The Challenges for Higher Education and Research in Disaster Risk Reduction

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Scope

1. Where did we come from?
2. Where are we now?
3. Where are we going?
4. Where should we be going?
5. What are the challenges we face?

Where did we come from?

- Training, education and research.
- 2 aspects:
  - "Disaster Management"
  - Discipline specific

"Disaster Management" (70s-90s)

- Initial informal focus on civil protection.
- Formalised by UNISA (1970s).
- In-house training with limited education and almost no research.
- Education semi-formalised (TSA).
  – International cooperation.
- No post-graduate programmes.
- New government focus on 1990s.

"Disaster Management" (90s)

- 1990s - 2000s sees heightened interest in subject matter.

- Various formal and non-formal courses in disaster and risk management.

- 1st post-graduate programme specifically in DM (UFS)

- Career path?

- Minimal increase in research outputs.

Discipline specific (70s-90s)

- Isolated disciplinary focus on natural hazards and vulnerability:
  - Geography
  - Meteorology
  - Sociology
  - Anthropology
  - Phycology
  - Health sciences etc.
- Research remains discipline specific.
- Some post-grad. research papers.

Discipline specific (90s)

- 9/11, Katrina, Indian Ocean Tsunami, Climate change and adaptation.
- More specific focus in various disciplines.
  - IDNDR (1990-1999)
  - ISDR (2000-2010)
- Focus shifted from natural sciences and hazards.
- Generally accepted that vulnerability studies are the most important.

Where are we now in South Africa?

- Proliferation of short courses.
- Unit standards.
- Certificate courses (120 credit).
- Under-grad. course in Management and DRR.
- Incorporation of DRR focus in various disciplines.
- 3 dedicated Masters programmes.
- No PhD - but discipline specific focus.

Where are we now i.t.o. research?

- Limited to a few universities.
- Event/discipline specific.
- Limited funding.
- NRF focus.
- One peer reviewed (non-accredited) e-journal.
- Dedicated research colloquiums.

Where are we going?

- Multi-disciplinary focus on DRR
  - Studying of a topic in various disciplines.
  - e.g. Study of art - art techniques, history, development, anthropology.
  - Benefit largely within the base discipline.
  - Overflows disciplinary boundaries but goals remains discipline specific.
- Largely the current focus.

Where are we going?

- ## Inter-disciplinary

  - Transfer of methods from one discipline to another.

    - Degree of application (e.g. nano technology in textiles; political change analysis for vulnerability studies)

    - Epistemological degree (e.g. theory of philosophy in humanitarian relief management)

    - Degree of generating new disciplines (e.g. methods of mathematics transfered to social and economic science to create chaos theory)

  - Goals also remain within discipline.

Where should we be going?

- ## Trans-disciplinary
  - – Move from Mode 1 to Mode 2 knowledge
    - • Mode 1 = traditional discipline knowledge
    - • Mode 2 = new, radical, unconventional, fast changing knowledge (knowledge between, beyond, above and below existing disciplines)
    - • e.g. defining our social life in terms of cyber-space.
  - – Modern changing societies need relevant knowledge.
  - – Disaster risk as we understand it is in constant flux.

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Challenges

- DRR as a "discipline"

- What would constitute a "disaster manager"?

- Integration of knowledge.

- Addressing the knowledge/education needs of a new generation.

- Common research agenda.

- Finding a common "language".

- Clear national focus on issues of disaster risk.
  - National education, training and research needs and resources analysis (NETaRNRA)

Challenges

- Accompanied by adequate funding.
- Longitudinal studies of risk and vulnerability.
- Integration of disaster risk into traditional disciplines.
- "New" type of researcher/lecturer.
- Mentorships/Learnerships/Workplace learning
- The notions of multi-, inter- and trans-disciplinary research and knowledge creation.