USING DANCE AND MOVEMENT ACTIVITIES TO ENHANCE THE COORDINATION AND SOCIALISATION SKILLS OF PRIMARY SCHOOL CHILDREN WITH DYSLEXIA

Diana-Lea Baranovich
University of Malaya
Malaysia
dileab@yahoo.com

Educators today are familiar with the signs and symptoms of dyslexia where the academic issues of reading, writing, spelling and arithmetic is concerned. There are many programs and international curricula to assist and help children suffering from dyslexia function and progress academically very well. The area of dyslexia which is also prominent in child suffers, however not nearly as frequently addressed is physical coordination. Children suffering from dyslexia have trouble with their overall gross motor coordination. Furthermore they have trouble with their sense of left and right, sense of direction in relationship to body in space, short-term memory, scheduling, and getting to the right place at the right time. Movement Games, Activities and Dances are enrichment activities, which require the child's full body participation. These activities help to enhance the child's sense of direction, memory, sequencing, location of body in space, and overall gross motor coordination skills. Furthermore, these activities serve to enhance the child's social and emotional growth through participating in a group.

Keywords: Heuristic research, dance therapy, dyslexia, physical coordination, concentration and socialisation

Dyslexia is becoming more widely recognized among education specialists, classroom teachers and parents; however, this particular learning disability is not yet fully understood.

Dyslexia Defined

The World Federation of Neurologists defines dyslexia as:

"A disorder in children, who despite conventional classroom experience, fail to attain the language skills of reading, writing, and spelling commensurate with their intellectual abilities" (World Federation of Neurologists, 1968).

Ramus defined dyslexia more simply by stating:

"Individuals who have a severe impediment in their ability to read and spell." (Ramus, 2004).

Furthermore, the World Federation of Neurologists places dyslexia under the category of a learning disability and happens to be the most common learning disability among children. Itis also more common among boys than girls (Heiervang, Stevenson, Lund, & Hugdahl, 2001).

When considering children of pre-school age, the symptoms of dyslexia are not easy to recognise because they can easily be confused with the normal maturation of childhood development. For example, children under age seven or eight commonly reverse letters and numbers. However, when children continue to have difficulties with these basic learning concepts into the primary schooling years, they are exhibiting signs of dyslexia. In the case that it is dyslexia, without the proper educational treatment plan, it is likely to become an overall impediment to the holistic development of the child, including the social and emotional domains.

Other common symptoms of dyslexia according to the Davis Dyslexia Correction Program (1992) are as follows:

Difficulty copying work accurately
Crowding of letters and numbers
Difficulty remembering events in sequence (chronological order) even after being exposed several times to the information
Spatial relations
Trouble with gross motor skills and overall coordination
Trouble distinguishing between left and right
Word pronunciation, forming sentences in speech
Poor concentration and attention
Often dual diagnosed with ADHD.

It has been observed through the years that dyslexic children often engage in "acting out" behaviors (hence the common dual diagnosis of ADHD) as a way of drawing attention away from their learning disabilities and social incompetencies. This will often lead to further issues with their self-esteem, and their relations with other children, including their own siblings (Dyslexic Professionals, 2006). This "acting out" behaviour often becomes annoying to other children. Also, other children who do not understand them can become impatient with the dyslexic child's inability to perform tasks quickly and efficiently as normal children or their lack of coordination on sports teams and other interactive activities.

This becomes a major impediment to the child's sense of self and overall socialisation skills. As explained in Eric Erickson's 4th stage of Psycho-social Development (7 – 12 years old), this stage is called Industry vs. Inferiority.

Children in this stage develop a positive self belief for productive work; they develop a view that they can master skills and complete tasks successfully (Erickson, 1968). In short, they are ready to contribute to the adult world in a positive, constructive way.

This is also the age whereby the child begins to develop habits, skills, values and motives and, most importantly, begins to internalize these values. The child also learns how to appropriately regulate behaviour according to the surrounding environment. Children will know not to run around a movie theatre or will choose not to throw litter in the street even when no one is looking (Heiervang et al., 2001) Due to the dyslexic child's developmental delays and ADHD behavior, which often causes socialisation issues, the above aforementioned does not happen.

There is no cure for dyslexia; however, there are treatment options and special educational programs designed to maximise the child's learning success and potential. As with any treatment program, success of the treatment depends heavily upon the attitude, interest and commitment of the people involved. It is important that the adults involved in the treatment process keep a positive and optimistic attitude in order to encourage the child in the process. The Houston Independent School District conducted a survey in 2003 of all the high school graduates from 2000 and 2001 who were diagnosed with classical dyslexia and received special education services. The survey showed that 93% of these graduates were attending post-secondary higher –education and/or were gainfully employed; hence, many dyslexic children have succeeded very well in life despite their learning disability. On the other hand, if the child does not receive the appropriate educational guidance or does not experience unconditional acceptance by the teacher and other adult caregivers and role models, the child is likely to begin "struggling" with issues of self- esteem.

Furthermore, it can be seen that although the Texas Intervention Plan for elementary students who are suffering from dyslexia suggests the child will receive modified and assisted instruction to compensate for reading and writing deficits, the treatment plan does not address any guidance or assistance to help enhance the physical delays of the child. These delays of physical coordination often contribute to the dyslexic child's emotional and socialisation issues. For example, due to poor coordination skills, dyslexic children often do poorly in sports activities and as a result of often ridiculed by their "more capable" peers.

Active Research Project

The purpose of this paper is to describe a heuristic qualitative active research project,which was done with eight children diagnosed with dyslexia. According to Merriam (1998), heuristic qualitative research is based on the researcher's knowledge and experience-based techniques about a given situation where intervention is needed. This knowledge and experience is then used for problem solving, learning, and discovery about what aspects of the intervention are most

suitable for the population. Heuristic methods are used to speed up the process of finding a satisfactory solution, where an exhaustive search is impractical. Examples of this method include using a "rule of thumb", an educated guess, an intuitive judgment, or common sense observation. The findings of a heuristic qualitative study help to explain background of the problem or situation, explain why an innovation or intervention worked or failed to work, evaluate, summarize and conclude the potential of further applicability.

The objective of this heuristic research project was to use dance therapy games, activities and dances with these children to enhance their spatial awareness, direction, body coordination, impulse control, self- esteem and socialisation.

The eight children selected attended an inner-city public school in Houston, Texas; they were either eight or nine years old and in the 3rd grade. Four of the children were Hispanic girls, three were Hispanic boys, and one boy was African American. All subjects were of lower socio-economic status. All children were in mainstream classrooms throughout the school day; however, for two hours three times a week, they went to the "resource classroom" to receive extra educational assistance for their learning disability. The duration of this program was 16 weeks from August – December 2007. I met with the children twice a week for forty-five minutes.

The idea for the dance therapy program came to me when I was working as an expressive arts therapist in a public elementary school. My job description was unique and very different from my typical assignments as a school psychologist whereby I would see students one on one throughout the day. This job I worked more as a "therapeutic resource teacher." I used various components of expressive arts to help various students in need of emotional and/or academic special attention. I worked with students in groups, and we worked on academic subjects as well as self-awareness and socialisation skills. Throughout my three years in the position, I would sometimes see a certain need with a certain population. I would then design a special program for that population. One such population that captured my attention was children from the resource classroom who were diagnosed with dyslexia or dual diagnosed with dyslexia and reactive ADHD. The term reactive is used to refer to dyslexia that is not physiological in its origin but psychological; meaning that the child is hyper due to emotional "needs" that are not being met (Boder, 2007).

While observing these children in class, I noticed that they had more difficulty with overall body control and coordination; furthermore, their sense of direction would become easily confused. Several weeks into the school year, I noticed that they were (often times) still getting up from their desks and walking to the wrong side of the room to exit the classroom. They would also get turned around going from one side of the hall way to the other – although they have walked the same hallway numerous times.

While observing them on playground equipment and in physical education class, they seemed to be somewhat clumsy and lack overall coordination typical

of their chronological age. Perhaps because of this, these children did not seem to enjoy organised sports and games and at times were ostracised by other children on their team. I also realised that they had more socialisation and behaviour problems than the other students diagnosed with other learning disabilities.

It was obvious that their academic needs were being attended to; they were progressing well academically and learning to compensate for their disability. However, they needed help with gross motor development, self-esteem and socialisation. Because one area of development influences other areas of development it appeared that there was a need for a treatment program which addressed the emotional and physical needs of the child as well as the academic needs.

Being a dance and movement therapist, I had a "eureka moment" one day during the third week of the school year and suggested "dance therapy." After clearing the idea with the school administration, I, along with the special education team, chose eight children, all of whom (along with their parents) agreed that they wanted to participate in a special dance program. The eight children were chosen because of their excellent attendance record and longevity of being in this one particular school. The parents of the children and school personnel were informed of the overall purpose of the program; however, the children were told that the program was for them to gain awareness of body, explore feelings and get exercise because they did not seem to like sports.

This age range of students (8-9 years of age) was chosen to be the subjects because they were old enough to be diagnosed as being dyslexic, yet young enough to benefit from the dance therapy program in terms of enhancing physical delays and building more positive self-esteem and pro-social behavior skills before bigger conduct and socialisation issues evolved.

Bearing all of the aforementioned issues in mind, I set out to plan the program. The first issue to consider was the "overall" structure of the program. Very many different theoretical orientations and approaches can be used in dance movement therapy with children; these include non-directive dance improvisation, directive choreographed dances and combinations of both. I first considered the need for structure with this particular population. Because these children had impulse control and socialisation issues, they needed a sense of self - grounding and "holding."

It is always important as a dance movement therapist to consider the use of structure and how we use it in our work. Structure is always present; it is just a matter of to what degree. Some populations need a lot of structure, such as the mentally retarded while others such as high functioning adults in an authentic movement group need very little. As with all forms of psychotherapy, it is based on the needs of the client.

As is succinctly stated by Levy "Structure is always present whether it is obvious or not."(1988). Structure helps to create a "holding environment." This term was derived from Winnecott's "(1968) description of conditions necessary

for emotional development. In everyday life, the mother (primary caregiver) provides this for the child. In therapy sessions, it is the therapist who holds this for the child to create a safe environment. This is the first step in having the child feel free to respond.

In dance therapy, structure can be provided through consistency of the following: time and place of sessions, organization of activities, and personality of the therapist. Also in terms of the dance itself, structure through rhythm, spatial formation, music, routines, props, images or signals.

Again the structure should always be based upon the needs of the group. The structure I used with the children in this group is not what I do with other groups or even a similar population. I have a basic idea and then it evolves based on the way in which the group progresses and what are expressed in their verbal and non-verbal communication.

I decided that the goal of this program was going to be in two levels; the first addressed the need of body coordination and sense of direction – including balance, spatial awareness, direction, co-ordination and memory. The second level addressed the children's overall socialisation skills including impulse control, personal space and boundaries and the ability to cooperate and work as a team with their peers. The self-esteem component would be an outgrowth of the developing process.

Considering the "holding environment" my opening ritual would be to have the children come together sitting in a circle. Circles create a sense of community and equality among group members. Also, I worked with this group right after they finished recess. The structure and routine of coming together in a circle allowed the children to ground and centre themselves, hence making for a smoother transition into a more formal environment. I began with my attention and focus activities. This allowed the children to get control of their body and gain a sense of being grounded. These games also helped the children by having them pay attention to each other and acknowledge each other as being leaders and followers.

Coming Together Games and Activities

Sound and Silence/ Stop and Start games:

These games enhanced the children's focus and concentration, body impulse and control, and listening and concentration skills. Below are a few of the games which were used during the opening ritual. All of the following games were created by me based on what?

Playing our drums together game:

I would have them sit in a circle. I would have them close their eyes; they would play their imaginary drum the same way I play my drum. By having the children close their eyes, I knew that they were listening and not just visually following

my arm movements of playing the drums. When I stopped playing my drum, they would stop playing their imaginary drum. Vary in speed and volume. Then pass the leadership to a child. At first I had to assist the child by playing the drum along with the child because in the beginning he could not maintain a steady pulse.

Follow the conductor game:

This game is done by giving the children a gesture – then they give a certain gesture and/or sound response. Such as, if the conductor holds his hands over his head, the children clap. If the conductor holds his hands in a "thumbs down" position, the children click their tongues, and so forth. Once a cue and gesture/ sound has been set, it is important not to change it. Over time, the children add new cues and sounds/gestures. It is always important to pass the leadership to the students. It is also important not to participate when a student is a leader because the children will look at the therapist and not the child who is the leader.

Moving in and out of the circle game:

This game was done whereby each child had an opportunity to move from his home base to the centre of the circle then back to his home base. Then the other children would simultaneously "copy cat" the child leader.
All the above games gave the children opportunities to be validated as a leader. This also gave the children an opportunity to be followers and respect their peers as leaders as well. This is very important for the socialisation aspect of their development.

Mirroring Game:

This game is done in pairs. With two children facing each other, one leads and the other follows as if looking in the mirror. Their feet remain set on the floor. On cue the follower becomes the leader. This game gives a sense of connection; moving and blending as one.

Loco-Motor Movement Games:

These games where introduced after the first six weeks of the program. One of the stationary games was always done first. The children were very aware of where in the movement space it was OK to move and where it was not.

Rhythmic Loco-motor Body Movement Games:

These games served to bring the concept of sound and silence – stop and start – to loco - motor movement. Concentrate on natural body rhythms which go "hand in hand" with body rhythms in dance. The students will walk, run, hop, jump,

and leap. They would listen to the corresponding drum beats. When the drum stopped, they freeze and make a shape.

Different instructions from time to time were given to the children as to how to freeze; such as, high, low, medium, on one body part, on two, or on four were given. This kept the children thinking.

Exploring their bodies in space – imagination movement:

These games helped the children to experience the full range and dynamics of their body movements. Because these children have poor impulse control and are hyperactive, they have a tendency to be "out of touch" with their bodies and their feelings within their bodies. The different body dynamics were heavy and light, quick and sustained, stretched/ lengthened and contracted, and bond and free. If I wanted the children to experience a bond and contracted movement, I would ask them to stomp on roaches. If I wanted the children to experience light and lengthened, I would ask them to float as a cloud high in the sky. I would improvise music accompaniment to fit the movement on the piano. Again, the children knew to stop when the music stopped.

Structured, Choreographed Dances

Children's Folk Dances and Square Dances

The folk dances and one square dance used during this program were taken from the **Simple Folk Dances for Children** CD by Georgianna Stewart.

These dances have very sequential steps and forms with significant change of direction and reversals of patterns. Some of the steps were simplified. It was very important to begin in a stationary position; the children would sit on the floor and pretend that their hands were their feet. It was also important to first review the directions and direction changes in the dance first. As opposed to having the children count over and over again in sets of eight to keep track of their dance steps, I encouraged the children to hum the music (pitch and musical accuracy was not that important). This enhanced their listening skills and helped them to connect to the music.

Contemporary Line Dances

The children wanted to do this. One of the boys brought in the 1970s record the Locomotion and showed the dance to everyone. This gave him the chance to be a "teacher." This gave me the idea of allowing each child to have an opportunity to be the "teacher." Not just the leader. Again, this reminded me of the necessary ingredient of what I have come to call the "organic evolution" of the group process in these activities.

Lines were a bit different; they did not have the circle to contain the group support. These particular dances did not have the same variety of movements

as do the children's folk and square dances; they tend to be repetitive of the same moves within a sixteen bar phrase over and over again. However, it is about the children. It was also another opportunity for the children to listen, concentrate, socialise, and work on bodily coordination and sense of direction. The children also enjoyed taking turns being the leader in front of the line.

Dance Improvisation

Two months into the program, I believed that the children were ready to experience improvisational dance. These dance movements are spontaneously created in the moment. In the beginning, I had to make this activity more structured than usual. I first had the students come to the centre of our circle and lead us in a dance movement, or show us a new way to wave our scarves. Then group would then follow. After several weeks, the children were ready to move more freely about the movement space. I often used props such as scarves, ribbons, hula hoops, or hats with this activity. Using a prop gave the children something to manipulate and focus upon. I used a variety of music styles and genres with this activity. As I expected I often had to call the children's attention to the music and remind them to listen and "move" with the music.

Performance

Then one day, about two months into the program, one of the children suggested that we "perform" at the annual Christmas show which was seven weeks away. At first I had a difficult time because dance therapy is not usually concerned with performance. But again, it is about the "client." These children had a need to be "displayed" and noticed. Also, they needed to know that I had "faith" in them that they could "do it."

After much discussion of the type of dance we would do, it was decided that we would do a "jazz" dance to "Jingle Bell Rock." We reviewed the jazz steps that the children were familiar with from our contemporary line dances. Then we decided on the best order to arrange our dance steps in coordination with the music. I, of course, modified and adjusted the steps along the way. I deliberately incorporated a few "peel off" moves, which required the children to listen, concentrate and wait for their turn. This took a lot of practice, but the children were successful.

We spent one afternoon looking through dance costume magazines and deciding upon the "best" costume for our performance. Basically, the children chose an elf costume. The school's PTA (Parent – Teacher Association) gladly volunteered both the money and their time to purchase the materials and sew the costumes. The performance was successful, and the children benefited from having a very tangible goal and purpose to work toward. There were times when the challenge became "frustrating" to them. This is when we would have our discussions about commitment and follow through. Although by ordinary

standards this dance routine was very simple and basic for this age group, I had to remind myself that these children were working from their limitations. This, of course, made the work all the more rewarding.

Observational Findings

The children accomplished a great deal in the dance therapy program, both at an individual and group level. As is customary with action based research, in-depth notes were taken following each session with the children. The notes included the following for each child during each session based on a five point Likert Scale – one being the lowest and five being the highest: mood and attitude, the concentration and focus level, ability to cooperate with peers, ability to follow instructions and guidance from the teacher, ability to coordinate body movements, ability to move in the correct direction, ability to remember the sequence of steps, and the ability show positive attitude and effort during movement improvisation. Throughout the semester all eight children improved in all areas. They went from competitive, exploitative peer relationships to cooperative reciprocal interactions. It enhanced their sense of self-esteem, and ability to achieve a goal. The issues of aggression, impulse control and boundaries were embodied in movement, enabling them to explore safely the meaning of these issues in their lives and work with them through their dance and movement. Throughout the program, I followed their cues. Training in child psychology and life span development assisted me in working through their personal and age specific concerns and needs.

Our twice weekly sessions provided a safe container for them, a place where they could be challenged, yet not fear being ridiculed, judged or rejected in any way. Furthermore, they could experience learning through an art form and through a collaborative learning approach. This was a very different learning experience from the individual, workbook oriented approach of their resource class.

Throughout the sixteen week program, there was much observed improvement in the children's overall coordination, body control, sense of direction and spatial relations both in their dance movements and general day to day movements. Teachers reported an improvement in their conduct and school work. Although the physical, social and emotional domains of development were enhanced as a result of participating in the dance program, whether or not the program improved their cognitive domain (reading and writing abilities) cannot be ascertained as no standard measurement was taken nor was the cognitive domain part of the program objective. However, generally speaking, when one domain of development is enhanced other domains are enhanced as well. The classroom teachers of the eight participants did mention that "overall" the children were also socializing better in the classroom, and were more focused and showed improvement; they followed directions and showed a decreased frustration level when they found an academic task frustrating. Twenty-five years

of teaching has allowed the author/researcher to observe that children with higher self-esteem and positive socialisation skills perform better academically; hence when one area of the developmental domain is enhanced, other developmental domains are vicariously enhanced.

Due to the limited sample size, the findings cannot be generalized; however the study serves as a basis for more in-depth research on the subject. A longitudinal study is also recommended.

References

Boder, E. (2007). Developmental Dyslexia – Prevailing Diagnostic Concepts and a New Diagnostic Approach. Retrieved from http://www.springerlink.com/content/b544317w67502533/

Davis, R. (1992). Test for Dyslexia: 37 Common Characteristics of Dyslexia. Retrieved from http://www.dyslexia.com/library/symptoms.htm

Dyslexic Professionals. (2006). Self Esteem, Confidence, and Dyslexia. Retrieved from http://www.beingdyslexic.co.uk/forums/index.php?showtopic=1582

Erickson, E. (1968). *Identity: Youth and crisis*. New York, NY: W. W. Norton.

Heiervang, E., Stevenson, J., Lund, A., & Hugdahl, K. (2001). Behaviour Problems in Children with Dyslexia. Retrieved from http://www.ncbi.nlm.nih.gov/pubmed/11839115

Levy, (1988). *Dance movement therapy: A healing art*. Reston, VA: American Alliance for Health, Physical Education, Recreation and Dance.

Merriam, S. (1998). *Qualitative research and case study applications in education.* San Francisco, CA: Josey-Bass.

PBS. (2003). A Primer on Dyslexia. Retrieved from http://www.pbs.org /parents/readinglanguage/articles/dyslexia/main.html

Stewart, Georgianna. (1995a). *All – Time Favourite Dances.* Kimbo Education, Long Branch, New Jersey. Music arrangements by Dennis Buck. CD #9126

Stewart, Georgianna. (1995b). *Folk Dance Fun.* Kimbo Education, Long Branch, New Jersey, Music by Dennis Buck, Dance Choreography by Georgianna Stewart. CD #7037

Winnicott, D. W. (1965). *The maturational environment and the facilitating environment*. New York, NY: International Universities Press.