

20. Investigative Research on Disaster Prevention Capability at School Facilities When Utilized as Emergency Evacuation Sites

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(1) Purpose and Aim of Study

In the event of a major earthquake or other disaster, the role of school facilities should be to assure the safety of children and teaching staff, and to provide an emergency evacuation site for local residents. Schools have accepted large numbers of evacuees following major earthquakes in the past, however, evacuees experienced various inconveniences while spending time at such sites. This study identifies issues arising from past experiences and investigates schools' disaster prevention capabilities. Based on the results of this investigation, it summarizes specific measures for enhancing such capabilities.

(2) Outline of Research Results

- In May 2006 a questionnaire on the disaster prevention capability of school facilities (covering all public schools nationwide) was sent to the disaster prevention offices of all prefectural and municipal governments and boards of education throughout Japan. Key results are outlined below.
 - The number of public schools designated as evacuation sites is 33,670, representing 89% of all public schools.
 - The current status of disaster prevention facilities and equipment at these schools is shown in Chart 2, which clearly indicates that schools designated as evacuation sites do not necessarily have full disaster prevention capability.
 - Seventy percent of prefectural governments and 59% of municipal governments have prepared disaster response manuals, and 34% of prefectural governments and 32% of municipal governments have included evacuation site capability in their manuals.
 - When planning and designing facilities, only 17% of prefectural governments and 28% of municipal governments give special consideration to envisaging their use as evacuation sites.

- Specific measures to improve disaster prevention capability of school facilities

Based on records of past major earthquakes and the results of the questionnaire outlined above, the study examined specific measures to improve the disaster prevention capability of school facilities and summarized them under the following five points:

- 1) Assuring safety by improving facilities' earthquake resistance capabilities, etc.
 - Earthquake resistance of building structures and safety measures relating to interior materials, equipment, and furniture
- 2) Assuring functions necessary for evacuation sites
 - Space required for evacuees to live temporarily and for evacuation site operations
 - Functions required by evacuees (toilets, electricity, water, gas, information services, heating/cooling, privacy, measures for elderly people and others requiring support, storage of emergency supplies)
- 3) Establishing operational methods for evacuation sites
 - Preparation of facility usage plans that envisage use as an evacuation center
 - Creation of networks involving relevant organizations, including local government disaster prevention departments, boards of education, schools, and local residents' groups
 - Preparation of evacuation site operations manuals and conduct of periodic exercises
- 4) Prompt resumption of educational activities at the school
 - Consideration of spaces to be used for prompt resumption of educational activities, and prior discussion of roles to be played by all involved
- 5) Promoting measures to enhance disaster prevention capabilities
 - Use of financial support systems available from sources other than MEXT
 - Upgrading of disaster prevention capabilities when expansion or renovation is being carried out
 - Sharing of information on cutting-edge initiatives

- Examples of initiatives to improve disaster prevention capabilities of school facilities

Some local governments have already introduced initiatives to improve disaster prevention capabilities. Based on the information gained from questionnaire responses, the study outlines 10 leading examples: seven dealing with facilities and three dealing with operations.