

## *Training in disaster/development management*

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This presentation is divided into two parts. The first section responds to the basic questions of the content, format and settings for programs that train people for roles in disasters and development. The second section will describe how the University of Wisconsin Disaster Management Center has started to provide a program that addresses some of these needs.

### **OPPORTUNITIES FOR TRAINING IN DISASTER/DEVELOPMENT MANAGEMENT**

The first question to ask is how academic institutions can respond to the needs of voluntary agencies and Third World organizations. We can make contributions through research of previous disasters. We can also provide a palate of learning tools, opportunities, and materials for voluntary agencies, here and abroad. We can develop a network for sharing knowledge, involving either an exchange of people or an exchange of information.

Most importantly, we have to recognize the need for collaboration among all the actors in the disaster-development field. We must collaborate with governments, with PVOs, and with victims in assessing what sorts of education, training or learning is needed. Third World organizations and disaster victims, themselves, need to be involved as much as possible, particularly in identifying local resources and natural coping mechanisms.

The second question to ask is what forms academic programs might take, including traditional university programs, non-traditional programs, and other educational or learning formats to provide continuing professional education for people who already have basic skills.

Continuing professional education can take place in a workshop or seminar format, or in the form of traditional independent study courses, either correspondence courses or self-directed, self-study courses. We can also investigate some of the innovative educational media which are used in other fields, such as radio, video, telephone, and other telecommunications systems.

The last question to ask is when, in the pre-disaster to post-disaster continuum, should we provide educational opportunities. We can offer learning opportunities at almost any time. That is not to say, however, that we will

provide the same kind of learning opportunities in a pre-disaster situation for prevention, mitigation and preparedness as may be useful in the immediate post-disaster, response, rehabilitation or reconstruction phases.

In order to show graphically how educational programming is related to the disaster/development continuum as described in the Cuny-Beaumont Mobius Strip, I have developed a model incorporating three dimensions (see Fig. 1).

The first dimension shows time passing through the continuum of development, mitigation, prevention, preparedness, the disaster event itself, relief, rehabilitation, reconstruction and development. The second dimension cuts across activity sectors, such as housing, health, and agriculture. The third dimension considers various learning modes, including informal education, distance education, seminars or workshops, and more formal campus-based programs. Each one of the unique cubes defined by a sector and a development phase, presents a unique educational opportunity, to be met by one or more learning modes.

### **THE UNIVERSITY OF WISCONSIN PROGRAM**

At the University of Wisconsin Extension, Department of Engineering and Applied Sciences we provide continuing professional education to engineers, builders, architects, and planners. We have been doing this for over forty years, in both the seminar/workshop format and the "distance education" or independent study format. From the late forties until about 1974 we were instrumental in developing and then administering the United States Armed Forces Institute, in which some 250,000 students per year were trained by correspondence.

At present, through our standard format of workshops and institutes, we reach about 15,000 students per year in Engineering and Applied Sciences. About the same number are reached in a broad independent study program which, in addition to engineering, involves health, business, and agriculture.

The Disaster Management Center began in 1981, as a result of conversations I had with Intertect, pooling the University's experience in continuing education with Intertect's in disaster management. We realized that there is information available on disaster management, but few ways to get that information to people in the field. We decided to wed the idea of continuing professional education with disaster management and set up a training curriculum to address all phases of disaster management, including mitigation, preparedness, response, rehabilitation and reconstruction.

In July of 1982, we received funding from the U.S. Office of Foreign Disaster Assistance to convene an advisory board to work with us in planning a disaster management program. That group laid out the broad outline of the program, generating a list of some fifty-five courses along with an outline of the content of each course, the names of several resource people who could contribute to the development of each course, and a list of textual materials.

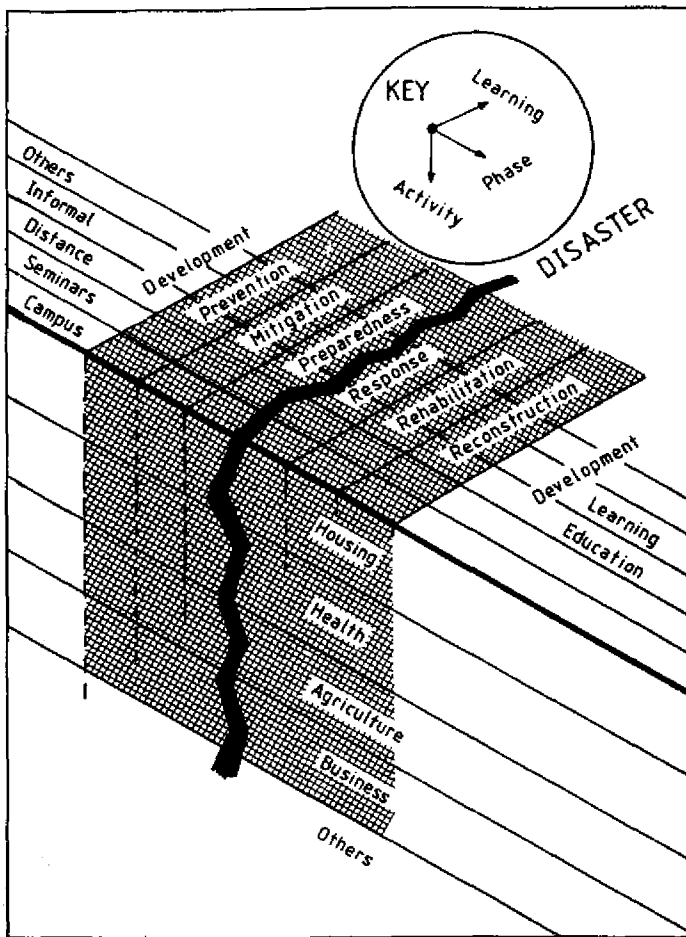


Fig. 1. A three dimensional model showing the disaster development continuum.

The advisory board also established several broad principles for the development of the Disaster Management Center. The disaster management curriculum should be open-ended (we would not stop at fifty-five courses) and would be generated by people in the field. The course materials would be flexible; they would begin as self-study materials, but be useful in other learning formats. Another basic premise was that the materials and courses developed should be practical, building on the real world experience of the student.

The board also felt that the courses should be inexpensive, and easy to use in a variety of situations. We want to minimize the time and travel needed to complete the courses so that they will be accessible to people who cannot take time away from their work. First, we intend the courses for people who are already involved in disaster or

development work to build on the skills they already have. In addition, we encourage professionals who should be involved in disasters and development to focus their skills (engineering, architecture, health, agriculture, etc.) on disasters and development issues.

We seek involvement with people at all levels, including international, national, local scale, government agencies, private voluntary agencies, and individuals. We try to address the issues for policy makers, executives, field directors, volunteers, and other interested individuals.

To develop courses, we identified experts in the field and worked with them to prepare self-study learning modules. These include (1) a text that is already available or one that our technical experts would develop; (2) a study guide to assist the learner through the texts; (3) a method of self-assessment to measure the student's understanding before taking the course, and after each lesson in the course; and (4) a method for final evaluation, which includes a standard objective examination and a disaster/development case study exercise — a process that forces the student to go through an analysis of how to use what has been learned through the course in specific disaster situations.

The broad framework of these courses is flexible, so that students can take either a single course, build on a specialization to receive a certification in a certain area, or pursue a diploma in disaster management. In addition, these courses can be taken literally anywhere and any time.

In the few years since the formation of the advisory panel and the outlining of the basic structure of the program, several courses have been developed with funding from the U.S. Office of Foreign Disaster Assistance, the Pan American Health Organization, the University of Wisconsin itself, and the U.S. State Department's Office of Refugee Programs. At our present pace of course development, we should be able to develop about ten courses a year.

One of the study guides developed for PAHO has been used in field training sessions, one in Guatemala in Spanish, and one in Antigua in English. In both Guatemala and Antigua, health administrators, doctors, and nurses were able to learn a great deal over a period of twenty hours of self-directed study. PAHO evaluated both pre-test results and post-test results to demonstrate significant learning. We were also encouraged that the people who took the course were pleased and accepted this format for learning.

## CONCLUSION

There is a body of knowledge regarding disaster management that can be made available in practical and accessible forms to people in the field who most need it. Programs that use a flexible format that can be applied at varied times and in varied settings are most likely to provide those people with crucial information and skills.