

**Learning Environment and Facilities in Special Schools
for Physically Handicapped Children**

(Paper submitted by the Hong Kong Special Schools Council to the Panel on Education of the Legislative Council on 16-10-1998)

1. Background

In 98/99, over 700 physically handicapped (PH) children aged between 4 to 20 are enrolled in seven special schools. The causes of their physical disabilities are many and varied but usually linked to medical conditions, the most common of which are cerebral palsy and muscular dystrophy. Their motor abilities are greatly reduced in flexibility, control and strength. Others afflicted by conditions such as "brittle bone", epilepsy, spino-bifida may require intensive daily nursing care. Most of our students have normal intelligence although there has been a steady rise in the number of children admitted to our schools with associated mental handicaps and learning difficulty.

2. Educational Services

The aim of education in our PH schools is to ensure that children enjoy equal educational opportunities as their able counterparts to develop and grow up to become independent and responsible citizens of the community. There are two main aspects in our service: education and rehabilitation. The curricula of mainstream schools are adapted and modified to ensure that the essential learning elements and the challenges of learning are retained, despite frequent disruption by therapy sessions and hospitalization needs. In rehabilitation service, intensive therapy programmes of all kinds are built into the curricula not merely to help these children overcome their disabilities but to ensure that their development into adulthood is not adversely affected by their disabilities and the emotional problems associated with the disabilities. Daily nursing care is provided for students requiring regular medication and catheterization to maintain a healthy life routine. To fully implement these two aspects of education and effectively meet the multifaceted special needs of these children, specially designed equipment and facilities as well as some adaptation of the learning environment are crucial for the provision of quality education for these children.

3. Difficulties encountered

The provision for special schools for PH children, from school design, schedule of accommodation to basic equipment and furniture such as desks and chairs, has been based on that for main stream schools. While such a policy ensures that children in special schools enjoy equal opportunities as those in mainstream schools, it tends to overlook the special and specific needs of our children in the educational process. For many years schools have to resort to external funding to modify or replace equipment and furniture to match their special requirements. For example our children need more solid frames for tables and chairs to stabilize their body in writing. The heights of tables and chairs have to be adjustable to match the varying body builds. We may sometimes succeed in bidding Furniture and Equipment Grant from the Education Department, but

staff who have little knowledge nor experience of the school setting. The result is either tolerance of the poorly matched facilities or a continuous search for additional funding.

4. Improvement to learning environment and facilities

We are encouraged to know that the Panel on Education of the Legislative Council is expressing interest and concern to the issues on Learning Environment and Facilities for PH children and would list below some suggestions on the improvements which we think are urgently needed by our PH schools.

A) Air-conditioning

We are finally relieved to learn that the Government is ready to install air-conditioning facilities to schools for PH children. This is certainly a welcoming, albeit belated, decision. The disabilities in our children often prevent them from fending themselves against heat and poor ventilation. Some do not have the physiological function of body ventilation; others are too weak physically even to move their body off sweat-soaked clothing or bed-sheet. Many of our children have to wear thick protective garments and braces and have to fight the discomfort of the harness and the heat in the summer. The installation of air-conditioners would ensure that our children could now focus on their learning and not to have to fight the discomfort of the heat and poor ventilation.

We endorse the Chief Executive's recommendation to install air-conditioners to PH schools and urge the government to implement this policy immediately. We would also remind the government that the provision should apply to all facilities in the schools, including those in the boarding section, the hall and the gymnasium or indoors games room.

B) A spacious environment

Physically handicapped children need space to express themselves. This is not just because most of them use ambulating aids (such as rolators, wheelchairs and clutches) that tend to take up space. The provision of space would relax their inhibition to express their sense of movements, thus enhancing their increased confidence in motor movements. The existing standard provision of classrooms and special rooms in general matches our demand for space, but the extreme shortage of storage space for bulky furniture and equipment greatly reduces the real size of these facilities. Besides, there should at least be one gymnasium-type of multi-purpose room other than the hall for various kinds of physical expression in the educational process.

We request for the provision of adequate storage storerooms for bulky furniture and equipment and a gymnasium as standard items in schools for PH children

C) Facilities for perceptual and sensory training

Many of the physically handicapped children present some degrees of perceptual deprivation and/or deficits. Such deficits can be compensated by a continuum of training programmes provided by such facilities as a toy library, multi-sensory room

and/or a sensory integration room. A toy library provides a wide range of play and stimulation aids that have been designed to enhance perceptual, cognitive and hand manipulation development. With the flexibility of a library, children can extend their training sessions to home and individual play situations. The facilities of either a multi- sensory or sensory integration room enable children with sensory processing disorders to experience stimulation from focussed sensory input and put them back to the normal pattern of sensory processing.

We request that the toy library and the sensory integration room should be made standard facilities in schools for PH children.

D) Meal service

Many physically handicapped children have associated chewing and swallowing problems. Food has to be chopped to a variety of sizes for easy ingestion. Besides, mealtime is also an important training opportunity for use with adaptive aids in feeding. Without a controlled meal service, may not get the required nutrition from their lunch.

We request the provision of a kitchen and cooks for day schools for PH children.

E) Inter-com and two-way public address system

A number of physically handicapped children frequently require urgent assistance during their study period. Such incidents as incontinence, epileptic fits, hyperactivity requires immediate assistance to the teacher. An intercom call bell or voice call system would ensure prompt support in case of urgent need.

We request the provision of an inter-com system

F) Observation room for educational psychologist

There have been an increasing number of physically handicapped children with emotionally disturbed behaviours. These children need a place to calm down their excessive emotional outbursts. A small observation room with audio-visual effects next the psychologist's room will provide a safe place for them to calm down.

G) White boards

A number of our children have poor lung functions. The chalk particles from the use of black/green board and duster may contaminate the air. A more healthy alternative of the white board should be offered as a standard option for our schools

H) Attached toilets for junior classes

Toilet training is an essential part of our rehabilitation programme. It will produce a better learning result if such training is related to the children's daily toilet needs. An attached toilet (with good ventilation) would help integrate such routine with other learning activities.

I) Hydrotherapy pool

Hydrotherapy pool is a standard provision for schools for PH or neurologically impaired children in many western countries. Many of our children are physically so weak that the only time they can experience their body movement is in the water. Hydrotherapy therefore is an indispensable part of our motor rehabilitation programmes. At present we have to go through tedious and laborious procedure to take our students to rehabilitation centres for their hydrotherapy sessions. For some schools this could be an acceptable alternative; for others this could be not only time and labour consuming but inefficient and may cause great disruption to the learning process.

We request that the hydrotherapy pool should be made a standard option for schools requiring in-house therapy in the pool and for them the provision should cover running and maintenance expenses.

J) Tailored-made Furniture and Equipment and Schedule of Accommodation

The importance of having specially-designed furniture and equipment and schedule of accommodation has been stated in the previous sections. The current standard F&E list and schedule of accommodation for schools for PH children still fail to reflect the special and specific needs of our children.

We request for a review of the existing F&E list and schedule of accommodation for schools for PH schools and that the schools should be fully consulted in the preparation of the list and schedule.

5) Summary

The staff and principals of schools for PH children are greatly encouraged by the concern of the Panel of Education on problems facing our children in respect of learning environment and facilities. The above suggestions represent concerns of some of the long-standing problems in our schools, which are barriers in our pursuit for quality education. We do hope that the provision of air-conditioners is only the first step in the improvement of the learning environment and facilities for our schools.