

OKLAHOMA STATE UNIVERSITY



Environmental Science Graduate Program

002 Life Sciences East

Stillwater, Oklahoma 74078-3011

405-744-9229, FAX 405-744-7673

E-mail: environ@okstate.edu

September 15, 2005

Don Bantz, D.P.A.
Academic Vice President and Provost
The Evergreen State College
Library Building, Room 3131
2700 Evergreen Parkway NW
Olympia, WA 98505

Dear Dr. Bantz:

It was a pleasure to meet you yesterday to present my observations of the MES program at Evergreen. I also want to express my appreciation for the hospitality extended to me by Dr. John Perkins, Dr. Ted Whitesell, and Ms. Jean McGregor. As promised, I will summarize my observations in this letter.

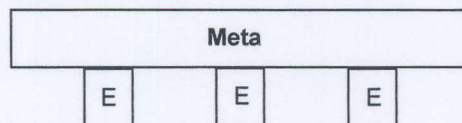
First, I want to congratulate Evergreen and the MES program for creating and maintaining a graduate environmental program that is among the finest in the nation. Its innovative metadisciplinary core curriculum, effective use of team teaching, use of a cohort model for student matriculation, continuing support by former directors and alumni, synergistic collaboration among faculty and students, and recent establishment of an external advisory board underlie the program's national reputation as an outstanding model for graduate environmental education. The program has accumulated a proven record of success and deserves the continued support of Evergreen's administration and external constituencies.

Though I have no criticisms of MES, I would like to offer a few suggestions for consideration by the program as it continues to mature and progress. I had previously discussed these suggestions with attendees at the MES Summer Institute, except where noted.

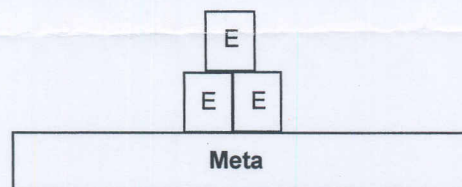
1. The program appropriately focuses its curriculum on the interface between society and nature. The *Education for a Sustainable and Secure Future* report published by the National Science Foundation in 2004 issues precisely this challenge to higher ed environmental programs. Because of MES's balanced inclusion of both social (humanities and social sciences) and natural (physical, life, and applied sciences) domains, I recommend that the program consider a name change. The use of "studies" in program titles typically refers to those that emphasize social issues whereas those that use "science" typically emphasize natural science issues. To avoid confusion among potential students and other stakeholders, the program may wish to consider "Graduate Program on the Environment" or other similar name that avoids the inclusion of "studies." Precedence exists for such names as in the "Duke School of the Environment."
2. I had not discussed with MES stakeholders a name change for the degree, however. I recommend that the program also consider this. The program may consider surveying alumni to identify what they expected from the degree while they were enrolled, how they are currently using their degree in their careers, and what they would like to accomplish by the end of their careers. This information can provide a basis for a degree name change. For example, if MES graduates are pursuing careers in environmental management, perhaps the degree should be renamed Master in Environmental Management. Alternatively, if graduates are pursuing careers in advancing sustainability goals, perhaps the degree should be renamed Master in Environmental Sustainability.
3. The program's major strength is its metadisciplinary core. I recommend that the program consider further enhancing its core by offering more metadisciplinary core courses. For example, I would suggest that the current case study course be replaced with a metadisciplinary course in environmental impact assessment (NEPA/SEPA) and the current methods course be replaced with a metadisciplinary research design course. I will comment more (see #6) on a methods course.

4. The program currently makes use of various electives to augment the metadisciplinary core. However, Institute discussions indicated to me that careful and explicit consideration should be devoted to the role that electives play in the program's curriculum. Four such roles can be conceptualized.

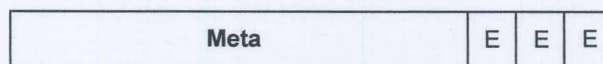
- a. Foundational Role: electives provide a foundation for metadisciplinary education (students learn disciplines first, and then integrate)



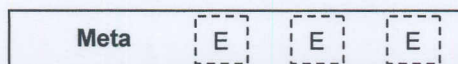
- b. Specialization Role: electives build on a foundation of metadisciplinary education (students add courses to the metadisciplinary base to focus on an area of specialization)



- c. Extensional Role: electives extend a metadisciplinary education through application and demonstration (for example, through the use of internships, service learning, community projects, etc.)



- d. Constitutive Role: electives are directly incorporated into the metadisciplinary curriculum rather than added onto it (this is my preferred use and is ideally suited for electives that are themselves are metadisciplinary)



The MES program could adopt any one or a combination of these roles but should do so after careful reflection.

5. To expand the metadisciplinary core, add metadisciplinary electives, and assure program consistency, I recommend that the program consider hiring metadisciplinary faculty – preferably dedicated to the MES program. A metadisciplinarian can teach metadisciplinary courses without the need for team teaching and therefore may be cheaper. Please understand that I am not suggesting that metadisciplinarian teaching should replace team teaching. Team teaching provides benefits of fostering faculty learning and collaboration and building student synthesis skills. Instead, I recommend that metadisciplinarian teaching should augment team teaching. In particular, I believe that important new metadisciplinarian electives could be quickly added to the curriculum by such faculty.
6. I deduced from conversations with program directors and discussions at the Institute that students have long expressed concerns about the inclusion of a “methods” course in the core curriculum. In my opinion, methods are best appreciated and understood when presented in the context of the problems to which they are suited. In other words, I believe that the inclusion of an isolated “methods” course is not the best way to introduce students to methods. I also learned from Institute discussions that some faculty members believe that a course which addresses methods of “universal” application in the environmental field could be designed to replace the current methods course. I do not believe that any such set of “universal” methods does or could exist in the environmental field for at least four reasons.

- a. Data collection methods include those associated with archival research, human subjects research, and natural science research – each of which has its own methods associated with quality assurance, sampling, and confidentiality. For example, human subjects data collection can be conducted in myriad ways, including face-to-face interviews, remote interviews, extended interviews, participant observation, ethnography, focus groups, nominal group technique, Delphi technique, role playing, charette, and many others. None of these methods is universal in the environmental field.
- b. Analytic methods include qualitative, quantitative, and combined qualitative-quantitative methods. Quantitative methods include dozens of techniques to measure central tendency, variance, taxonomies, correlations, and other statistical categories, which vary somewhat for natural science and social sciences. Qualitative methods include narrative analysis, content analysis, conflict analysis, etc. Combined methods include, but are not limited to, Q methodology, cognitive mapping, influence diagramming, concept development, and others. None of these methods is universal in the environmental field.
- c. Interpretation methods are often under-treated in methods courses, which is unfortunate. Reliability and validity are insufficiently considered. Moreover, interpretation is closely aligned with the epistemological underpinning of the research method used. Logical positivism-empiricism, abduction, constructionism, and other epistemologies influence how data is interpreted. I understand that students are exposed to epistemological discussion in the PEEP class, which calls into question the propriety of any claim to universal methods.
- d. Similarly, no universal presentation method exists. Presentations, whether written or oral, are necessarily tied to the research method, presentation purpose, nature of the audience, physical constraints, and so on.

Therefore, I recommend that methods be incorporated into other courses so that students can appreciate how methods are used in context. I further recommend that MES consider replacing the existing methods course with a metadisciplinary research design course. In this course, information on framing research, formulating research questions, conducting literature reviews, linking research questions to methods, developing findings from results, reaching valid conclusions, and developing and delivering professional presentations could be included. Since all MES students must complete theses, this is one area for which universal instruction should be provided.

7. I understand that most previous MES graduates have gained employment in the public and non-profit sectors. Limited Institute discussion concerned the need to help students prepare for employment in the private (for-profit) sector. A substantial majority of our graduates at OSU is employed in this sector and I have worked in this sector as well. Based on these experiences, I would suggest that MES consider developing new metadisciplinary courses in compliance, risk assessment and management, pollution prevention, environmental management systems (ISO 14001), environmental impact assessment (NEPA/SEPA), sustainable development, community relations and risk communication, and conflict management – each of which responds to private sector needs. Moreover, I realize that skills courses such as GIS, remote sensing, database management, and computer graphics are available as electives. However, it would be better if these skills were incorporated into metadisciplinary courses rather than taught as stand-alone courses divorced from their appropriate application contexts. As I mentioned previously, the hiring of metadisciplinarians can greatly facilitate the development of such courses.
8. External advisory boards can serve at least three functions. If MES desires its board to safeguard the culture and historical traditions of the program, it is best to solicit membership from alumni loyal to the program. If MES desires its board to provide advice on curriculum and employment trends, then it should recruit leading environmental professionals regardless of their previous academic affiliations. If MES desires its board to provide political and financial support, then it should encourage the participation by civic, political, and private sector leaders of organizations in position to offer such support. I am aware that some in MES (and most likely others at Evergreen) may be reluctant to enter into strategic partnerships with industry and other businesses who may seek inappropriate influence over Evergreen programs. I might offer three responses to this concern.

- First, not all businesses and industries are hostile to the goals and objectives of Evergreen and the MES program.
- Second, MES can choose whom it wishes to invite to its board and which advice it wishes to accept or reject.
- Third, mechanisms such as endowments can insulate MES and Evergreen from inappropriate influence. For example, an endowed chair or professorship can provide the resources to hire a metadisciplinarian (which may also attract matching funds from the State). By structuring the endowment so that the benefactor is excluded from participation in the recruitment and hiring process, the College maintains control over who it hires and how the person performs.

I hope that these suggestions stimulate further dialogue among MES stakeholders as they deliberate about program progress. I look forward to learning how the program continues its advancement in graduate environmental education. I celebrate your courage and foresight. If I can be of further help, please don't hesitate to call. I thoroughly enjoyed my visit at Evergreen and would gladly agree to return.

Sincerely,

Will Focht, Ph.D.
Director

cc: Dr. Ted Whitesell
Dr. John Perkins