

THE SERVICE LEARNING PROJECT  
AN ECU QEP PROGRAM INITIATIVE  
PROPOSAL

Cover Page

<b>Title of Project:</b> "Research as community service": Psy 820 (Research design and statistics) as a service learning course	
<b>Course title, prefix &amp; number that will involve service-learning:</b> Psy 820, sections 1 and 2, typical enrollment 12-18 students per section, offered every fall	
<b>Instructor 1 (will also serve as contact person/Principal Investigator):</b>	
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Signature of Applicant 1:	Date:
Department/Division Head Signature:	Date:
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Email Address:	
Signature of Applicant 2 (if applicable):	Date:
Department/Division Head Signature:	Date:

If there are more than 2 involved instructors, please print a second sheet.

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## 1. Preamble

I am a strong believer in service learning. As I see it, the objective of the education system should be to teach students how to make a contribution to the well-being of humanity. Service learning is an ideal tool for meeting this objective. A good way to learn how to do something is to actually do it. If we want students to make the world a better place, then we have to actually go with them into the world and help them do things.

The “thing” that I do is research. Although I am trained as a psychologist, my specialty is research design and statistics. My primary interest in coming to ECU is to teach courses in research design. Is it possible that “research” and “community service” can go together? Is there such a thing as “research as community service”?

The answer to these questions is unequivocally yes. In a typical research design course, the students work on a research project that emphasizes the concepts covered in the class. It is only a short extension of that idea to have the students work on a research project that helps some sort of organization, preferably an organization with altruistic and benevolent goals. I call this organization the “community partner.” At another institution, I developed a successful formula for research design classes wherein the class as a whole works on a research project in conjunction with a community partner (see below item #4 for a description of some of the previous projects).

Typically, I meet with the community partner months before the project begins, and we formulate research questions that the partner needs answered that are relevant to their mission. The partner comes to class at the beginning of the semester and meets with the students to discuss the project and to start building a relationship with the students. Once armed with a suitable research question, I then guide the students through the process of designing a project, collecting the data, analyzing the data, and making a final presentation and report—and all of these steps happen concurrently with textbook material. The community partners are involved in the project because they have to provide us with access to the people they serve, and the students prepare a final presentation and report for the partner.

Students gain an academic understanding of the community problem by completing a literature search and reading articles about the project. And they also gain a much more humanistic, first-person appreciation for the problem by interviewing the clients of the community partner. And academically, the students are able to see the immediate and direct application of the concepts that we discuss in class. I feel that the educational experience is greatly enhanced by bridging the academic and humanistic domains of real world problems.

## 2. Description of the Project

- a. Course involved. I plan to transform my course Psy 820 (Research Design and Statistics) into a service learning course. Please note that this is a graduate level course required of all students entering the Psychology Department’s graduate programs. Typical enrollment in the two sections of this course is 25-30 students, it is offered every Fall semester.
- b. Instructors. There is only one instructor involved.
- c. Community problem. The nature of the problem that is worked on will vary each year. Currently, I have developed a working relationship with Foothills Community Action Partnership, a local agency that has a surprisingly broad array of programs designed to assist low-income people. (Their website is <http://www.foothillscap.org/>, and please see their services offered at <http://www.foothillscap.org/Services.htm>.) Since they have only rudimentary data collection and program evaluation skills, practically every program that they administer can provide an opportunity for community service.
- d. Service activity. The service activity involved in this course is of a slightly different nature than that of a quintessential service learning course. This course is a continuation of the undergraduate courses in which students learn how to do academic research projects. Thus, the objectives of the course focus on teaching students how to do research, and by far the best way to learn how to do research is to actually engage in real research projects. As such, the “learning” part of service learning is that the students will be able to learn about fundamentals and practical aspects of

research. The “service” part of service learning is that the project that we will work on will be with a community service provider (the community partner), and as such, we will help that provider gather information that is relevant to their mission. (See below point #5 for a discussion of assessment of student learning outcomes.)

- e. Reflection activities. Both informal and formal reflection activities will be built into the course. In terms of informal reflection, class time will include scheduled time to discuss academic readings related to the community problem, share experiences from working with the community partner and their clients, discuss the results of the data analysis, and interact in putting together the final paper and presentations. In terms of formal reflection, students will be required to 1) write brief synopses on the articles that they read, 2) write a formal research report according to the format of the American Psychological Association (which has very specific requirements for structure, format, and content of research reports and is the leading format utilized in psychology), and 3) participate in an in-class poster session and make a part of the final presentation to the community partner. In addition, students may be offered the opportunity to present the research at a conference or to co-author a paper for submission to a scholarly journal.
- f. Sample syllabus. See attached.
- g. Plan of action table. See attached.

3. Intent to engage in scholarly activity. I intend to use this research opportunity as a way to advance my research agenda. I have used this model of “research as community service” in the past, and I have already published one article (with a student as co-author) in a peer-reviewed journal.

#### 4. Previous projects

I have already completed several projects along these lines at my previous job in Texas.

- A. We worked with the Williamson County Task Force on the Elderly to do a needs assessment of seniors in our county by interviewing about 60 home-bound citizens.
- B. We did an assessment of what had gone wrong with fundraising efforts of a local church. We survey 1600 church members by mail to assess why the rate of giving to the capital campaign had fallen off abruptly.
- C. We did two surveys for the local community clinic. The first assessment was to try to understand why some of the patients were not signed up for Medicare and Medicaid, and the second assessment was to try to understand how to improve the scheduling system to cut down on missed appointments. For both of these studies, we interviewed patients in the waiting room at the clinic.
- D. We worked with the local human milk bank to determine ways to improve the donor experience and increase donation amount. The milk bank collects human milk from lactating mothers and dispenses it to infants who’s mothers can feed them, mostly premature infants. There is a much greater need for milk than there is a supply, and the milk bank was interested in learning how they could help donors donate more milk.
- E. We worked with the Williamson County Coalition against Underage Drinking to do a community-wide survey of adults’ attitudes and practices toward underage drinking. (The Coalition starts with the assumption that every underage drinker somehow got their alcohol from an adult, be it a parent, friend, store cashier, or chief executive officer of a brewing company.) We administered the survey over the web, collected over 800 responses, and used the results to help focus the Coalition’s efforts on specific educational programs. (For example, most respondents admitted that they do not closely monitor their alcohol supplies and would not know if a small amount was missing; the Coalition chose to start a publicity campaign to get people to be responsible with how they store alcohol in their homes.)

#### 5. Assessment of student learning outcomes

The RFP states that each project should assess five student learning outcomes. Below, I address how each of these outcomes will be assessed. Basically, students in the course are required to contribute

to the research project, to write a formal research report, and present the results in a poster session. These three items are the main forms of assessment with respect to the project.

*Students will demonstrate an understanding of a subject matter and how it applies to real world problems.* In this course, students will develop their research skills and utilize those skills to address a real world problem. I am not sure exactly how students will “demonstrate” this besides being actively involved in the process of doing it.

*Students will demonstrate an appreciation of the complexity of a community problem through synthesis and evaluation of various ideas.* Students will demonstrate this appreciation by doing a literature review and writing a paper about the research that we will do. Both reading the literature and writing the introduction section to a research paper require students to synthesize and evaluate an array of ideas.

*Students will demonstrate oral communication skills through reflective discussions and project presentations.* There will be at least two structured presentations during the semester: we will make a formal presentation to the community partner, and we will have an in-class poster session that imitates sessions at conferences. During class time, we will have opportunities to talk about the project, but I am not sure at this time if these discussions will be formally graded (nor am I sure how I would grade them if they were to be graded).

*Students will demonstrate written communication skills through reflective written assignments.* I do not plan to ask students to keep a journal or a log of their experiences working on the research project. Rather, they will have opportunities to practice written communication skills by working on the rough draft and final versions of the formal paper that is part of the course requirements. This paper is not reflective in the sense that it is an outlet for students’ thoughts on the subject and it is not a vehicle for personal growth in the same way that a journal may be. However, it is an excellent chance for students to develop their written communication skills, especially as we will be learning about using American Psychological Association formatting for the paper.

*Students will demonstrate the basic skills necessary for critical and creative thinking.* In psychology, creativity is often expressed through the ability to develop research designs that test for relationships between important concepts, and critical thinking is expressed through the ability to analyze data and test for these relationships. Students will have opportunities to practice both of these skills in the course of designing the research project, collecting the data, and analyzing it.

## Sample Syllabus

### Psy 820—Statistics and Research Design I (3 credit hours)

#### Instructor

Dr. Richard Osbaldiston (Please call me “Dr. O.” or “Dr. Oz.”)

Office location: 102 Cammack Bldg.

Email: [Richard.Osbaldiston@eku.edu](mailto:Richard.Osbaldiston@eku.edu) (Email is the best way to reach me.)

Phone: 2-3055 or 859-622-3055

Office hours: Tuesday 3:00-5:00, Friday 3:00-5:00, or any other time by appointment.

#### Required Textbooks

1) Jackson, *Research Methods and Statistics, 2 ed.*, Thomson Wadsworth, ISBN 0-534-55660-4.

2) Rosenthal & Rosnow, *Essentials of Behavioral Research: Methods and Data Analysis, 3 ed.*, McGraw-Hill, ISBN 978-0-07-353196-0.

3) Green & Salkind, *Using SPSS for Windows and Macintosh: Analyzing and Understanding Data, 4 ed.*, Pearson Prentice Hall, ISBN 0-13-146597-X.

#### Computer Requirements

- 1) Access to a computer with internet capabilities, especially being able to use PsycInfo data base
- 2) A USB mass storage device
- 3) Frequent access to email

#### Catalog Description

Principles and techniques of scientific observation, control, and analysis specifically oriented to research in psychology. Evaluation of research designs and their implementation in professional settings.

Emphasis on univariate statistical analyses.

#### Course Philosophy and Approach

*EKU's Mission.* The purpose of EKU is to “provide intellectual and cultural opportunities that will develop habits of scholarship and intellectual curiosity, provide a deep understanding of American democracy and the citizen's role in maintaining its strength and vitality, impart an understanding of humans and their aspirations, enable effective and efficient communication, and prepare productive and responsible citizens.” (See <http://www.eku.edu/about/>.) Further, EKU has adopted a Quality Enhancement Plan, and that plan focuses on teaching students the skills of explore, evaluate, expand, and express. These skills are all important components of the research process, and we will practice all of them this semester.

If you were to survey all of the most respected and admired people from history—people like Mother Teresa, Mahatma Gandhi, Martin Luther King Jr., the Dali Lama, Abraham Lincoln—you would find that they all possessed a very singular desire to make the world a better place. They all sensed that there was an inadequacy or an injustice in the world, and they all dedicated their lives to solving that problem. We can follow in the footsteps of these great leaders by also learning how to make a difference in the world. In the course of this semester, we will work on a project that will directly help people who are less fortunate than us—and we will learn the fundamentals of how to do research at the same time.

*Process vs. product.* In most college classes, the text book tells you information and knowledge that other people have already figured out. We can think of this as a *product*. While you can do many things with this product, ultimately, it is of limited usefulness. However, in research classes, you learn how to figure out new things that no one else has ever thought of before. Thus, research is the *process* by which you learn new things. Once you know how to use the process, you can learn anything that you

want. As such, the process of research is unlimited, infinite, boundless. You can figure out anything that you want to know, you are not limited to working with just what other people have already figured out.

Scientific research is currently the most powerful intellectual tool that we have available to us. Given its power, it is important to understand how to do research and how to interpret its results. In this class, we will focus on understanding both non-experimental research (descriptive and correlational research) and experimental research.

*Over-learning.* You have probably already had one or two courses in research methods and statistics. From those courses, you know that you can't just read a research textbook once and understand all the intricacies of design and analysis. To master the process of scientific research, you have to work with the basic principles continuously and apply them in a variety of different ways. This is called "over-learning," that is, you take the same material and go over it several different times, and each time you cover it, you understand it at a new and deeper level.

We're going to apply this idea of over-learning in this course. The first 4 weeks of the semester will be a review of a basic undergraduate research methods course; in fact, we'll read and study an entire undergraduate book. Then we'll spend the rest of the semester looking at all those concepts in greater detail by 1) reading a textbook that discusses the concepts at a much deeper level, 2) looking at how the concepts are utilized in the primary literature, and 3) by doing a research project. If you did well in your undergraduate research class, you might not learn that many more new terms and concepts this semester, but you will have a lot of practice applying what you know and developing a greater understanding of it.

Eastern Kentucky University expects that students will do 2-3 hours of work outside of class for each one hour of class time. As such, you should plan your schedule accordingly so that you can invest this effort in your learning experience.

## **Course Objectives**

EKU has adopted a quality enhancement plan that includes the 4 E's: explore, evaluate, expand, and express. The objective of this course is to give students practice at skills related to these 4 E's.

Explore and expand: Learn how scientific research is the process of exploration. Research is the process with which we explore new topics and expand our knowledge base.

Evaluate: Learn how to evaluate data gathered in research projects. Data are what forms our knowledge of the world around us. We need to know how to evaluate the data in order to understand the world.

Express: An important component of the research process is sharing the results with other people. Being able to express the findings in clear, concise, and useful ways is very important.

## **Specific Skills**

### Research design skills

- Strengths and weaknesses of different types of designs
- Practical design issues (e.g., choosing a sample, creating the materials, administering measures)
- Critical issues in design (e.g., reliability, validity)

### Statistical analysis skills

- Descriptive stats (measures of central tendency and spread)
- Confidence intervals and effect sizes
- Correct use of statistical procedures
- Reliability
- Correlation (Pearson and Point biserial)
- Analysis of variance

### Computer skills

- Using Excel to compute descriptive stats, generate graphs and charts
- Using SPSS to compute descriptive stats, generate graphs and charts, manipulate data, compute inferential stats

### Humanistic skills

- Learn about a social problem
- Build relationships with people who are working on that problem
- Understand what you can do to make a difference in the world

### **Course Requirements and Grading System**

Daily homework: Practically every day of the semester, there will be some sort of written work to turn in. These assignments may be doing practice problems at the end of the chapters, finding primary literature that is relevant to the topics that we are discussing, or working on the research project. Students may work cooperatively on these assignments (and in some cases, group work will be necessary), but all work turned in should be each student's own effort. Homework is due in class; no late homework will be accepted.

Exams: There will be four exams during the course of the semester. And there will be a final exam given during the regularly-scheduled time for this class. These exams will be closed books and notes.

Project: As a class, we will work together on a research project. The exact details of the project will be announced ahead of time, and the project will consist of doing a literature review, creating the project, collecting data, analyzing data (using SPSS), and writing an APA-formatted paper. This project will be done in conjunction with a community partner that serves people who are less fortunate than we are.

In-class exercises: Occasionally and without prior announcement, there may be short exercises to complete during class. Because of the spontaneous nature of these exercises, there can be no make-ups for students who miss these class periods.

Grades in this course will be computed according to the following weighting scheme:

Daily homework	25%
Exams (4 at 10% each)	40%
Final Exam	10%
Project	20%
In-class exercises	5%

Letter grades will be assigned according to the following scale:

A: 90-100 B: 80-90 C: 70-80 F: below 70

Attendance: Attendance is not an explicit component of your grade. However, students who miss class will not be allowed to turn in their homework after class nor make up the in-class exercises. Students who know in advance that they must miss class may turn in homework before class. Please let the instructor know in advance if you must miss class.

### **Disabilities Statement**

If you are registered with the Office of Services for Individuals with Disabilities, please make an appointment with the course instructor to discuss any academic accommodations you need. If you need academic accommodations and are not registered with the Office of Services for Individuals with Disabilities, please contact the Office directly either in person on the third floor of the Student Services Building, by email at [disserv@eku.edu](mailto:disserv@eku.edu) or by telephone at (859) 622-2933 V/TTY. Upon individual request, this syllabus can be made available in alternative forms.

### **Academic Integrity**

Students are advised that ECU's Academic Integrity policy will be strictly enforced in this course. The Academic Integrity policy is available at [www.academicintegrity.eku.edu](http://www.academicintegrity.eku.edu). Questions regarding the policy may be directed to the Office of Academic Integrity.

## Plan of Action for Psy 820, Fall 2008

### May-August, 2008

Meet with Foothills Community Action Partnership to discuss which of their programs has the greatest need for evaluation and to determine the research question that we will try to answer. A key feature of every research project is access to participants, and the biggest logistical issue that needs to be assessed is will the students be able to complete a reasonable and worthy number of interviews or surveys.

### August, 2008

Members of the Partnership visit the class and meet the students early in the semester. The members tell the students about what the Partnership does, who they serve, and why they need help.

### Late September-early October, 2008

As part of the course requirements, students complete a literature review to understand the problem at a greater level and to determine what other research has been done on the topic. Once the literature review is completed, students design the research project, including determining how to draw the sample, design the measures, and collect the data.

### October, 2008

Students collect the data, usually by administering surveys in face-to-face settings. This work requires them to meet with the clients of the Partnership and acquire a first-person look at who is being served by the Partnership.

### November, 2008

Students analyze the collected data. This step is done in conjunction with learning SPSS, a powerful statistical software program. Learning how to use SPSS is greatly facilitated by the fact that the students have a data set which they designed and collected.

### December, 2008

Students make final presentation to Partnership, either during formal class time or at a board meeting. Students also write final report to be submitted to the Partnership. Interested students can continue to work with the instructor to present the results at a conference or to submit a manuscript for publication in a peer reviewed journal.