# ROLE: Curriculum Development, Instructional Design and Technology

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## 1. Name your curriculum development, instructional design and/or technology activity(ies):

1) Complete revision of the 3 quarter Global Health Practice Seminar (GHS 203A,B,C)
2) Revision of the GHS 101 Introduction to Global Health Course

## 2. Your role(s): Describe your role(s) and specifically what you contribute.

1) I worked closely in equal part with the Associate Director of the program to completely revise all three quarters of the MS Global Health Practice Seminar curriculum. We had the assistance of one other faculty member.
2) I assisted the Global Health Pathway director with yearly revision of the GHS 101 curriculum every year. We also had the support of an emeritus faculty member. I would assess myself as having a 25% role (50% PD, 25% emeritus faculty). Other course faculty have subsequently assisted with further course development. I contributed less for the on-line course conversion (about 10%).

## 3. Learners and amount of contact: Describe types, levels and numbers of learners.

1) For 203 we have 38 current learners in the program (previously 38 (2012-2013) and 35 (2011-2012). All students are Masters students. However our learners have a range of previous training backgrounds prior to entering the program varying from BS and BA degrees to other MS/MA and MD/RN/PhD degrees. My direct classroom contact time for this course is 25 sessions of three hours each plus additional office hours and advising time which nears about 100 hours per year.
2) For 101 we have about 30 learners per year, more than half from the School of Nursing and the rest split between the School of Medicine and the School of Pharmacy with an occasional learner from the School of Dentistry.

## 4. Builds on best practice/evidence: Describe your preparation including needs assessment, the use of best practice and evidence where available, your professional development, and/or congruence with national, curriculum, and/or program goals.

1) Needs assessment and best practice GHS 203: we did a review of the previous five years of evaluations for the course, reviewed exist interviews, and reviewed the alumni survey to determine gaps in the curriculum as well as problems with the teaching format. We also assessed ability to meet specific educational objectives for scientific writing, oral communication, and leadership skills among our recent graduates with jobs at UCSF.
2) Needs assessment and best practice GHS 101: we did an extensive review of 20 introductory global health courses and 5 introductory global health topics and compiled the twenty most commonly taught and discussed topics. We shared that list with program and course directors on the Global Health Education Curriculum Listserv to get feedback on rank ordering. Then we assessed local expertise in each of these areas to select 10 topics for our revised course. We organized those into specific content areas based on global health framework (Foundational elements, contextual considerations, determination of the burden of disease, Vulnerable populations, and stakeholders).
3) Professional development- Stanford Teaching Course, Teaching Scholars Program (2008-2009), additional teaching seminars offered by Academy of Medical Educators. I also review the syllabi of other faculty to review objectives and organizational structure.

## 5. Goals and learning objectives: List goals and learning objectives of program. If these are extensive, provide just a few illustrative examples.

The objective of this year-long course is to develop all the skills necessary to develop a Capstone proposal and see it through to completion. The five main proficiencies are: 1) Scientific Writing, 2) Team-based Learning Skills, 3) Professional Development, 4) Presentation Skills and 5) Scientific Process. The learning objectives for the second and third quarter build on those in the first quarter. While extensive, the following are some representative examples:

- Conceive, develop and write a Capstone proposal to be conducted in the spring quarter.
- Deliver a professional presentation on the design, outcomes and potential applications of a scientific proposal.
- Understand team dynamics and as well as your learning and teaching style relative to other team members.
Incorporate an ethical approach to planning global health research and interventions

For GHS 101: The objectives for each session vary. One example:
Understand the following terms: multinational organization, millennium development goals
Explain the World Health Organizations strengths and weaknesses

6. Methods: Describe the curriculum, instructional resources and/or technology used, innovations employed, how these align with objectives, and rationale for choices.

For both courses we created new educational materials.
For the 203 course, in order to improve the knowledge of and quality of the scientific writing and integrate the course into existing methods courses we created a questionnaire for students to administer about the common cold. They administered the survey, compiled the data, analyzed it in epidemiology and biostatistics and mixed methods and completed the writing in a step-wise guided fashion in our course. This allowed standardized review of everyone’s writing skills using the same data set and also allowed for completion of a short scientific paper within the first quarter that was independent of their capstone projects. Additionally it increased the communication and collaboration between all course faculty in the fall quarter.
For the 101 course we created new case studies with advanced teachers guides that allowed for standardization of teaching in small groups. Additionally we moved much of the lecture material on-line so that the bulk of the class time could be used for small group case based discussion to enhance learning.

7. Results and impact: Describe evidence of learner ratings of teaching/course, learning outcomes, application of knowledge in other settings at UCSF, impact on educational programs, and/or recognition/honors within the institution for this work.

We have one quarter of evaluations for the complete revamp of the 203 course (out of 2):
The learning objectives (competencies for the course were clear  1.47  1.69
I was able to understand the course  1.89  1.81
The instructor(s) fostered a learning environment that was supportive  1.92  1.84
There was ample time for discussion or questions  1.72  1.92
Overall I was satisfied with the course  1.52  1.63

The comments from advisors and mentors and ad hoc reader for qualifying exams suggest an overwhelming sense that the overall quality of writing is improved compared to previous years.

8. Dissemination: Describe how your efforts have been recognized by others externally through peer review, dissemination, use by others, or teaching awards nationally.

We have shared this curriculum with the Duke and Notre Dame Masters programs for incorporation into their curriculum. Additionally we have shared the scientific writing portion of the curriculum with UCSF colleagues who teach the same material internationally. Additionally I was asked to be a chapter editor for the Second Edition of Developing Global Health Programming: A Guidebook for Medical and Professional Schools which was published in January of this year.

9. Reflective critique: Describe your reflections, what went well and plans for improvement.

Though we have had improved evaluations as well as positive reviews from other faculty on the GHS203 course, evaluation comments suggest that some students still felt there was inadequate communication of specific course goals. Though this was a minority we will need to improve organization and messaging of the course. Additionally for trainees with extensive previous experience we will need to create additional alternative curriculum to move them towards expertise.