Thesis Title Concept Design for Physical Deformed Children School in Thailand

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ABSTRACT

This research is the study of Concept Designs for Physical Deformed Children School in Thailand. The objective of this research is studying the use condition of building and the problems of using the school building for physical deformed children as it is in present. This study is to analyze and propose the concept idea in design the school for physical deformed children in Thailand by studying Srisungwan School as a case study by gethering information as follow;

1.Information regarding use condition of general building area for teaching and learning that is mustered by observing and using questionnaires to teachers and professors.

2.Information regarding use of the room only for recovering efficiency of deformed children by interviewing with questionnaires to particular academics and room staffs.

The result of research is concluded as follow;

1.General Information of Students Srisungwan School has 216 students. The percentage of male student is 58.57% and the percentage of female student is 41.20%. State of the students show that the most as a percentage, is 48.15% of the students use wheelchairs, second most as a percentage, is 19.91% use walking helpers, and 18.98% use walking sticks, there is only 12.96% that not using the walking helpers. Most of the figure sizes of the students are different. There are mixing among figure size and normal sizes: bigger figure—than normal size of children and smaller size than normal size their number

is nearly the same as a percentage, is 83.33%, normal size and dwarf their number are the same as a percentage, is 8.33%

2. Teaching and Learning Activities Srisungwan School has established for teaching, learning, and recovering the physical efficiency. There are classrooms as following

2.1Special Level: This level is to prepare the readiness for the students by planning to teach and develop individually the skill of using various parts of muscles, speaking and wording, self-aiding and social habit, witting, academically readiness for entering to normal class level

2.2Kindergarden Level

2.3Out Level: This level is to teach number of students who has physical deformed due to brain fever together with the witless defect. They are unable to learn in the same level with other students so they need to learn in "out level". There is preparation of individual teaching plan for developing each student suit to physical condition, wit and potential in various by combining the opinions of physical therapists, teachers, oversee staffs, parents, and students themselves.

2.4Primary Level

- 2.5Junior High Level
- 3. Building Usage Buildings of Srisungwan School consists of
- 3.1General Classrooms: Area of each general classroom is 4.00 x 8.00 meters all together as a percentage is 54.28%. Other classrooms that has area of 3.00 x 6.00 meters for each room as a percentage is 45.71%, and 80% is insufficient to use. Durable articles consist of mixing of particular design tables and chairs and normal design in the number that appropriate to the number of students in class is 68.57%, cap boards for keeping equipment or teaching aids, bulletins board or graphic teaching media, and black board. At the present time, classrooms consist of wood floor and vinyl-tiled floor, plastered concrete wall, hard wood doors, and windows without light windows. Most of the accidents that occur in classrooms result from falling down due to hitting among students while they are walking as a percentage is 71.43%. The second most 57.14% of falling

down due to the slip of floor surface.

- 3.2 Vocational Classrooms. Because the teaching and learning use the curriculum of Ministry of Education; therefore, the vocational subjects are added for the students can help themselves. Vocational subjects consist of the following classrooms
 - 3.2.1 Domestic Science (Cooking) Classroom
 - 3.2.2 Sewing Classroom
 - 3.2.3 Art Classroom
 - 3.2.4 Music Classroom
 - 3.2.5 Computer Classroom
 - 3.2.6 Science Classroom
 - 3.2.7 Physical Classroom
- 3.3 Physical Therapy Services, its purpose is to emphasize the cripple children to develop their physical movement as close as normal children. The special therapy room is divided into;
 - 1. Physical Therapy Room
 - 2. Activity Therapy Room
 - 3. Electric Therapy Room
 - 4. Water Therapy Room
 - 5. Speaking Improvement Room

Most accident in physical therapy room 71.43% occur from efficiency recovering equipments, the second most 57.14% result from falling down from hitting walk by other students.

- 3.4 Physical Support Equipment Room. This room is used for repairing the damaging equipment and be able to make many equipment such as brace, special shoes, supporting stick. At present, this room has applicable area of 88 square meters which is too small to work. The durable articles in physical support equipment room consists of
 - 1. Table chair of physical support equipment makers
 - 2.Wood work bench

- 3.Metal work bench
- 4.Leather work bench
- 5.Document table
- 6.Practice equipment shelve
- 7.Tool cabinet
- 8. Tools for making physical equipment

The 66.66% of accident in physical equipment room result from using of tools and equipment, the 66.66% of accident result from walking hit the workbenches, and 50% result from walking hit the stuffs on floor.

- 3.5 Social Work Room. Duties of social workers are provide ways of services, advice, and instruction to parents, teachers, and students. Durable articles consists of tables chairs for social workers, cabinet, and book shelve.
- 3.6 Nursing Room. Nursing room provides nursing and recovering to sick children. Most of accident in nursing room result from falling due to the slip of floor surface.
- 3.7 Boy and Girl Dormitories. At present, the boy bedroom is one big and appropriate bedroom hall with all beds in one room. Its area is 80 to 100 square meters but it is insufficient to work. In addition girl and small children bedroom is one big bedroom hall and appropriate.

General Structure of School Building and Other Buildings

- 1. At present, the surface of walkway in front of ground floor classroom is finished floor and wood floor. Porch inside the present building is appropriate as a percentage is 66.66%, and accident on the walkway results from falling due to the slip of floor surface as a percentage is 97.10%
- 2. The decline walkway structure is not appropriate as a percentage, is 56.52%. Accident on the inclined walkway 59.42% results from falling because the slope is too high.
- 3. Bathroom, bath place, toiletry, and washbasin in the present are not sufficient for demand of teachers and students as a percentage is 68.12%. Accident that occurs in

bathroom and toiletry resulting from falling due to the slip of floor surface as a percentage is 100%. Falling is the second cause of accident due to weighting of body on toilet is not correct position, as a percentage is 95.65%. In addition the 94.20% of falling results from walking hit the wall and bathroom - toiletry doors.

- 4. Waiting room for teachers
- 5. Every connected walk way between building must have roofs, the percentage is 92.75%. There is little change of places when the buildings are used as a percentage is 52.17%. The changes of places impact to travel a lot: walkways are not the same level, and walkways are too narrow as a percentage is 98.55%. Next, the slip of floor surface as a percentage, is 65.65%, and the distance of each building is far as a percentage is 94.20%.
 - 6. Light inside buildings.

At present, natural light is used together with electric light from light bulbs as a percentage is 56.07%.

The result of this research has shown that state of using buildings and problems of using learning building for deformed children at present can not fully respond the use and there are still many problems that must be solved and improved such as inclined walkways and stairs, physical support equipment room, physical therapy room, learning building. One that is found and be the problem: the classrooms are insufficient to the number of students; therefore, the classrooms are temporary divided by partition. This cause the classroom can not respond to the use as per purpose of the architect. From the concluded result of research as above – mentioned thus the researcher has used the conclusion and proposal as mentioned as concept design for physical deformed children in Thailand that is appropriate in Chapter 6 of this thesis.

Concept Design for Physical Deformed Children School

The important keys of education for physical deformed children are

- 1. Training for Independent Living.
- 2.Literate and be able to work for living or continue for higher education.