Utilization of Disaster Reduction Technology Database for Disaster Reduction Education

Hiroaki NEGISHI\(^1\), TAKEUCHI, Yukiko\(^2\), KAMEDA, Hiroyuki\(^2\), TAKARA, Kaoru\(^3\), KOBAYASHI, Kenichiro\(^4\), HE, Bin\(^2\)

\(^1\)NIED, \(^2\)C-PiER, Kyoto University, \(^3\)DPRI, Kyoto University, \(^4\)RCUSS, Kobe University

Disaster Reduction Hyperbase (DRH) is a web-based database to disseminate appropriate disaster risk reduction (DRR) technology and knowledge. The implementation technology contents are described and opened in the web-system. The main targets of this database are the executor of disaster management (e.g., policy makers, community leaders, practitioners and motivated researchers). The DRH contents include the specific information for implementation, such as resources (cost, manpower) and application examples. In addition, this database has not only the contents based on science and technology but also process technology (Know-how for implementation and practice, capacity building and social development for knowledge ownership) and transferable indigenous knowledge (Traditional art of disaster reduction that is indigenous to specific region(s) but having potential to be applied to other regions and having time-tested reliability).

For the purpose of development of disaster management practitioner, we investigate the process of developing of practical educational materials from DRH contents. The elements of resources and application examples are needed for DRH contents because they are practical one. On the other hand, educational materials need the elements of representation and environment information, such as stakeholder, concept and media style. We developed the template that expresses information of technology-education linkage. The necessary elements for educational materials become clear by filling the template.

The attempts to develop educational materials by graduate students based on the DRH contents were conducted as the practice of disaster reduction education materials development. The process is as follows:

1) Implement the lectures on basics of disaster reduction education, examples of educational materials, DRH contents and practical information on disaster reduction technologies.
2) Access DRH website and touch the actual contents and learn the practical disaster reduction technologies.
3) Select the contents for referring to develop educational materials from DRH database, fill the template, and develop educational material(s) actually.
4) Conduct presentation on the developed educational material(s), and make improvements based on the comments.

The template and educational materials will be published and opened at the website with DRH contents.

Keywords: Disaster Reduction Hyperbase(DRH), Disaster Reduction Education, Educational Materials Development, International Development