

聲音與肢體律動輔助科技應用於視覺障礙兒童教育之研究

摘要

本研究之目的為：(一) 整合聲音、肢體律動輔助科技與音樂活動幫助視覺障礙幼兒肢體動作之發展。(二) 創造發明平價本土化之觸覺感知引導儀器促進視覺障礙幼兒肢體動作之發展。

本研究以質性資料收集為主，量化數據為輔，依立意取樣的方式，選取七名4-6歲之視覺多重障礙幼兒為研究對象。每週實施一次教學，每次課程進行約40分鐘，為期約六個月，共計23次教學，在自然的情境裡進行觀察及資料蒐集，研究者之資料蒐集以半結構式觀察記錄與軼事紀錄為主。

透過一系列有系統的聲音光束音樂活動課程，結果如下：(一) 經由一系列的音樂課程後，視覺多重障礙幼兒的肢體能力皆有正向發展，且社會效度之統計顯示亦支持本研究結果，故音樂活動課程對視覺多重障礙幼兒在肢體動作方面，為正向且有效的課程。(二) 透過觸覺感知引導肢體活動，能夠提昇視覺多重障礙幼兒之肢體空間發展。

研究結果證明了音樂活動與自創之觸覺感知引導儀器對視覺多重障礙幼兒肢體發展有正向的影響。

關鍵字：聲音光束、視覺多重障礙幼兒、肢體動作

A Study on the Use of Technology of Sounds and Physical Movement with Visually Impaired Children

Abstract

The purposes of the study were (1) integrating sounds, assistive technology of physical movement to help the development of physical movement of children with multiple disabilities and visual impairment; (2) inventing parity and local equipment of tactile sensory to enhance the development of physical movement of children with multiple disabilities and visual impairment.

The methodology was both of qualitative and quantitative study. Seven 4-6 year-old participants with multiple disabilities and visual impairment were selected by purposive sampling to participate in the study. The duration was 6 months with 40-minute instructional sessions once per week. The data analysis was through semi-structured observation forms and anecdotal logs.

Through a series of systematic music activities with Soundbeam equipment, the results of the study were as follows:

1. The participants' ability of physical movement had a positive improvement. The social validity also showed the positive support for the result.

2. The invention of parity and local equipment of tactile sensory was able to assist the participants' development of physical movement.

The results showed the effectiveness of the music activities and the invented equipment on developing physical movement of children with multiple disabilities and visual impairment.

Keywords: Y Soundbeam, Children with Multiple Disabilities and Visual Impairment, Physical Movement