.

Additional course materials and resources will be available via ICON (<http://icon.uiowa.edu/index.shtml>) or copies will be provided in class.

Online support

The instructor is using ICON to supplement this course. Please check the website – <http://icon.uiowa.edu/index.shtml> – for updates to the syllabus, class announcements, assignments, and downloadable copies of reading materials.

Guidelines for written assignments

I expect students to complete and submit all assignments on time. If you have a valid reason for being late, please contact the instructor to arrange for an extension. Late assignments are subject to a reduction of 10% of the total points for every day (both weekends and weekdays are counted) they are late. All written assignments should be free of grammatical, stylistic, or typographical errors. All outside references or sources should be properly cited following the American Medical Association (AMA) *Manual of Style*, Ninth Edition (1998). If you are using EndNote, you can set your reference output style to *Journal of the American Medical Association* to automatically format your reference list in accordance with AMA style. Examples of AMA reference style can be found on the web at: <http://healthlinks.washington.edu/hsl/styleguides/ama.html>. The National Library of Medicine (NLM) also lists citation examples at: http://www.nlm.nih.gov/bsd/uniform_requirements.html. Note that the NLM also offers guidelines for citing internet sources; these guidelines can be found at: <http://www.nlm.nih.gov/pubs/formats/internet.pdf>.

Students are expected to follow the highest standards of ethical behavior when completing assignments. Plagiarism or any other form of cheating will result in a failing grade and referral to the College of Public Health.

Please sign an honor pledge on all submitted assignments. The format follows:

“I, [name], hereby declare, upon my word of honor, that I have neither given nor received unauthorized help on this work. (Signature)”

Academic honor and integrity

If there is cause to believe that a student has cheated or plagiarized, the instructor will inform the student in writing and work with the Department Head, and the Associate Dean of Education and Student Affairs to determine the consequences. The complete policy can be referenced in the College of Public Health Student Handbook, which is available online on the Iowa Student Information System (ISIS) website. Information about how plagiarism is defined and guidelines on making proper citations is available in the office of the Community and Behavioral Health Graduate Program Coordinator, E231 GH.

Classroom accessibility & accommodations

Any student with a disability that requires modification in seating, testing, or other class requirement should notify the Student Disability Services office and inform the instructor within the first week of class so that appropriate accommodations can be made. For more information about Student Disability Services, go to: <http://www.uiowa.edu/~sds/>.

Other

This course is given by the College of Public Health. This means that class policies on matters such as requirements, grading, and sanctions for academic dishonesty are governed by the College of Public Health. Students wishing to add or drop this course after the official deadline must receive the approval of the Dean of the College of Public Health. Details of the University policy of cross enrollments may be found at:

<http://www.uiowa.edu/~provost/deos/crossenroll.pdf>.

Session 1, 1/17/06

Topics:

- ✓ Introductions
- ✓ Overview of the course
- ✓ Class format
- ✓ Discussions
- ✓ Labs and final assignment
- ✓ Journaling assignment
- ✓ Academic ethics and expectations
- ✓ Evaluation: Where we are now

Readings:

Windsor, R., et al. Chapter 1, pp. 1-35, "Introduction to Evaluation."

Alexander, G. and Kogan, M. (2005). Editorial: The expanding role of MCH epidemiologists: Evolving job description, tasks and skill areas, and sources of training support. *Maternal and Child Health Journal*. 9(2):121-123. Available on ICON website.

Alexander, G. and Petersen, D. (2004). Editorial: MCH needs assessment capacity shows ongoing improvement; but, meager MCH evaluation capacity may impede performance. *Maternal and Child Health Journal*. 8(2):103-105. Available on ICON website.

Peersman, G., Rugg, D. (2004). Intervention research and program evaluation: The need to move beyond monitoring. *New Directions for Evaluation*. 103(Fall):141-158. Available on ICON website.

Patton, M.Q. (2004). A microcosm of the global challenges facing the field: Commentary on HIV/AIDS monitoring and evaluation. *New Directions for Evaluation*. 103(Fall):163-171. Available on ICON website.

Class Session 2, 1/24/06

Topic: Feminist theory and evaluation research

Required readings:

From *New Directions for Evaluation*. 2002:96. Special issue on feminist evaluation; Available on ICON website.

Seigert, D. and Brisolaro, S. Editor's notes, pp. 1-2.

Sielbeck-Bowen KA, Brisolaro S, Seigart D, Tischler C, Whitmore E.

Exploring feminist evaluation: The ground from which we rise. Pp. 3-8.

Pillow, W. Gender matters: Feminist research in educational evaluation. Pp. 9-26.

Hood, D.W., Cassaro, D. Feminist evaluation and the inclusion of difference. Pp. 27-40.

Patton, MQ. Feminist, yes, but is it evaluation? Pp. 97-108.

Sielbeck-Brown, K., Brisolaro, S., Seigart, D., Tischler, C., and Whitmore, E. Beginning the Conversation. Pp. 109-113.

Wang, C., Pies, C. (2004). Family, maternal, and child health through photovoice. *Maternal and Child Health Journal*. 8(2):95-102.

Additional readings (choose one):

Ward, K. Reflections on a job done: Well? Pp. 41-56.

Beardsley, R.M., Miller, M.H. Revisioning the process: A case study in feminist program evaluation. Pp. 57-70.

Truman, C. Doing feminist evaluation with men: Achieving objectivity in a sexual health needs assessment. Pp. 71-82.

Bamberger, M., Podems, D. Feminist evaluation in the international development context. Pp. 83-96.

Class Session 3, 1/31/06

Topics:

- ✓ Perinatal health: terms and definitions
- ✓ Prenatal care – is it effective?
- ✓ Measurement issues

Readings:

Windsor, R., et al. Chapter 3, pp. 79-130, “Measurement in Evaluation.”

Reichman, N.E.; Teitler, J.O. (2005). Timing of enhanced prenatal care and birth outcomes in New Jersey’s HealthStart Program. *Maternal and Child Health Journal* 9(2):151-158. [Available on ICON website.](#)

MacDorman, M.; Rowley, D.; Iyasu, S.; Kiely, J.; Gardner, P.; and Davis, M. (1994). Infant mortality. In *From Data to Action: CDC's Public Health Surveillance for Women, Infants, and Children*. Maternal & Child Health Monograph. Pp. 231-251. [Available on ICON website.](#)

Misra DP, Guyer B. (1998). Benefits and limitations of prenatal care: from counting visits to measuring content. *JAMA*. May 27;279(20):1661-2. [Available on ICON website.](#)

Strobino, D.; O’Campo, P.; Schoendorf, K. (1995). A strategic framework for infant mortality reduction: Implications for Healthy Start. *Milbank Quarterly*. 73(4):507-533. [Available on ICON website.](#)

Class Session 4, 2/7/06

Topics:

- ✓ Experimentation and causality
- ✓ Validity and threats to validity

Guest speaker:

Ginger Yang, PhD, Assistant Professor, Department of Community & Behavioral Health.

Readings:

Windsor, R., et al. Chapter 6, pp. 215-228, “Formative and Impact Evaluations.”

Shadish, Cook & Campbell, Ch. 1-3, pp. 1-102.

Valente, T. (2002) Evaluating Health Promotion Programs. Oxford: Oxford University Press. Chapter 6, "Study Design," pp. 87-107. Available on ICON website.

Marks HM. (2003). Rigorous uncertainty: Why RA Fisher is important. *International Journal of Epidemiology*. 12(6):932-937. Available on ICON website.

Krieger, N. (1994). Epidemiology and the web of causation: Has anyone seen the spider? *Social Science & Medicine*. 39(7):887-903. Available on ICON website.

Class Session 5, 2/14/06

Topics:

- ✓ Participatory and empowerment evaluation
- ✓ Appreciative inquiry

Readings:

Litt IF. Research with, not on, adolescents: Community-based participatory research. *Journal of Adolescent Health*. 2003; 33:315-316. – Available on ICON website.

McAllister CL, Green BL, Terry MA, Herman V, Mulvey L. Parents, practitioners, and researchers: Community-based participatory research with Early Head Start. *American Journal of Public Health*. 2003;93(10):1672-1679 – Available on ICON website.

Coghlan, A., Preskill, H., Catsambas, T. An overview of appreciative inquiry in evaluation. *New Directions for Evaluation*. 2003;100:5-22.– Available on ICON website.

Jacobsgaard M. Using appreciative inquiry to evaluate project activities of a nongovernmental organization supporting victims of trauma in Sri Lanka. *New Directions for Evaluation*. 2003;100:53-62.– Available on ICON website.

Patton MQ. Inquiry into appreciative evaluation. *New Directions for Evaluation*. 2003;100:85-98.– Available on ICON website.

Class Session 6, 2/21/06

Lab #1, "Describing the data"

Meet at computing lab, E178 GH.

Topics:

- ✓ Review: levels of measurement, types of variables, measures of central tendency, descriptive statistics
- ✓ Statistical tests commonly used in evaluation

Readings:

Shadish, Cook & Campbell, ch. 4-5.

Norusis, Ch. 1-2 (review); ch. 4-6

Class Session 7, 2/28/06

Topics:

- ✓ Quasi-experimental designs
- ✓ Quasi-experiments with time-series designs

Readings:

Windsor, R., et al. Chapter 6, pp. 230-262, "Formative and Impact Evaluations."

Shadish, Cook & Campbell, Ch. 6-8.

Bracken, M. (1984). Design and conduct of randomized clinical trials in perinatal research. In *Perinatal Epidemiology*. New York: Oxford University Press, pp. 397-422. Available on ICON website.

Handler, A. (2004) Thoughts about the national evaluation of FIMR: Strategies for evaluating population-based MCH interventions. *Maternal & Child Health Journal* Special Issue: Fetal and Infant Mortality Review: Historical Foundations, Evaluation Findings, and Future Directions (Theme Editor: Arden Handler, DrPH). 8(4): 191-194. Available on ICON website.

Strobino, D.; Misra, D.; Grason, H. (2004). The FIMR Evaluation: Objectives, Concepts, Frameworks, and Methods. *Maternal & Child Health Journal* Special Issue: Fetal and Infant Mortality Review: Historical Foundations, Evaluation Findings, and Future Directions (Theme Editor: Arden Handler, DrPH). 8(4): 205-215. Available on ICON website.

Misra, D.; Grason, H.; Liao, M.; Strobino, D.; McDonnel, K.; Allston, A. (2004). The Nationwide Evaluation of Fetal and Infant Mortality Review (FIMR)

Programs: Development and Implementation of Recommendations and Conduct of Essential Maternal and Child Health Services by FIMR Programs. *Maternal & Child Health Journal* Special Issue: Fetal and Infant Mortality Review: Historical Foundations, Evaluation Findings, and Future Directions (Theme Editor: Arden Handler, DrPH). 8(4): 231-238. [Available on ICON website.](#)

Class Session 8, 3/7/06

Topics:

- ✓ Community-level health indicators
- ✓ Using Census data
- ✓ BNIA
- ✓ FACITS

Topic 1: Lab #2, "Census data." -- Meet at computing lab, E178 GH.

Lab #1 is due.

3/15/05 SPRING BREAK

Class Session 9, 3/14/06

Topics:

- ✓ Exploring qualitative data in evaluation research

Guest:

Kellee McCrory, MPH, Coordinator, Iowa Center for Evaluation Research

Windsor, R., et al. Chapter 5, pp. 175-214, "Qualitative Evaluation."

Aronson, R.; Wallis, A.; O'Campo, P.; Whitehead, T.; Shafer, P. (In review). Ethnographically informed community evaluation: A framework and approach to evaluate multi-faceted community-based interventions. [Available on ICON website.](#)

Submit evaluation journal summary with brief (2-3 minute) oral summary.

Class Session 10, 3/21/06

Topic:

- ✓ Outcome analysis

Readings:

Valente, ch. 11-13. Available on ICON website.

Norusis, ch. 19-21.

Lab #2 due.

Class Session 11, 3/28/06

Topic:

Cost analysis

Readings:

Windsor, ch. 7, "Cost Evaluation," pp. 264-292.

Class Session 12, 4/4/06

Topics:

- ✓ Evaluating comprehensive community change: the *Making Connections* initiative.
- ✓ Theory of change.

Guest speaker: Tom Kelly, MPH, Evaluation Director, Annie E. Casey Foundation.

Readings:

Annie E. Casey Foundation. (1997). *Evaluating Comprehensive Community Change*. Baltimore, MD: Annie E. Casey Foundation. Available on ICON website.

Organizational Research Services. (2004). *Theory of Change. A Practical Tool for Action, Results and Learning.* Available on ICON website.

Chen, H. (2005). Practical Program Evaluation. Thousand Oaks, CA: Sage Publications. Chapter 2, "A Conceptual Framework of Program Theory for Practitioners," pp. 15-44. Available on ICON website.

Chen, H. (2005). Practical Program Evaluation. Thousand Oaks, CA: Sage

Publications. Chapter 10, "Theory-Driven Outcome Evaluation," pp. 231-266.
Available on ICON website.

Class Session 13, 4/11/06

Topic:

- ✓ Des Moines Healthy Start "reverse site visit"

Guest speakers:

Jen Van Liew, Executive Director, Visiting Nurse Services, Des Moines
Kari Lebeda Townsend, Project Director, Des Moines Healthy Start

Readings:

Kristoff, N.J. (2005). Health Care? Ask Cuba. *New York Times*, 1/12/05.
Available on ICON website.

Tandon, D.; Parillo, K.M.; Jenkins, C.; Duggan, A. 2005. Formative evaluation of home visitors' role in addressing poor mental health, domestic violence, and substance abuse among low-income pregnant and parenting women. *Maternal and Child Health Journal*. (Advance publication online.)
Available on ICON website.

Devaney, B.; Howell, E.; McCormick, M. (2001). Case management: At the heart of Healthy Start. *Issue Brief No.6*. Mathematic Public Policy Research, Inc.
Available on ICON website.

Harrington, M; Foot, B. (2001). Healthy Start: Health education plays a key role in local efforts. *Issue Brief No.7*. Mathematic Public Policy Research, Inc.
Available on ICON website.

Davaney, B.; Howell, E.; McCormick, M.; and Moreno, L. (2000). *Reducing Infant Mortality: Lessons Learned from Healthy Start. Final Report*. (Executive Summary). Princeton, NJ: Mathematica Public Policy Research, Inc. Available on ICON website.

Resources:

Healthy Start Association (<http://www.healthystartassoc.org/>)
Mathematica Public Policy Research, Inc. (www.mathematica-mpr.com)

Class Session 14, 4/18/06

Lab 3, "Measuring and reporting outcomes" – Meet at student computing lab, E178 GH.

Class Session 15, 4/25/06

Topic:

Ethical questions in evaluation research

Guests: J. Nicholls Eastmond, PhD, Utah State University, Department of Instructional Technology and his graduate students

Lab #3 is due.

5/2/06

Finals week – no class.

Journals due by 4 pm.

Final project due by 4 pm.

Based on:

Guba, Egon. Journal writing in evaluation. (1989). In Mertens, D.M. *Creative Ideas for Teaching Evaluation: Activities, Assignments and Resources*. Boston: Kluwer Academic Publishers.

Objectives and Overview

This project is a journal-writing activity designed to summarize how your ideas are developing about evaluation research. The overall idea is that the journals will exhibit “progressive subjectivism” – that is, successive entries should be more sophisticated and informed than earlier ones. You should think of yourself as an anthropologist studying a land in which an activity totally foreign to your culture – evaluation – occurs on a day-to-day basis. Your task is to grab hold of the “meaning and spirit” of that culture.

Procedures

Your journal should be maintained on a class-to-class basis. That is, there should be an entry for every class session, and preferably an entry related to each set of readings. This assignment begins with the first class session.

Use either a bound, lined journal notebook or a word processing file to maintain your journal. If you are interested, we can set up a ‘blog’ account for you that would allow you to make entries from any computer with internet access.

For each class, create a dated entry that summarizes as well as possible your present thoughts and ideas about evaluation. Each new entry should update what you have written so far, noting any changes in your thinking, new ideas, and any principles which you believe should guide evaluation.

About halfway through the semester (3/14/06), you will prepare a statement that is no longer than 5 pages (1.5 spacing) that summarizes your thoughts at that point. Each student will present *briefly* (about 2 minutes) on “where your head is” about evaluation.

At the completion of the course (5/2/06, 4 pm), you will submit your journal along with a second statement (no more than 5 pages with 1.5 spacing) and a one-page assessment of that statement. The second statement should summarize your journal from the first entry through to the last (i.e., not just the second half). Your one-page assessment of your journal should use two assessment criteria that you develop yourself. Such criteria might include: (1) overall change and growth evidenced in your entries, (2) introduction of outside experiences, (3) integration of materials, (4) continuity of key themes. PLEASE NOTE: This assessment is not meant to be of the judgmental variety – the assessment is meant to help you think critically about your journal and how it provides evidence of your growth during the course. For example, if you use

criteria #4 above, you might talk about recurring themes in your journal entries (or even discuss wide variation in themes and the possibility that you shifted topics often – this is not necessarily a bad thing). Think of this as a critique or even a review.

It is essential that you begin this assignment at once and work on it faithfully. If you have questions or problems, please raise these in class so that everyone can benefit.

Final assignment – Report on Evaluation and Findings

Topic/content: The purpose of this article will be to report on your findings from the class case study evaluation of Des Moines Healthy Start. Use information and your notes from the class on 2/14, the data and analyses that were part of all three labs, class readings on Healthy Start and other reproductive health programs, and any other information you can find on the program, the population, the context, etc., from the literature or other sources.

Format: Manuscript-length paper following *American Journal of Public Health (AJPH)* format. The manuscript should be similar in style, substance, and format to an article in *AJPH*'s "Research and Practice" section – that is, about 3,500 words with a 120-word abstract and containing tables, etc., as appropriate. Go to www.ajph.org and select Instructions for Authors for detailed instructions regarding style and editing. There are several examples of evaluation articles from recent issues of AJPH on the Blackboard website; they are in the Readings section and are listed as "special readings." In addition, Appendix A in the Windsor et al., textbook reviews the contents of an evaluation report.

Grading: This paper is worth 30% of your total class grade. Points will be scored based on:

- ✓ Brief, clear review of the literature (4 pts);
- ✓ Succinct and clear description of the program and context (4 pts);
- ✓ Explanation of evaluation design and methods and their relevance (why you chose them) (6 pts);
- ✓ Integration of data, both quantitative and qualitative (6 pts);
- ✓ Discussion that covers findings, strengths, limitations, sources of bias, and the why's of what you found and learned (6 pts); and
- ✓ Editorial integrity (i.e., spelling, grammar, style, and adherence to editorial instructions), including visual presentation of charts, tables, and illustrations, and strong writing (4 pts).