

Abstract

This research aims to propose the guidelines for designing a sport and activity center for general and disable persons. The study includes: 1) to study the idea for designing sport centers for everyone through cases in foreign countries; 2) to investigate categories of sport that both general and disable persons can play in the same area; 3) to study the criteria on designing the proper environment for every person; 4) to propose the architecture and spatial composition for the disable persons in Bangkok and its perimeter; 5) to search for the opinion of the related people who design and manage sport centers for every person by interviewing and assessment; 6) to conclude the scope of work which includes guidelines concerning sport categories, proper activities and specific areas for sport and activity centers.

The result of the study reveals the design approach for sport and activity centers for general and disable persons who require convenience in using the center. The survey of ideas for designing the sport centers in foreign countries found that England provides the best public sport centers for all which have mainly been supported by government for every group of persons. Then, the second is United State of America, followed by Japan and Israel. The survey of 36 sport categories reveals that the disable persons can play 23 sports in the same area for general persons. These areas are required to install the utilized instruments for the disable persons to use them at the available time. The disable persons can be divided into 5 groups but there are 3 groups which directly affect the design of the center, namely those who are incapable of visual contact, incapable of hearing or communication and incapable of body movement. Then, the design of center for every groups of persons must consider the seven functional aspects as follows: equitable use, flexibility, simple and intuitive use, perceptibility, tolerance for error, low physical effort, appropriate size and space for approach and use. The study of the architecture and spatial composition for disable persons confirms that permanent design is more proper for use than temporary structure which causes many problems, for example, high cost of installation and demolition, too steep slope, too narrow door and disconnection of pathway.

Activity areas in Vachirabenjatuj Sport Center, being a part of Train Park, consists of 47 rai or 75,295 square meters. The amount of users who use this park per year is approximately 351,439. There are many sport activities which are the component of the five new sport and activity buildings. They are knowledge center building, body ability support center, water sport center, auditorium and gymnasium and standard running path of 120 meters. In the addition, there is an approved area of outdoor sport, consisting of four futsal courts, six tennis courts, two sepaktakraw courts, two basketball courts and petanque ground. The total functional area covers 31,269 square meters and another 61,439.7 square meters for parking area and open space. Total investment, which was supported from Bangkok Metropolitan Authority and Thailand Sport and Recreation Authority, is 659,018,734 baht.