PROGRAM PLANNING, EVALUATION AND PROCESS IMPROVEMENT

Anna Foucek Tresidder and Sarah E. Mount, Eastern Washington University

INTRODUCTORY ESSAY

Program Planning, Evaluation and Process Improvement (PPEPI) is a required course for all Master of Public Health (MPH) students enrolled at our medium-sized, regional public university. The student population is diverse with varied representation by age, race, nationality, and a high proportion of first-generation college students. The MPH program is an evening program, constructed with working students in mind. Each class meets once a week for a three-hour block during a 15-week semester. Prerequisites for this course include biostatistics, epidemiology, public health foundations, research methods and health systems.

PPEPI uses a service-learning delivery structure to allow students to work with community partners in applying classroom learning. This accomplishes two things: (a) students gain a better understanding of classroom topics through application, and (b) students gain confidence and competence through communicating and “teaching” those topics to their community partner. There are four distinct actions in the course construct: (a) program theory and logic, (b) developing an evaluation measurement plan, (c) data collection and analysis, and (d) using results for evidence-based decision making about the program.

Students select their community partner program (CPP) during the first three weeks of class by ranking their top three choices from a list provided by the professor. Each CPP fills out an application that describes the program and provides background on the organization. Three weeks into the semester, students will present a logic model to their CPP that demonstrates the theory and logic that the program is based on. Rarely has a CPP thought about how theory or logic pertains to their activities, nor have they created a flow chart that illustrates how resources (inputs), activities, participants, outputs and outcomes are related (WKKF, 2004). During this time, the students will also begin a literature review to investigate similar programs for an assigned annotated bibliography.

After the logic and theory are drawn out, the students utilize the identified outcomes (short-term, mid-term, or long-term) to construct an evaluation matrix. The matrix developed by Gelmon, Tresidder, and Waterbury (2005) connects the outcomes with specific indicators, data collection methods, subjects and timelines. The matrix (Table 1) guides the students to consider the questions and methodologies they are using and if they are most representative of what needs to be measured.
TABLE 1: EVALUATION MATRIX TEMPLATE

<table>
<thead>
<tr>
<th>Core Concepts</th>
<th>Key Indicators</th>
<th>Methods</th>
<th>Sources</th>
<th>Timeline</th>
</tr>
</thead>
<tbody>
<tr>
<td>What are the major</td>
<td>What can we observe or measure</td>
<td>How will we collect</td>
<td>From whom or where will</td>
<td>What frequency will this</td>
</tr>
<tr>
<td>outcomes addressed by</td>
<td>to generate evidence?</td>
<td>the evidence?</td>
<td>we obtain this information?</td>
<td>method be administered?</td>
</tr>
<tr>
<td>the program? (see logic</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>model)</td>
<td></td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

In a semester-based delivery, all groups are able to complete the university IRB process and engage in preliminary data collection and analysis. Student groups move at different paces because the primary objective is to be responsive to the needs of the community partner which can vary in scope. The professor works closely with the groups to provide guidance and consultations throughout the project. The first three deliverables include: a scope of work, logic model and evaluation matrix. Subsequent weekly deliverables are in line with the CPP and are continuously receiving feedback and assessing the best way to move forward, thus the weekly deliverables maybe amended to better meet the needs of the project. Even though the projects vary, the standardized deliverables assure equity in work amongst groups in the class. The professor adjusts workloads if the projects exceed reasonable expectations. Each of the weekly deliverables are submitted in draft form and final versions are a part of the final report. The course is front-loaded but it eases the work load in the latter half of the semester as they are editing more than creating content from scratch.

It is clear early on what the constraints are for the CPP. Often these include money, human resources (expertise), politics, and capacity. Feasibility is considered when assembling and planning for the evaluation, “Are there enough resources to complete all pieces of the evaluation?” The students focus on what they can feasibly complete with the time that is remaining in the semester. Students are reminded to review their logic model and matrix on a weekly basis in order to develop methodologies that best fit the outcomes that the program is trying to measure. Previous knowledge of ethics, methodologies, and analysis is essential for completion of these projects. We review these concepts, but it is assumed that students have completed the prerequisites prior to taking this course.

Drafts of project deliverables are drawn up throughout the semester so that when students give their final presentations in the last two weeks of the semester, much of their work is done. The first week of presentations is reserved for projects that did not engage in primary data collection while groups that collected their own data present the following week. The classroom presentation provides an opportunity to discuss issues and receive feedback from the professor, classmates, and community partner. The group then has 1-2 weeks to integrate helpful feedback and submit their final report. Although this is a semi-public forum, evaluation is not intended to expose or criticize but clarify how improvements can be made and what celebrations should be occurring. Community partner organizations understand that not only do their student groups benefit from this learning, but also by sharing lessons they learned, CPPs can further the learning process for other organizations. No community partners are engaged if services are of a private nature or those receiving services are vulnerable.
Deliverables are due almost every week to keep the groups on track and facilitate communication with the community partner. Peer review is conducted in class and via online portal, which allow the groups to get fresh perspectives on their projects and tap into the experience of our class. After getting peer review feedback and professor feedback, the groups are encouraged to send the deliverables to the community partner for review and feedback. It is understood that the community partner may not have time, but through teaching this course for 15 years they appreciate the updates, even if they cannot respond right away.

The final report is submitted via the online class portal and through VeriCite for a plagiarism check. The use of plagiarism software is not standard in all programs. However, in Public Health it allows students to check their work and correct places where they have not quoted or paraphrased correctly. This course is transparent in its use of VeriCite and it is used as a tool to facilitate communication and learning of proper citation practices. The group must also email the final report to the community partner by the final date. The professor and all group members are cc’d on the email to confirm delivery to the community partner. The community partner will receive a complete report outlining program theory, evaluation plan, instrumentation, analysis (or analysis strategies if there is no time to complete analysis during the class). The report concludes with recommendations, implications, and prioritization of next steps. Community partners are invited to communicate with the professor if questions arise after the course concludes.

This service-learning model benefits students, faculty, community, and the university at large. Students benefit from applying knowledge to real life situations, managing common constraints, and improving their ability to deal with complexity and ambiguity. These qualities are essential in public health practice. The benefits to the faculty include student satisfaction with the course, increased networking and community connections, and new avenues for publication. The community partner receives technical assistance that improves the organization’s sustainability, gains new perspectives and enthusiasm for their work, and the potential for continued relations with students. The University benefits through innovative curriculum delivery, increased student retention in the program, and positive community relationships.

It should be noted that the strong language in this syllabus has developed over 15 years of offering this course. It is important that students understand they and their groups are held accountable to their group and community partner. This is standard in Public Health practice, where a lot is expected in a very short timeframe with minimal resources. Students are supported throughout this process and are often surprised at how much they can accomplish. Each week the group troubleshoots issues that come up. Groups are allotted class time together to plan their own expectations for the week. The professor provides tools, techniques and resources throughout the course that makes these projects doable.

**SYLLABUS: PROGRAM PLANNING, EVALUATION AND PROCESS IMPROVEMENT**

**COURSE DESCRIPTION:**

This course introduces the student to public health planning and evaluation for continuous quality improvement. Congruent with the mission of the Master in Public Health program’s focus on public health
leadership, the course will emphasize the development of practical skills and knowledge needed of leaders responsible for ensuring the quality of the processes, programs and organizations for which they may be responsible for as practicing public health professionals. This course will start by focusing on processes as the building blocks of programs and organization. Students will be introduced to the principles, methods and tools for managing quality in program processes. With a foundation in process improvement principles, students will build upon this knowledge by learning how processes support programs. Students will learn approaches and theories to community health program planning and evaluation and finally, will understand how these approaches can be applied to manage quality across a public health organization and how quality management efforts are applied within voluntary public health accreditation. Through didactic instruction, classroom discussion and practical experience in the field, students will be introduced to both theory and evidence-based strategies to build and continuously manage efficient and effective public health services. Students will learn concepts by applying them to ongoing projects in cooperation with real organizations in the field (3 semester credits hours).

**STUDENT LEARNING OBJECTIVES:**

Upon completion of the course, the student will:

1. **Understand** the theories and concepts of program planning/program evaluation/process improvement as applied in the delivery of public health and social services.

2. **Utilize** root cause analysis, logic modelling, and evaluation matrices to better understand and improve public health programs.
   a. Root-cause analysis is a tool commonly used in public health to understand the casual factors of errors and adverse effects. It is primarily designed to answer 3 questions: what happened, why did it happen, and what can be done to prevent it from happening again?
   b. Logic Models are flow diagrams that link program resources with activities. It aligns activities with outcomes.
   c. Evaluation Matrices build off of the logic model to establish the logistics and details of measurement that will provide appropriate feedback for improvement.

3. **Develop** skills in working with a community partner organization to understand the resources, constraints, and population served and assure evaluation meets the needs of the organization.

4. **Apply** this content in practice by engaging with a community partner and designing a logic model, evaluation framework, methodology, and corresponding instrumentation.

5. **Analyze** data using appropriate mixed methods syntheses of qualitative and quantitative data to establish progress on outcomes.

6. **Improve** skills in working in small teams, interprofessional communication and written and oral communication styles for stakeholder consumption.
7. **Collaborate** with program/organization leadership to gain access to data and participants and follow the IRB process to assure ethical and procedural quality.

**ASSESSMENT:**

The following table breaks down the assessment plan for the PPEPI course. Assignments that are submitted by the groups are noted with (G) and individual assignments with (I).

**TABLE 2: ASSESSMENT BREAKDOWN FOR PPEPI**

<table>
<thead>
<tr>
<th>Component</th>
<th>Week Due</th>
<th>Percent of Grade</th>
<th>Key SLOs</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Introductory Meeting with COMMUNITY PARTNER (G)</td>
<td>2</td>
<td>5%</td>
<td>2,4,6</td>
</tr>
<tr>
<td>B. Scope of Work (G)</td>
<td>3</td>
<td>6%</td>
<td>1,3,7</td>
</tr>
<tr>
<td>C. Logic Model (I)</td>
<td>4</td>
<td>6%</td>
<td>2,3,6</td>
</tr>
<tr>
<td>D. Evaluation Matrix (G)</td>
<td>5</td>
<td>6%</td>
<td>1,3,7</td>
</tr>
<tr>
<td>E. Quantitative Data Collection Instrument (I)</td>
<td>6</td>
<td>6%</td>
<td>3,4,5,7</td>
</tr>
<tr>
<td>F. Qualitative Data Collection Instrument (I)</td>
<td>7</td>
<td>6%</td>
<td>3,4,5,7</td>
</tr>
<tr>
<td>G. IRB Application Due (G)</td>
<td>8</td>
<td>6%</td>
<td>1,3,4,6,7</td>
</tr>
<tr>
<td>H. Annotated Bibliography (I)</td>
<td>9</td>
<td>10%</td>
<td>1,2,4</td>
</tr>
<tr>
<td>I. Report Draft (G)</td>
<td>12</td>
<td>10%</td>
<td>6,7</td>
</tr>
<tr>
<td>J. Final Presentation (G)</td>
<td>15</td>
<td>30%</td>
<td>6,7</td>
</tr>
<tr>
<td>K. Final Report (G)</td>
<td>16</td>
<td>10%</td>
<td>6,7</td>
</tr>
<tr>
<td>L. Peer Review and In-Class Activities</td>
<td>All</td>
<td>5%</td>
<td>3,6,7</td>
</tr>
</tbody>
</table>
Components A-F are graded based on completion with full, half, or no credit given. These are expected to be drafts, but preliminary work needs to be done.

Components G-L are graded using rubrics, expected to be finished, and contain many of the drafts listed above.

**READINGS:**


The university library provides online access to the necessary journals for the literature review and many other sources of secondary data. Students will read articles relevant to their community partner, project, methodology, and participant group throughout the semester.

**COURSE SCHEDULE:**

The following schedule (Table 3) outlines the semester timeline for the course. In the reading sections texts are abbreviated by the following legend: Program evaluation: Principles and practices (NWHF), Health program planning and evaluation: A practical, systematic approach for community health (HPPE), Evaluation strategies for communicating and reporting: Enhancing learning in organizations (ESCR), and Logic Model Development Guide (LMDG).

**Table 3: Course Schedule**

<table>
<thead>
<tr>
<th>Week</th>
<th>Topic</th>
<th>Assignments</th>
</tr>
</thead>
</table>
| 1    | • Introduction to Programs, Evaluation, and Improvement  
       • Syllabus Review  
       • Community Partner Project Introduction | -Select community partner and project  
-Purchase/Download Texts  
-Introduction discussion |
<table>
<thead>
<tr>
<th>Week</th>
<th>Topics</th>
</tr>
</thead>
</table>
| 2    | - Program Development  
      - Understanding Health Problems  
      - Evaluator’s Responsibilities |
|      | - HPPE: Section 1 & 2, Ch. 1-4; Section 6, Ch. 16  
      - Initial meeting with community partner |
| 3    | - Health Program Development and Planning |
|      | - HPPE: Section 3, Ch. 5-6  
      - Kellogg Logic Model Handbook, All  
      - Scope of Work due |
| 4    | - Implementing and Monitoring the Health Program  
      - Understanding process theory  
      - Using budgets and information systems for improvement |
|      | - HPPE: Section 4, Ch. 7-8  
      - Kellogg Logic Model Handbook, All  
      - Logic Model Draft due (group peer review in class)  
      - Start literature review on topics relevant to your community partner project |
| 5    | - Implementing and Monitoring the Health Program (cont.)  
      - Formative and summative evaluation  
      - Quality and fidelity in health programs |
|      | - HPPE: Section 4, Ch. 9-10  
      - Evaluation Matrix Draft due (group peer review in class) |
| 6    | - Outcome and impact evaluation  
      - Planning the intervention  
      - Choosing designs  
      - Sampling designs and data sources |
|      | - HPPE: Section 5, Ch. 11-13  
      - Draft of a Quantitative Instrument due (group peer review in class) |
| 7    | - Outcome and impact evaluation (cont.)  
      - Review of quantitative and qualitative data analysis methods and strategies |
|      | - HPPE: Section 5, Ch. 14-15  
      - Draft of a Qualitative Instrument due (group peer review in class) |
ASSIGNMENTS AND ACTIVITIES:

This course includes classroom lectures, guest presentations, facilitation exercises, group assignments, instructor and student-led interactive discussions of selected articles and topics, student teach-back assignments, concept/mind maps of assigned reading, problem-based learning, and service learning. The principles and methods of evaluation and continuous improvement will be applied across three sections or concept blocks which will also form the basis of the course: public health program planning, evaluation, and continuous quality improvement. The students develop skills in research and evaluation while simultaneously learning about the exciting things that are happening in the community. Nearly every week students will deliver a piece of the final report that will be peer reviewed by classmates. This approach requires a lot of work up front, however, it will ease up once each piece has been drafted. Students are given time in class to workshop deliverables drafts are graded simply for level of completion.
INDIVIDUAL PAPER 1: ANNOTATED BIBLIOGRAPHY

An annotated bibliography is an organizing tool that is helpful when working on a research project. An effective annotated bibliography is used to compile research sources in one location and provide the researcher with quick access to the information contained in each source.

Your annotated bibliography will consist of the sources that you have deemed relevant to your topic and/or question(s) of inquiry. While you may encounter sources that are not relevant or do not fit the scope of your project while researching, for the purposes of this assignment, you will only include the ones that you find useful and relevant. I encourage the use of headings to organize your writing. The format should be as follows:

1. **Start** with an introduction of the topic, question, or issue you chose to investigate. Your introduction should provide context for your annotated bibliography and an overview of what you set out to discover.

2. **For each resource:** Cite the source in proper APA format. The citations should be organized in alphabetical order by author just as in an APA References page. Follow the citation with a brief annotation that summarizes the source (approx. 5-7 sentences). Do not quote from the source, and do not copy and paste the abstract. All of the annotation should be in your own words. In the next paragraph, explain the source’s relevance and importance to your issue.

3. **Write** a conclusion that summarizes your findings and proposes where you might take this line of inquiry next. You will receive a handout with more details on completing the assignment later in the semester.

GROUP PAPER: SERVICE-LEARNING PROJECT:

A major part of your learning in this class will be achieved through the application of theory and concepts to an actual program evaluation project. Throughout this project, you will also participate in service learning -- working with a community organization to develop an evaluation framework which will respond to the organization’s needs and assets and will be of future use to that organization. The objectives of this experience for the students are to:

1. **Demonstrate** knowledge about the program/organization for which the evaluation is being prepared;

2. **Collaborate** with program/organization leadership to identify program objectives, intent of the evaluation, and anticipated outcomes;

3. **Design** a realistic evaluation plan that is compatible with program/organizational assets, needs and resources (including instrumentation, timelines, and analysis suggestions);

4. **Conduct** synthesis in the analysis that outline implications for the results in QA/QI activities; and

5. **Disseminate** the evaluation final report to the program/organization, the professor and the class.
An important aspect of community-based learning is to provide service to the community partner. There are also objectives for the community partner; these are to:

1. **Inform** students about the program/organization;

2. **Meet** with students to identify program objectives, intent of the evaluation, anticipated outcomes, and evaluate final product;

3. **Provide** consultation to students throughout the process as necessary, and provide relevant background information; and

4. **Review** the evaluation plan, report/presentation and offer feedback to the students as necessary.

Other objectives may be defined between the students and the community partner at their initial meeting. The intent of the project may not be to conduct the evaluation, but to design a framework that the community partner can then use at a later date. It is anticipated that students will meet with their community partners at least three times:

- An initial information gathering meeting,

- A meeting to discuss preliminary ideas and collect additional information, and

- A final meeting to present the evaluation plan. It is feasible that the second meeting could be conducted via telephone or web call. Additional contact is often necessary, either by e-mail or telephone. All students in the group must participate in the first meeting with the partner.

A description of the projects will be provided at the first-class session. Students will rank their individual preference for the evaluation projects and I will determine the assignment of teams to the various projects during that class. Each group will receive the CPP contact name, phone number and email address for their project. Within two weeks of the course, each group must have met with their community partner to initiate the evaluation design process and should be prepared to report on this to the entire class. You will receive a handout regarding this initial meeting, it will prompt you on questions to ask or documents that would be helpful in your process.

Each evaluation team will make a brief presentation of their work during week 14 or 15. Each presentation will be up to 20 minutes in length, with 5 minutes of discussion. The presentation should provide a brief overview of the organization and the intent of the evaluation, proposed framework, methodology, and preliminary findings and recommendations. All members of the group must participate in the presentation. You should provide any relevant handouts of your evaluation methodology and instruments to all class members, as these are unreadable on a slide. You should invite your community partner to attend the presentation (this may take the place of the formal presentation to the partner, unless they request a presentation at their organization). We will schedule the timing of the presentations to accommodate your CPP’s availability. Bring a hardcopy for the professor, 3 slides per page, and upload you slides to Canvas.

After your presentation you may wish to make minor changes in your paper prior to submission. One integrated paper should be submitted for each project team. The paper should be typed, double-spaced
(using a 12-point font), proofread for spelling and grammar, and no more than 20 pages in length (appended materials, example evaluation instruments and references are additional to the 20-page limit). Each student will also append a 1-2-page reflection statement on lessons learned from working in the community and in your groups. Students should submit a hardcopy of your paper to the professor as well as submit the paper online through VeriCite on the course Canvas site. Although projects will vary the professor will make every effort to maintain equal workloads amongst class projects. If you have concerns regarding workloads, please consult your professor.

**METHODS OF STUDENT EVALUATION:**

A service-learning class requires students to engage with the work in the course. We will conduct in-class activities and peer-review sessions which provide the credit. Students are expected to have read the assignment prior to class and be prepared to discuss the chapters assigned for each class.

Two papers are required for this class. These papers are to be in APA 6th edition format. All papers are to be submitted into the assignment section using VeriCite in Canvas no later than midnight of the day before the hard copy is due. A writing assessment rubric will be used when assessing your paper. This and other program standard grading rubrics are available on the course Canvas portal. This is included in the file section of canvas. Please review it carefully.

Each paper is to have a minimum of 10 peer reviewed references. The textbook, popular literature, and other sources may be used, cited and referenced in the reference sheet, but they do not count as one of the minimum 10 references.

All assignments are to be submitted via VeriCite through Canvas, unless specified by the professor. A hardcopy is to be turned in at the beginning of class on due date specified, you will bring two hard copies when assignments are due: one for use in class the other for Instructor feedback. Your name, class, class time, and assignment title are to be on each submission. All assignments must be typed, double-spaced using a 12-point font, with standard 1” margins, and proofread for spelling and grammatical accuracy. You are to use APA formatting and citation methods.

Many assignments are peer-reviewed. To utilize class expertise and diversity your work will be reviewed by your classmates. This is a valuable exercise for your group to receive feedback, but also on how to give constructive feedback. For each peer-reviewed assignment criteria will be given as guidance to provide feedback that is constructive and adds value to the product.

**GRADING:**

<table>
<thead>
<tr>
<th>Assignment</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annotated Bibliography Paper</td>
<td>10%</td>
</tr>
<tr>
<td>Final Project, Paper (Draft and Final) and Presentation</td>
<td>50%</td>
</tr>
<tr>
<td>Short Assignments</td>
<td>30%</td>
</tr>
<tr>
<td>(Drafts of logic model, evaluation matrix, and data collection tools of choice, etc.)</td>
<td>10%</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>
COURSE POLICIES:

ACADEMIC INTEGRITY

Students are expected to complete their own work and properly cite works when referenced. All work in final form is submitted through the VeriCite portal to be checked for plagiarism. If plagiarism is detected, the instructor will sort it into one of the following categories, as per university policy.

TECHNOLOGY

There are to be no electronics use in the classroom. If you require a laptop or tablet for note taking, you may make arrangements with the professor. Cell phones are to be turned off during class unless a need is identified to the instructor prior to class. There is to be no text messaging during class. However, if students need to have access to phones or other technology, arrangements can be made with the professor.

ATTENDANCE

The expectation is that students will attend every class. If you are going to miss class an explanation needs to be given to your professor and group members.

ADA ACCOMMODATION POLICY

The following is the university statement and policy for disability accommodations:

Students with disabilities may request reasonable modifications by contacting the disability support services. The University assures equal access to instruction through collaboration between students with disabilities, instructors, and Disability Support Services. “Reasonable” means the University permits no fundamental alterations of academic standards or retroactive modifications. The MPH program is dedicated to student success and will accommodate any reasonable request for accommodation. Communicate with your professor at the start of the semester to discuss options.

FAMILY FRIENDLY CLASSROOM POLICY

Currently, the university does not have a formal policy on children in the classroom. It is left to the discretion of the faculty teaching the course. I believe that students should not have to choose between their education and family. Childcare is not provided at our campus and many of our students are parents, thus I feel it is our responsibility to facilitate parental participation in the classroom. Depending on
classroom technology I may also be possible to stream into the class, consult professor for accessibility available in the classroom. The following are my classroom policies:

1) Breastfeeding infants are welcome to be in class as often as is necessary to support new mothers.
2) Minor illnesses and interruptions in childcare force parents to miss classes to stay home with a child. While this is not meant to be a long-term childcare solution, occasionally bringing a grown child to class in order to cover gaps in care is welcomed by the professor.

3) If your child needs special attention please sit close to the door so that we minimize disruptions in learning for other students.