

A Try to Develop a Teaching Material Which Is Aimed at Enhancing Instructional Skills of P.E. Teachers at Schools for the Hearing Impaired in Japan and Taiwan

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At physical education section of Special Needs Education School for the Deaf, University of Tsukuba, we have made use of a teaching material by computer when we offer guidance to student teachers or newly-appointed teachers who are engaged in P.E. classes. At the 9th APCD in 2006, we showed the value of this teaching material, based on the results of the questionnaire survey issued to P.E. teachers of deaf schools in Japan. This time, we present the contents of our joint research "A try to develop a teaching material which is aimed at enhancing instructional skills of P.E. teachers at schools for the hearing impaired in Japan and Taiwan," where we have cooperated with National Taichung Special Education School for the Hearing Impaired and National Changhua University of Education. In our research, we focused on the following points: 1) a test on physical strength and athletics abilities of deaf pupils or students, 2) teaching contents of P.E. classes based on the actual conditions of students and pupils, 3) a students' attitude survey on each event of P.E. classes and a fully worked-out teaching material and contents, 4) Report on National Changhua University of Education. Based on these, we added specific examples and data to help P.E. teachers make good use of this teaching material in their P.E. lessons. We selected carefully and improved the contents of our teaching material, reflecting the actual conditions in Japan and Taiwan.

Keywords : a teaching material P.E. teachers Japan and Taiwan

Introduction

At physical education section of Special Needs Education School for the Deaf University of Tsukuba, we have made use of a teaching material by computer when we offer guidance to student teachers or newly-appointed teachers who are engaged in P.E. classes(**Figure 1**) (**Figure 2**).

At the 9th APCD in 2006, we showed the value of this teaching material, based on the results of the questionnaire survey issued to P.E. teachers of deaf school in Japan.

Since 2010, we have cooperated with National Taichung Special Education School for the Hearing Impaired (Taichung School) and National Changhua University of Education in order to develop and enhance curriculum and our teaching material.

Figure 1 Teaching material



Figure 2 Eye contact & relaxation



Methods

In our research, we focused on the following points: 1) a test on physical strength and athletics abilities of deaf pupils or students, 2) teaching contents of P.E. classes based on the actual conditions of students and pupils, 3) a students' attitude survey on each event of P.E. classes and a fully worked-out teaching material and contents, 4) Report on National Changhua University of Education.

Results

(1) Physical trends among children

The following trends were observed at both schools.

- (a) There was no variance between the body composition of our male and female students and the national average.
- (b) Muscle strength, muscle endurance and flexibility were lower among all age groups for males.
- (c) There was no difference from the average for females at our school, except for those over twelve; we observed a decrease in flexibility and no improvement in running or jumping abilities.

(2) Devising an instruction method that meets children's needs

We employed the following methods at our school.

- (a) We used exercises which use a balance ball to improve flexibility, balance and posture (**Figure 3**).
- (b) In order to broaden a visual field, we attempted activities such as running in zigzags through hanging bars for the kindergarteners (**Figure 4**) (**Figure 5**).

We also have other creative experiences with students in groups of 3 such as passing the ball around to make an X shape.

- (c) We used a target object in order to provide clearer instructions when teaching basketball (**Figure 6**).

Figure 3 Balance ball (our school)



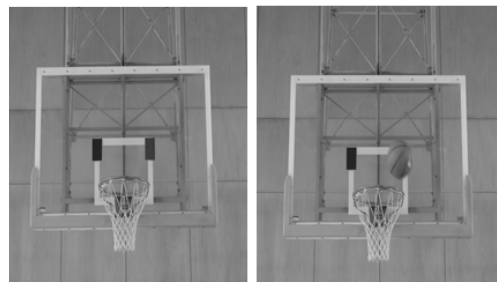
Figure 4 Running in zigzags through hanging bars (our school)



Figure 5 To Broaden a visual field (our school)



Figure 6 A target object in order to provide clearer instructions (our school)



The following were employed at the Taichung School.

- (a) Individual instruction manuals were created upon parental approval. Further, evaluation was conducted.
 - (b) Individualized exercises were taught after calculating BMI and posting ideal weights.
 - (c) Stretching exercises were utilized in the first half of class to improve flexibility.
 - (d) Instituted 333 exercise (3 times a week, 30 minutes each time, pulse above 130 beats/minute).
- (3) Results of the awareness survey topics which dealt with physical education.

The following contents were apparent at both schools.

- (a) While it varied based on the activity, most enjoyed physical education classes.
 - (b) In terms of track and field, it was difficult to encourage students' desire for endurance running.
 - (c) Swimming "felt good" and was very popular.
 - (d) There are many students who were aware that they weren't very good at apparatus gymnastics at our school.
- (4) Report on National Changhua University of Education.

Five major national projects in promoting children physical fitness

- (a) Lifestyle of Health and Sustainability (LOHAS) Exercise Stations Project
- (b) "Aid students" to Fit Project
- (c) Walk to School Project
- (d) Swimming Ability Project
- (e) School Sports Volunteer Training Program

Conclusions

Taiwan is promoting 5 National Policy projects, with a focus on the Taichung School, and Individualized manuals and instructions are created based on these projects. The focus is on individualized instruction for the many disabled children in attendance.

While we are creating an individualized instruction plan, the focus of P.E. classes is group instruction, which is similar to the teaching material we are creating. However, while keeping in mind that children's interests vary, it has been very educational observing such classes based on innovations which allow individual students to feel their health and physical capacity progress and improve further.

Both our school and the Taichung School are innovating physical education activities that meet the students' needs. We have gained greater awareness from each other of how we can develop and enhance curriculum; group activities for the Taichung School and individualized activities for our school.

Due to the increase of deaf students attending regular schools in Japan and Taiwan, we expect that our teaching material will be one of the means used by physical education teachers, not only in special education schools but also in regular schools as well.

In the future I hope to improve our teaching material that reflects the knowledge and instructional innovations gained from the joint research.

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