

Emergency Management Institute



FEMA

Higher Education Project

B. Wayne Blanchard, Ph.D., CEM

(301) 447-1262, wayne.blanchard@dhs.gov

<http://training.fema.gov/EMIWeb/edu>

October 12, 2004 Draft

EM Hi-Ed Project Presentation

Table of Contents

- **Hi-Ed Project Background----- pp. 2-34**
 - **Goals, The EM Profession, Audiences,**
 - **Philosophical Context, Activities**
 - **Technocratic/Social Vulnerability Approach**
- **EM Hi-Ed Project Courses----- pp.35-44**
- **Degree Program Information--pp.45-65**
- **Course Development Info.----- pp.66-73**

Goals

EMI Higher Education Project

- **(1) Increase Collegiate Study of Hazards, Disasters, and Emergency Management**
- **(2) Enhance EM Profession, and**
- **(3) Support Colleges & Universities**

Why Enhance and Study EM?

- In order to accomplish EM responsibilities nationwide, a cadre of professionals is required at every level of government and within the private sector which can bring to an organizational management team requisite knowledge-based competencies (education) and skills-based operational competencies (training).

Why Enhance and Study EM?

- “Emergency management today is a constant educational process, and if the local emergency manager does not wish to continue their education, they will find they have been left behind and are ineffective in their community.”

(Jerry VeHaun, Past President, International Association of Emergency Managers, *DisasterCom*, April 2004)

Why Enhance and Study EM?

- “...hiring people with degrees and certifications and credentials *must* be the way of the future....Stricter hiring requirements are coming to a disaster agency near you...it *will* happen.”

(Craig Marks, Director, Community Preparedness and Disaster Management Program, University of North Carolina at Chapel Hill, School of Public Health, June 2004, “Eye on Education,” IAEM Bulletin, p.3.)

Why Enhance and Study EM?

- “...some emergency management systems are exclusively ‘ambulances at the bottom of cliffs’, whereas others are also ‘fences at the top’.
- (Dr. Neil Britton, “Higher Education in Emergency Management: What is Happening Elsewhere” (Paper for the 2004 EM HiEd Conference, June 2004, p. 2)

Definition of “Profession”

- *“A Vocation or occupation requiring advanced education and training, and involving intellectual skills, as medicine, law, theology, engineering, teaching, etc....”*

(Webster’s New World Dictionary, Third College Edition)

What Constitutes A Profession?

- Systematic Body of Knowledge
- System for Advancement and Dissemination of Knowledge
- College Degrees in Subject Area
- Identification of Minimum Standards
- Standards of Conduct or Ethics
- Professional Societies
- Public Recognition

Emergency Manager Stereotype

The Way of the Past

- Not College Educated (4-year Degree)
- White
- Middle to Late Middle-Aged
- Male
- Emergency Mgmt. is 2nd or 3rd Career
- Job Obtained Other Than With EM Competencies

Emergency Manager Stereotype

Goal: Enhance EM Profession

- Spends E.M. Career In One Jurisdiction
- Disaster Response Planning Oriented
 - Reactive
 - Command and Control Style
 - Works Primarily With Emergency Services
- Bureaucratic
- Works in Isolation from Community Served
- Plans FOR Jurisdiction
 - Primarily Disaster Response Oriented

Emergency Manager Stereotype

Goal: Enhance EM Profession

- Minimal Access to Top Decision-Makers
- Has Not Done a Risk Assessment
- Has Not Done a Mitigation Plan
- Has Not Done a Strategic Plan
- Has Not Joined EM Professional Assoc.
- Doesn't Read Disaster Research Lit.
- Resistant to Change

Emer.Mgr. Stereotype (Con't)

Goal: Enhance EM Profession

- Knowledge Base:
 - Experiential (Learns on the Job)
 - Consensus (Others who Learned on Job)
 - Past Practice
- Frequently Wears Other Hats
 - Or Is “The Other Hat” (e.g. Fire Dept. First)
- Not Well Paid or Funded
- Many Part-Time & Volunteer Positions

New Generation Emergency Managers

Goal: Enhance EM Profession

- College Educated--Many With EM Degrees
- More Professional and Knowledgeable
- Knowledge Base: Science and Research
- Technologically More Capable/Adept
- Younger
- More Diverse and Culturally Sensitive
- Emergency Mgmt. Career of 1st Choice

New Generation Emergency Managers

Goal: Enhance EM Profession (Con't)

- **Risk-Based Approach to Emergency Management**
- **Building Disaster Resilient Communities Focus**
 - **I.E., A Catalyst for a Safer America**
- **Emphasizes Social Vulnerability Reduction**
- **Programmatically Rooted in E.M. Fundamentals**
 - **Comprehensive Emergency Management (I.e., All Hazards)**
 - **Works On All Four Phases of the Disaster Life Cycle**
 - **Pursues Integrated Emergency Management**
- **An Executive Manager, Facilitator, Networker, Partner,**

New Generation Emergency Managers

Goal: Enhance EM Profession (Con't)

- Does Strategic Planning
- Plans **With** Jurisdictional Stakeholders
 - Partnering and Networking
- Proactive
- Life-Long Learner--Reads Disaster Lit.
- Joins Professional Associations
- Better Paid
- Better Funding for E.M. Programs
- Upwardly and Geographically Mobile
- Broader Range of Working Contacts

Broader Range of Working Contacts

Goal: Enhance EM Profession

- **Elected and Appointed Officials**
- **Economic Development Commissions**
- **Planning and Zoning Boards/Commissions**
- **Risk Managers**
- **Building Departments and Code Enforcement**
- **Developers -- Business Community in General**
- **Natural Resources/EPA Organizations**
- **Storm Water and Floodplain Managers**
- **Academia and Professional Organizations**
- **Community Based Organizations**

Bottom Line

A person who can articulate

A persuasive and defensible case

For disaster prevention and reduction

To top elected and appointed officials.

Audiences

Goal: Enhance EM Profession

- Typical College Students
 - Juniors and Seniors
 - Upon Graduation-- Enter EM Profession
 - Upon Graduation Enter Other Professions
 - Public, Private, and Volunteer Sectors
- Practitioners
 - Enhance Professionalism, Advancement
- Affiliated Practitioners
 - Want to Enter the Field
 - Want Advancement/Knowledge Expansion

Philosophical Context Overview

Goal: Enhance EM Profession

- E.M. of the Future, Not E.M. as is Today
- Building Disaster Resilient Communities
- Balance Technocratic/Vulnerability Models
- I.E. Paradigm Shift

Future of Emergency Management

Goal: Enhance EM Profession

- New Hazards
- Greater Hazard Frequency and Intensity
- Escalating Costs
- Growing Societal Vulnerability

- Paradigm Shift -- a matter not of making minor corrections, but of adjusting to a major conceptual revolution.

Building Disaster Resilient Communities

Goal: Enhance EM Profession

- Sustainable Development Philosophy
- Unconstrained Development = Disaster
- Strategic Community Planning
 - Smart Growth
 - Long Term View
- Respect and Defend the Environment
- Network and Partner

Building Disaster Resilient Communities

Networking and Partnering

- BDRRC Too Big for One or Small Number
- **Bring People Together from Variety of Backgrounds and Disciplines to Refract Problems Through Prism of Complementary Minds Allied in Common Purpose**
- Strengthens Social, Economic, and Environmental Resiliency

Building Disaster Resilient Communities

Goal 1: Enhance EM Profession

- Looks at Built and Social Environment
 - Reduce Vulnerability of People
 - Reduce Vulnerability of Structures
- Seek Inter and Intra-Governmental **Equity**
 - Quality of Life
 - Responsibility for Future Generations

Building Disaster Resilient Communities

The Future of Emergency Management

- From Background to Boardroom
- Long-term and Global Perspective
- Four-Phases Disaster Life Cycle
 - Holistic -- Not Just Advanced Mitigation
- Emer. Mgmt. Will Equate With BDRC

Technocratic versus Vulnerability Approach to Emergency Management

Goal 1: Enhance EM Profession

- Technocratic Model
 - Focus on Physical Processes of Hazard
 - Apply Managerial Problem Solving
 - Apply Technology, Engineering, Money
 - Tends to be Top-Down Approach
- Vulnerability Model
 - Focus on Socio-Economic-Political Factors
 - Reduce Vulnerability of People
 - Bottom-Up Approach

Technocratic vs. Vulnerability Approach

- Focus:
 - Physical Processes
 - Reduce Damage
- Style -- Managerial
 - Hierarchical
 - Key Individuals and Orgs. Problem Solve
 - Apply Technology, Engineering, Money
- Philosophical Orientation
 - Utilitarian
 - Conquer Nature
- Method (**Deconstructionist**)
 - Newtonian Physics Analogy
- Focus:
 - Social Processes
 - Reduce People Vulner.
- Style -- Collegial
 - Decentralized
 - Community Approach to Problem Understanding
 - Apply Creativity, Imagination, Pressure
- Philosophical Orientation
 - Egalitarian
 - Live with Nature
- Method: (Holistic)
 - Quantum Physics Analogy

Newtonian vs. Quantum Physics Analogy

- Deconstructionist
- Apply Analysis
- Look for Simplicity
- Isolate
- Independent Parts
- Parts Equal Whole
- Distant Observer
- Objective Reality
- Holistic
- Apply Synthesis
- Recognize Complexity
- Contextualize
- Interdependent Parts
- Whole Greater than Parts
- Involved Activist
- Subjective Reality

Paradigm Shift?

- Paradigm: The overall framework of basic assumptions used to analyze and interpret data, view the world, understand reality.
- Anything that we perceive or say about the world is necessarily couched within some frame-worked way of looking at it.

Paradigmatic Ways of Looking at the World

- Religious -- Revelation
- Philosophical -- Contemplation
- Tribal -- Tradition

- Technocratic -- Observation
- Vulnerability -- Participative, Interactive

HiEd Project Activities

Goal 2: College and University Support

- **Maintenance of the “College List”**
- **Development of College Courses & Books**
- **Make EM Training Courses Available to 2-Year Schools**
- **Compilation of EM Course Syllabi**
- **Proposals Compendium**
- **Letters of Support, Consultation**
- **Annual EM HiEd Conference at EMI**
 - Next Conference: June 7-9, 2005 (Emmitsburg, MD)

HiEd Project Activities

Goal 2: College & University Support (Con't)

- Emergency Management Competencies
- Practitioner's Corner
- Service Learning
- Intern Opportunities
- Learning Resource Center Access
- Activity Reports
- Partnerships

Partnerships

- Association of Floodplain Managers
- Coastal Services Center (DOC/NOAA)
- U.S. Army Corps of Engineers (EM Div.)
- National Science Foundation
- North Carolina Division of Emer. Mgmt.
- Public Entity Risk Institute

Types of HiEd Project Activities

Goal 2: College and University Support

- Associate Degree Level
 - Wide Range of Training Courses Available
 - CD ROM and EMI Course Catalog
- Bachelor Degree Level
 - Developed EM Curriculum
 - Support Emergency Mgmt. Department
 - Farmed-Out to Existing Departments
 - Courses to Support Other Disciplines
- Graduate Level



EM HiEd Project Course Information

EM HiEd Project Courses

Goal 2: College and University Support

- Mostly Upper Division, Class-Room Based
- Modifiable to Lower Division, Graduate
- Developed via Contract by Academics
- Academic Education, Not Advanced Training
- Ready-To-Teach
- More Than Can Be Taught in Semester

Courses Developed (15)

Goal 2: College and University Support

- **Building Disaster Resilient Communities**
- **Breaking the Disaster Cycle – New Directions in Hazards Mitigation (Graduate Level)**
- **Business and Industry Crisis Management**
- **Hazards Mitigation Principles and Practice**
- **Hazards Risk Management**
- **Individual and Community Disaster Ed.**
- **Political & Policy Basis of Emergency Management**

Courses Developed (Con't)

Goal 2: College and University Support

- **Public Administration and Emergency Management**
- **Research & Analysis Methods in Emer. Management**
- **Social Dimensions of Disaster (2nd Edition)**
- **Social Vulnerability Approach to Disasters**
- **Sociology of Disaster**
- **Technology and Emergency Management**
- **Terrorism and Emergency Management**
- **Tourism, Travel & Hospitality Mgmt. Industries and Emer. Mgmt.**

Courses Under Development (7)

Goal 2: College and University Support

- **Coastal Hazards Management (Graduate Course)**
- **Disaster Response Operations & Management**
- **Earthquake Hazard and Emergency Management**
- **Floodplain Management (Graduate Course)**
- **Hazards Mapping and Modeling**
- **Sustainable (Holistic) Disaster Recovery**
- **Terrorism and Homeland Security**

Books Under Development

Goal 2: College and University Support

- Disciplines, Disasters, and Emergency Mgmt.
- Emergency and Risk Mgmt. Case Studies
- Introduction to Emergency Management

Courses Suggested For Future Development

- **All-Hazards Survey Course**
- **Communicating Risk/Risk Communication**
- **Cost Benefit Analysis and Risk Assessment**
- **Disciplinary Perspectives on Disaster and Emer.Mgmt.**
- **Engineering/Building/Construction Professions and Disaster Reduction**
- **Hazards Engineering for Non-Engineers**
- **International Disaster Management**
- **Legal Basis for and Ethical/Legal Issues in Emer.Mgmt.**
- **Planning, Hazards and Disasters**
- **Politics of Emergency Management & Disaster**
- **Psychology of Disasters**
- **Social Marketing in Emergency Management**
- **Theory of Emergency Management**

Emergency Mgmt. Curriculum

- ***Building Disaster Resilient Communities***
- ***Disaster Response Operations & Management***
- ***Earthquake Hazard and Emer. Management***
- ***Hazards, Disasters and the U.S. E.M. System***
- ***Hazards Mitigation Principles and Practice***
- ***Hazards Risk Management***
- ***Individual and Community Disaster Education***
- ***Political & Policy Basis of Emergency Mgmt.***
- ***Public Administration and Emergency Mgmt***
- ***Research & Analysis Methods in Emergency Mgmt.***
- ***Social Dimensions of Disaster***
- ***Social Vulnerability Approach to Emergency Mgmt.***
- ***Technology and Emergency Management***
- ***Terrorism and Emergency Management***

Courses to Support Other Disciplines

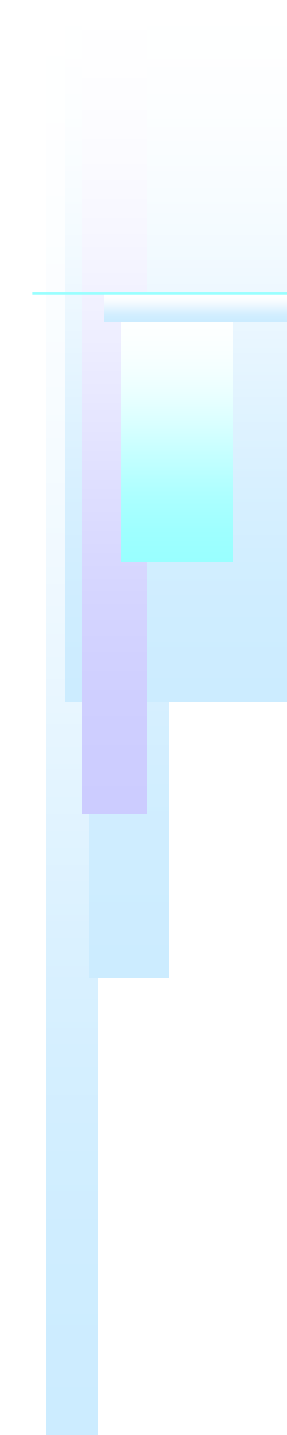
Goal 2: Support Colleges and Universities

- **Business and Industry Crisis Management**
- **Coastal Hazards Management (Graduate Level)**
- **Floodplain Management (Graduate Level)**
- **Political and Policy Basis of Emergency Mgmt.**
- **Public Administration and Emergency Mgmt.**
- **Sociology of Disaster**
- **Tourism, Travel and Hospitality Mgmt. Industries and Emergency Management**

Course Distribution

Goal 2: College and University Support

- Via Internet:
<http://training.fema.gov/emiweb/edu>
- CD ROM
- Via National Technical Info. Service
(Dept. of Commerce)



Emergency Management and Related Collegiate Program Information

Emergency Management Programs - 1995



- University of North Texas (BS)
- Thomas Edison University (BS)
- Rochester Institute of Technology (BS)
- UCLA Continuing Ed Certificate Program

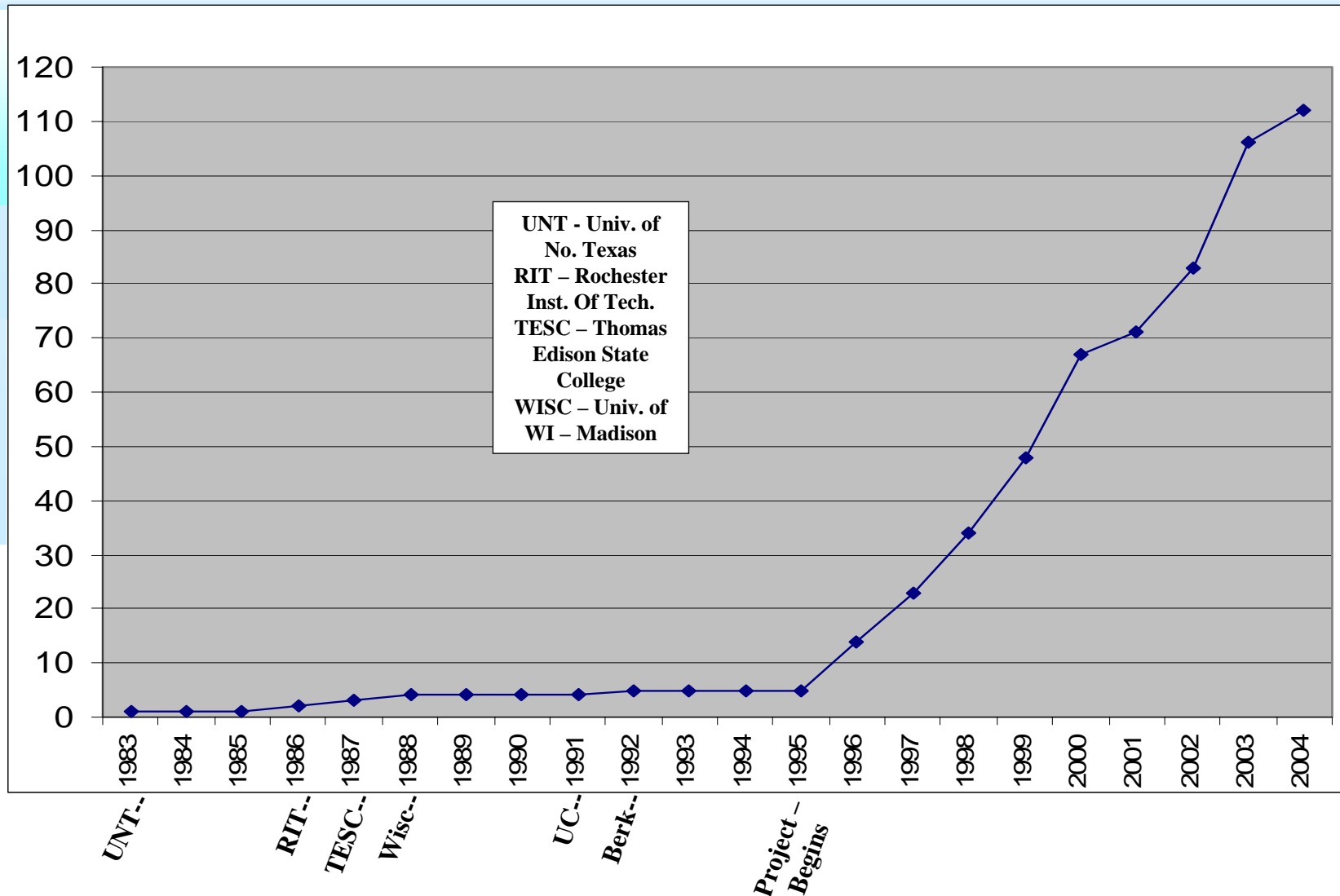
Emergency Management Collegiate Programs - 2004

- 118 College Emergency Mgmt. Programs:
 - 51 Certificates, Minors, Diplomas
 - 20 Associate Degrees
 - 11 Bachelor Degrees
 - 29 Masters-Level Programs
 - 7 Doctoral-Level Programs
- 44 Under Development or Investigation

Homeland Security and International Disaster Management & Humanitarian Assistance Programs

- 24 Homeland Security (HS), Homeland Defense, Terrorism, and Critical Infrastructure Protection Programs
- 11 HS Programs Under Development, or Investigation
- 9 International Disaster Management & Humanitarian Assistance Programs

Emergency Management College Programs by Year



State Map Break-Out

- 39 States Have Emergency Mgmt. Programs
- 7 States Investigating EM Programs
 - Kentucky, Maryland, Nebraska, New Hampshire, New Mexico, South Carolina, South Dakota
- 2 States Have EM-Related HiEd Programs
 - Alaska, Iowa
- 2 States Have No EM or Related Program
 - Maine, Montana
- DC & Puerto Rico Have Emer. Mgmt. Pgms.

Projected Collegiate Program Growth

- 102 Programs Under Investigation/Development
 - 33 at Associate Level
 - 37 at Bachelor Level
 - 32 at Graduate Level

Programs Growing In Size As Well As Numbers

- The Crisis and Disaster Management Program has steadily grown – to the point that it is now the 2nd largest in the home department. (Dianna Havner Bryant, CMSU, April 2003)
- The MPA EM Concentration program was overwhelmed this year – had to turn students away – more in queue for next semester. (Bill Waugh, GSU, April 2003)

Programs Growing In Size As Well As Numbers

- EAM program going very well – 70 of 74 graduates landed EM-relevant jobs- \$38 to \$42K range. (Mary Ann Rollans, ATU, March 2003)
- JSU is averaging 30 new graduate EM students per semester. (Brenda Phillips, Feb. 2003)
- EM Certificate going so well we're adding an AD. (Don Beckering, Hennipin TC, March 2003)

Programs Growing In Size As Well As Numbers

- “Over the past four years we have seen our student population nearly double
- [185 declared majors], and our credit hour production more than triple...we are contemplating putting a cap on enrollment.” (Dr. David McEntire, University of North Texas, March 2004)

Programs Growing In Size As Well As Numbers

- “Doubled the size of our program in one-year from two cohorts to four and added two new certificates.”
- Growing from one certificate to a multi-disciplinary program with a BSDM, MSDM and DrPH-DM by August 2005.” (Craig Marks, Director, Disaster Management Program, University of North Carolina at Chapel Hill, March 12, 2004)

Programs Growing In Size As Well As Numbers

- “The B.S. in Emergency Management is one of the fastest growing four year degrees at the University of Akron.”
- (Drs. David Hoover and Nancy Grant, Co-Directors, Center for Emergency Management and Homeland Security Policy Research, University of Akron, Ohio, March 15, 2004)

Programs Growing In Size As Well As Numbers

- “Our MPA EM Concentration is growing steadily and more students in our nonprofit administration concentration are choosing to earn the graduate certificate in disaster management at the same time. We are also getting more applications for the PhD in public policy program with a concentration in disaster management.” (Dr. William Waugh, Jr. , Dept. of Public Administration, Georgia State University, March 16, 2004)

Programs Growing In Size As Well As Numbers

- **Graduate enrollment in the Emergency/Disaster Management [EDM] program has increased by 28% in the last five months to 72 students. Undergraduate enrollment...has increased by 54%...to 111 students.**
- **Graduate enrollment in our Homeland Security [HS] program has increased 58%...to 271 students. Undergraduate enrollment...has increased by 32%...to 303 students.** (Robert Jaffin, Chair, Public Sector and Critical Infrastructure Studies Dept., American Public University System, March 16, 2004)

Programs Growing In Size As Well As Numbers

- Disaster Managers: A New Profession in Turkey through the ITU Graduate Degree Program! A vision became a reality.
- All 13 Graduates were placed in high level government and private sector disaster management positions.
- Applications for the upcoming program have increased 4-fold. (Dr. Derin Ural, Director, Disaster Management Program, Istanbul Technical University, Turkey, March 18, 2004)

Programs Growing In Size As Well As Numbers

“The Master of Science graduate degree in Fire & Emergency Management Administration at Oklahoma State University continues to grow. It is now the second largest of 19 master degree programs in the College of Arts & Sciences at OSU. We are expecting more than a 40% enrollment increase in our courses by the end of this academic year...” (Dr. Anthony Brown, Professor and Director, Fire & Emergency Management Program, Dept. of Political Science, OSU, April 12, 2004)

Programs Growing In Size, In Numbers, Students Getting Jobs

- **“One of our problems is that some of our graduate students are being hired out from under us – by merely being enrolled in the Crisis and Emergency Management Program.”**
- **(Greg Shaw, George Washington University, July 1999)**

Departmental Location of Bachelor Degree Programs in Emer. Mgmt.

- Building Construction, School of Arch.
- Business Department
- Continuing Studies, School of
- Emergency Management
- Emer.Admin & Mgmt., Continuing Ed School
- Information and Mgmt. Technology Dept.
- Interdisciplinary Technology Dept.
- Public Administration
- Public Service, Department of

Problems/Challenges Schools With EM Certificates/Degrees Report

- **Academic qualifications of students**
- **Academic recognition**
- **Administrative and public support/recognition**
- **Career counseling/placement**
- **Change, keeping up with tech. & policy change**
- **Curriculum -- Need broad, solid and full curriculum**
- **Distance Learning Arrangements**

Problems/Challenges Schools With EM Certificates/Degrees Report

- **Faculty -- recruiting qualified faculty**
- **Funding -- program./course development, staff, research**
- **Marketing**
- **Program Growth Pains**
- **Recruitment/Practitioner lack of interest**
- **Teaching**
 - **Theory/practice balance**
 - **Making it interesting**
- **Textbooks/Readings**



Emergency Management Course Development Information

Course Level

- Not Introductory Course--Have Several
 - Hazards, Disasters and U.S. Emer.Mgmt.
 - Political and Policy Basis of Emer.Mgmt.
 - Hazards Mitigation
- Senior Level
 - Addresses Public Policy Issues
 - Futuristic
 - Could Be Used at Graduate Level

Course Session Layout

- Title of Course, Session, Length of Time
- Objectives
- Scope
- Readings -- Instructor and Student
- Requirements
- Remarks
- Supplemental Considerations
- References

Knowledge, Skills and Abilities to be Emphasized in Sessions

Goal 1: Enhance EM Profession

- **Analytical Thinking -- Ability to Evaluate**
- **Ability to Synthesize Information**
- **Communication Skills -- Written, Oral**
- **Creativity, Imagination, Adaptability**
- **Diversity Sensitivity**
- **Leadership and Followership Skills**
- **Management Skills**
- **Networking and Consensus-Building**
- **Physical and Social Context Sensitivity**
- **Problem Solving & Strategic Thinking**

Deliverables

- Work Plan
- Syllabus--Course Outline & Readings
- Drafts of Individual Sessions as Developed
- Complete First Draft--Global Review Process
- 2nd (3rd if necessary) Drafts Based on Review Comments
 - Electronic (Microsoft Office 2000)

Previous Problem Areas in HiEd Course Development

- Written in Narrative Format -- Textbook
 - Material Needs to be Broken Out
 - Bullets -- I. E. Instructor User Friendly!
- Not Very Interactive -- Lecture Format
 - Need Student Activities, Exercises, Engagement
- Minimum Use of Instructor Tools
 - Need Power Point Slides/Overheads
 - Case Studies
- Content -- Comprehensiveness
- Poorly Written
- Use of Out-of-Print or Hard-to-Get Readings

Copyright Approvals

- Responsibility of Course Developer
- Usually Applies to Charts, Graphs, Tables, Photographs
- The Earlier the Better

Course Development Considerations

- Developer Cannot Copyright Course
- Not to be Tailored to a Specific State
- Not to be “FEMA-Centric”
- Not to be Single-Hazard Specific
- Complete & Generous Source Citations