# What is Causing Learning and Concentration Difficulties

A STUDY OF SENSOMOTORI® SENSO MOTOR TRAINING PROGRAM FOR SCHOOLS AND KINDERGARTEN (IN FINLAND 2006-2008)

Study of the daily implemented Sensomotor Exercises in kindergarten and young children in schools.

In the winter of 2008, Elisa Toppila, a Master's degree student in special education at the University of Turku, Finnland, conducted a study for teachers who had carried out a Sensomoottori® training.

Teachers were taught to implement new sensomotor training developed for school and kindergarten children to promote the development of the children.

Teacher's training took place in 2006-2007 in Espoo, Helsinki, and Vantaa. In the autumn/winter of 2006/2007, about 50 teachers and assistants were trained in 6 schools and 9 kindergartens, which provided Sensomotor group training for 2 years. Some of the training was done with a group of children.

Background: For years, teachers have reported increasing levels of anxiety and the difficulty of reaching normal learning goals in children. Increasing class sizes and the new challenges posed by immigration, for example, are only exacerbating this situation. The potential of the school to teach troubled children has been discussed in public and exclusion from postgraduate studies is already seen as a major social problem. Therapy professionals have paid attention to the same issue, and to address this problem, some therapy professionals have developed a Sensomotor® sensory training program that promotes the development of children.

#### The Method

The Sensomoottori® \* is a kind of sensory exercise program designed for schools and kindergartens, where all children in the group or class take part in a short training session each day. The exercises are based on the experience in the field of therapy and modern knowledge of neurophysiology. Exercises are a series of exercises that develop and integrate physical sensory functions and are designed to accomplish a child's normal developmental pattern. In practice, training improves children's balance, motor skills, use of eyes, hand/eye coordination, and corrects possible developmental problems (e.g. inhibits remains of primitive reflexes and improves adult reflexes). \*(the export version of the program is named as the FinnSenso Training Program).

The practice is done during the normal school day and lasts about 10-15 minutes/day. Goals for Sensomotor Training:

- Improve the learning and concentration of the whole group
- improve the social interaction of the group
- promote children's progress in the normal learning path
- reduce the number of pupils transferred to special classes
- prevents exclusion
- Prevents teacher burnout

# The sensomotor operating model consists of the following elements:

- · Approximately 8 hours of training for teachers, including practical training
- Each Teacher's Own Personal Sensory Motor Training Manual (175 pages)
- · Possibility to join continuous material update

Sensomotor training is suitable for classroom teachers, special needs teachers, and school assistants. The theory section is also very suitable such as school psychologist, school health care, curator, etc.

# The size of the training group?

The teacher group had about 20 teachers/training session.

#### The research method:

The research was carried out using a theme interview method, where each interviewed teacher was interviewed in person and the interviews were recorded. The survey was attended by 7 teachers and 3 assistants from kindergartens and 6 classroom teachers from schools.

#### The questions concerned the following areas:

- 1. The necessity of training and quality of education?
- 2. The practical effects and importance of sensomotor training in learning?
- 3. Views on the future of sensomotor training?

### Main results of the survey:

First, did I ask teachers views on learning difficulties in schools and kindergartens?

75% of the respondents felt that their learning difficulties had increased

#### How intense was the training?

69% practiced regularly or fairly frequently

# The effects of training?

Teachers were asked which areas of development and learning are most marked by development. In the teachers' opinion, training enhances learning, concentration, attentiveness, reading, writing, and social interaction.

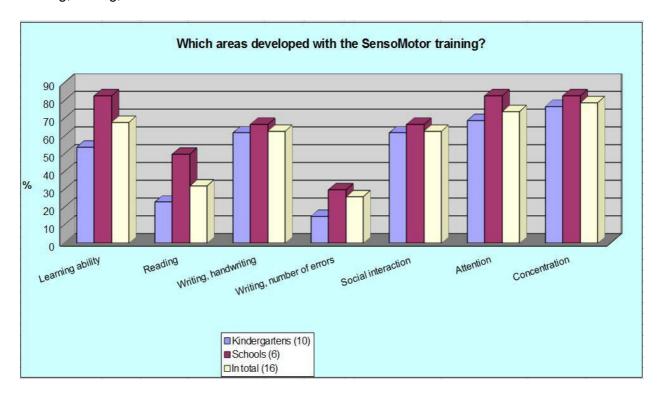


Diagram: Effects of Training. Blue Color = Nursery School. Red = school age and yellow=mean

Teachers' opinion on the importance of training?

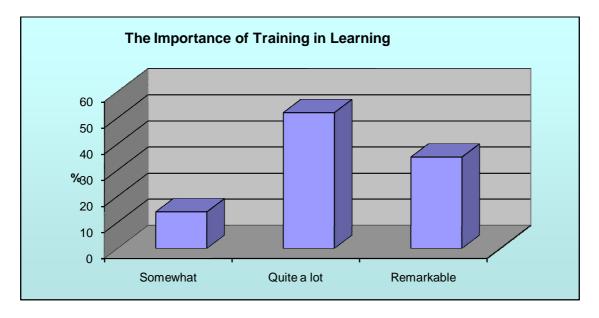


Diagram: The Importance of Practice in Learning

90% of the teachers felt that the training had either a lot of impacts (58%) or a significant impact (32%) on learning.

#### Some teachers comments:

- Can draw attention to things that have never been thought of before.
- Gave work a systematic approach, especially during class exercises.
- Provided a clear program on how to do it.
- As a result of the training, I became more aware of developmental issues and the training develops logic, and our education gave these exercises.
- New information about how important each step in a baby's development is.
- Provided support for action planning and exercise planning.
- New information and knowledge and know-how to do exercises correctly.
- After the course, I noticed the children differently during the exercise class.
- The course introduced routine group counseling

# What do you think about training?

- the training was praised, among others because it contained both theory and practice.
- "all teachers should know these things"

- "such things should come as early as possible in basic education in the childcare and education profession"
- "more information on these issues was hoped to nurses in the clinics"
- "If they just had known these things in the clinic when my baby was small, they would have been able to pay more attention to my baby at the crawling age."

During the course, I got a lot of information and things were highlighted. We also got to do a lot of exercises ourselves. It aroused curiosity and interest.

# Teachers' comments on the practical effects of training:

- "The first thing it shows is concentration, the fact that they start to focus on work. then that class calms down somehow, that is, that social interaction comes in, then it starts to appear in the handwriting and gradually the error rate decreases. Then comes the learning ability"
- "Overactive children can concentrate much better"
- "I did not notice it myself, but the special teacher asked, what happened when this handwriting was improved, concentration and errors were reduced. Concretely, this was a small group, and they were really making progress in their writing."
- "For one child, the fine motor pencil skills changed radically during these exercises."
- "My co-workers found that overactive children tend to concentrate much better when doing
  regular exercise daily. These children behaved much better, for example in group work.
  And in all the situations where they had to sit and wait, the kids were doing something
  better, they were calm."
- "We were thinking with one parent when this child had stumbled very often in the past and had motor awkwardness, but this year and after, this stumbling diminished. We are wondering if this practice would have had an impact on it."

# **Summary:**

The effects of training in children were seen in particular in the improvement of learning and concentration skills, as well as improved reading, writing and social interaction.

Teachers considered the training important and widely believed that such training should be included in initial teacher training.

It can also be concluded from the positive effect of sensomotor training on learning and concentration that children who are now practicing this training have a better chance of meeting their later learning goals. This is also likely to be important as a preventive approach to exclusion.

The training achieved the goals set by the program developers.

Based on this study, skills on sensomotor training could be recommended to teachers and assistants working with children.