

COMPLETION REPORT

The Use of Japanese Paper Folding Art, Origami, in Increasing Learning Skills among Children with Disabilities

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Effective study strategies are the gateway to school success. However, for many children who have learning disabilities and attention deficits, studying is an overwhelming challenge. Prestia (2003) stated that many students with special needs have neurological, biological and sensory difficulties that affect how they learn and respond to classroom environments. Students with learning disabilities are found to be weak in the retention of learned skills because of short attention span and have difficulty following lessons at the appropriate rate. The Japanese paper folding art, Origami, is a form of assistive technology which could be of use in increasing the learning skills in the classrooms of children with learning disabilities. According to Sze (2005), origami enables children to visualize the creative process of learning in terms of its' outcome and process in a short time frame, with a tactile demonstration that is easily accomplished.

This study investigated the effect of using origami on the development of learning skills of children with learning disabilities. A case study using single subject design was employed involving students with learning disabilities who have lesser attention span on lessons. Data were collected using the Baseline Observation Form, Intervention Observation Form and the Intervention Module and were analyzed using descriptive statistics based frequencies and the percentage of attention span. The results showed that the samples' attention span increased above 60% when intervention was given. Maximum concentration of 100% was found in at least two intervention sessions. Motivation and feeling curious have helped in sustaining the attention span during the intervention sessions. In addition, the hands-on nature of origami also contributed to the increase in attention span of the samples. Lesser disruptive behavior during the session was another contributing factor in sustaining the attention span.

This study has shown that the art of Origami uses the different intelligences that a child has. The kinesthetic intelligence is represented in the hands on activity of folding the paper, the inter and intra personal intelligences emerge through the inter and intra communication activities which occur while folding the paper. The listening and reading directions engage the students' linguistic intelligence. The technical sequential steps in the paper folding not only able to promote accuracy, organizational management skills, increase attention and fine motor skills, it also enables children to experience fun and success in learning. May (2012) stresses the hands on activities involving origami enable the students to use the different sensorial aspects of touch, auditory and visual that can help boost positive and meaningful learning experience. The students in the study were observed to be very engaged in their activities. The use of colorful and different Origami paper texture have helped boost create a more stimulating learning environment. An Origami based learning module which inculcated Japanese cultural art heritage was developed during the study and can be suggested as a tool in providing alternative teaching in classroom for children with special educational needs.

Awards and Publication of the Results Research Project

Verbal Presentation (Date, Venue, Name of Conference, Title of Presentation, Presenter, etc.)

- 1) 17-18 September 2014 / Institut KWSP Kajang, Selangor, Malaysia / The 4th International Conference on Learner Diversity (ICELD 2014)/ Intervensi peningkatan tumpuan dalam pembelajaran murid bermasalah pembelajaran melalui lipatan kraf tradisi Jepun (*Intervention on Increasing Attention in the Learning of Children with Learning Disabilities through the Use of Japanese Traditional Paper Folding Craft*) / Manisah Mohd. Ali & Norizza Sahal.
- 2) 30 September 2015/ Faculty of Education, Universiti Kebangsaan Malaysia/ Origami dalam Pendidikan Khas (*Origami in Special Education*) / Manisah Mohd. Ali.
Main Prize Category: 3rd Place & Gold Medal Award
- 3) 26 January 2016/ /Faculty of Education, Universiti Kebangsaan Malaysia/ International Conference on Special Education in South East Asia 6th Series/ Seni Lipatan Kertas Jepun dalam Pengajaran dan Pembelajaran Kemahiran Motor Halus Murid Bermasalah Pembelajaran (*Japenese Paper Folding Craf in the Teaching and Learning of Fine Motor Skills to Students with Learning Disabilities*) / Yusni Yusoff & Manisah Mohd. Ali.
Conference proceedings.
- 4) 16-18 February 2016/ Centre for Teaching and Learning Technologies, Universiti Kebangsaan Malaysia. *Applikasi Origami dalam Kemahiran Belajar (Application of Origami in Learning Skills)* / Manisah Mohd. Ali.
Gold Medal Award

Education Thesis (Name of Journal and its Date, Title and Author of Thesis, etc.)

- 1) Norizza Sahal. 2014. Keberkesanan Pengajaran Menggunakan Origami Dalam Meningkatkan Daya Tumpuan Murid Bermasalah Pembelajaran. (*A Study on the Effectiveness of Using Origami in Increasing Attention Span among Students with Learning Disabilities*) Unpublished Undergraduate Academic Project. Fakulti Pendidikan Universiti Kebangsaan Malaysia
- 2) Yusni Yusoff. 2016. Penggunaan Origami dalam Meningkatkan Kemahiran Belajar Murid Bermasalah Pembelajaran. (*The Use of Origami in Increasing Learning Skills of Students with Learning Disabilities*) Unpublished Masters Project. Fakulti Pendidikan Universiti Kebangsaan Malaysia.
- 3) Manisah Mohd. Ali & Norizza Sahal “Intervensi Peningkatan Tumpuan Dalam Pembelajaran Murid Bermasalah Pembelajaran” – accepted dan in press for publication in Malaysia Journal of Education, 41(1); May 2016.

Book (Publisher and Date of the Book, Title and Author of the Book, etc.)

- 1) Manisah Mohd Ali, Modul Origami untuk Pendidikan Khas – in progress