This collaborative project between Japanese and Chinese universities involved the design and construction of paper-tube-structured temporary classrooms at the elementary school struck by the Sichuan earthquake on May 2008. While most of the reconstruction assistance consisted of constructing temporary housing, we received a request from the Chengdu Chenghua District Education Bureau to rebuild the classroom buildings. These buildings had been officially designated as unusable and had been completely closed as part of the delayed reconstruction of educational facilities. We therefore designed temporary classroom buildings to be constructed using paper tubes, which are cheap, recyclable, reusable, and readily available on site. During the summer vacation, about 120 Japanese and Chinese volunteers worked together on the construction while deepening mutual understanding. We developed simple building methods and plans suited to unskilled people such as volunteers. With appropriate construction management, three buildings (nine classrooms) were completed in about forty days. These were the first buildings in China to have a paper-tube structure, and were also the first school buildings to be rebuilt in the earthquake-stricken area.