

# *'Physical contact & Physical education'*



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**22<sup>nd</sup> of August, Term 4**  
**Bachelor Thesis**

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LEARN TO LIVE LEARN TO LIVE LEARN TO LIVE LEARN TO LIVE LEARN TO LIVE

## Summary

Touching happens fewer and fewer by the results of the automation and industrialization (Sluijter, 2002). For some reason, touching is not as usual as it has been in former times. Nowadays, touching became a taboo, especially the growing publicity and the influences of the media upon it, makes that touching more and more disappears out of daily life. The other side tells that the effects of touching are very surprising. Loving and intentionally touching is good for the total health (Sluijter, 2002).

In Denmark and Sweden, physical contact in education became a method to teach students to grow up in an atmosphere of solidarity. Many researches support the positive effects of touching. The percentage of bullied children in schools decreases and children who suffer of trouble of attention benefit from regular touching (Sluijter, 2002). Except of these effects, the social emotional development will be stimulated by frequent touching. Students acquire lots of social skills, learn to communicate and behave better (Sluijter 2002; Oden, 2005). The mechanism which lies behind this method is the hormone Oxytocine will be produced after a loving touch. After an intentional loving touch, receptors in the skin send a signal to the hypophyse in the brains. The receptors are connected with the emotional brain. Depending on the 'emotional load' of a touch, a certain amount of Oxytocine will be produced. The hormone Oxytocine gives a feeling of well being and inclination to tend other people (Sluijter, 2002).

The research of this thesis about the influences of physical contact on the social emotional development of students has found place on Murrays Bay Intermediate School (MBI School) in Auckland, New Zealand. The students have been taught a lesson with different tasks with components of cooperation, physical contact and communication in it. Afterwards, the students filled in a questionnaire to get to know how they experienced that lesson. The results of this research can be found in chapter seven and seem to support in the social emotional development.

New Zealand offers quality education. Intermediate education (year 7 and 8) is a part of the compulsory schooling in New Zealand. Intermediate education offers a wide curriculum, extra specialization and several extracurricular activities to prepare the students for college. Especially MBI School offers lots of opportunities for students to explore their environment and to develop their personal skills and talents. The education of MBI School is based on two theories ([www.mbi.school.nz](http://www.mbi.school.nz)):

- Howard Gardner's theory of multiple intelligences
- Anderson's revised taxonomy

These theories describe a way of teaching which learns students to become more independently. Besides, the theories point out not to focus on one aspect, but concentrate more on the whole range of competences ([www.mbi.school.nz](http://www.mbi.school.nz)). MBI School has a wide look upon education and the development of education. MBI School is always accessible to innovation and alternative ways of teaching. Preparing students for college means teach them how to use their knowledge in the society where they live with others.

Especially in the stage of puberty, the total development of year 7 and 8 (beginning to become adolescent) students can be described as 'confusing' (Beemen, 2002). Changes of the body have big influences on their self-image, their behavior and social contacts. Social cognition is a skill they learn and develop in stage of puberty (Beemen, 2002). "*Sociale cognitie is het waarnemen en interpreteren van de gevoelens en gedachte van anderen en het denken over de ander als persoon*" (Beemen, 2001, p. 205) [Social cognition is the perceiving and interpreting of the feelings and the thoughts of other people and the thinking about the other as a person]. Physical contact is not self-evident for everyone, especially not in puberty, though the method of physical contact seems to support students in their social emotional development (Beemen 2001; Sluijter, 2002). This research, which has found place

on MBI School, shows that students react very positive on physical contact and cooperation. Using the method of physical contact trains the student's capacity of social cognition. The implementation of the method within (physical) education does not have specific demands. Simple games and activities can be enough to obtain the wished effect. It can be seen as another way of thinking, which lends its fundamentals of the theories about adaptive education and cooperative learning. The method connects knowledge with social skills. So implementation of physical contact can be seen as an overarching of different skills which are required for success in life. Fact is that physical contact and tactile stimulation must be reintegrated in education to invest in the domain of personal experiences of the students. Lots of activities are developed for MBI School to make it easier to implement physical contact and tactile stimulation in daily activities and physical education (PE). These activities (described in part two) can be seen as a recommendation to MBI School and can be divided in different categories below. MBI School will experience the positive effects of this method if they use the activities of the practical part on a frequent base. One activity a week is enough to experience these positive effects of touching (Sluijter, 2002). It will improve the atmosphere in the class!

The activities are divided in different categories to connect the aims of this method with the aims of the subject PE. In this way, the practical part can be easily integrated in the PE curriculum on MBI School.

The activities:

1. Strategy activities
2. Activities with physical contact
3. Teambuilding activities

## Preface

I can remember the day I read the article about physical contact in education. This is already about one and a half year ago. "Another creative idea!" I thought. It let me think about the possibilities there are for education. It enlarges the domain and the definition of how and why students should be learning in a specific way. More and more people try to innovate and to develop the education. Searching for more efficiency, new methods and if possible, adaptable to every child. I traveled all the way to New Zealand for my final training to become a PE teacher. The five months I have been on the other side of the world literally made me look different to teaching. By doing research to the influences of physical contact upon the social emotional development of children, I discovered that the social part of PE is the part which I like the most. For me, physical education became the way to teach my students how to handle different situations (in life) and how to get along with others. The practical character of physical education is also a way of communication which does not particularly need words to explain itself.

The practical part I developed, regardless if it will be used, opened a new world for me. I have been working on this thesis and on a project for more than a year. It finally gave me the idea that I could specialize and distinguish myself to the standard curriculum. It gave me space and lots of inspiration to become the teacher I want to become. The choice to finish my degree a little later became the best decision I made in four years of studying. All those four years I have always been busy. Finally in New Zealand, I found my rest to create new plans for the future. It may be clear, that my time in New Zealand has been a fantastic time. This thesis is the result of a the literature study and a research which found place on Murrays Bays Intermediate School (MBI School). When I first started writing I felt like being captured in the English language. Language for me (the Dutch language) is a way of communication in which I can express myself very well. My grandfather sacrificed his holiday to help me translating parts of my thesis which I already wrote in Dutch. It is just unbelievable that a person of eighty years old has such extraordinary qualities and is happy to share them with others. Also my grandmother may not be forgotten: she gave me the best spinach-cheese quiche ever after a hard working day on this thesis!

Physical contact is not accepted in education yet. Researches come to light, more articles are written than before and the media starts to be interested as well. Even though more people start to become interested, it was very hard to find information and literature. Lucky as I was, I found the author of the book about physical contact in education. I immediately contacted her! Many thanks to Marijke Sluijter, for all the information she send me and for her encouraging words!

Of course I could never have done this research without well willing kids to be participant. I have had lots of fun with the fantastic kids of MBI School. Also the positive and encouraging staff helped me to reach my personal goals. Besides, I want to say thank you because of the way they accepted me as a staff member.

Finally I would like to thank you, Maartje. Even though we have had some tough conversations, I do think we both learnt a lot. Misunderstandings are part of life. I'm glad that both, you and I have the capacity to reflect upon these situations. Thank you for all your help and feedback, I'm coming near to the end of a fantastic time, thank you for being there for me.

Margreet

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## Introduction

Touching and being touched is a need of every human being. Nowadays, physical contact decreases because of the industrialization and automation. The taboo around physical contact is growing. The line between wished and not wished touching became unclear and also in education physical contact seems to be 'not done'. The influence of the media upon touching in education makes the taboo even bigger. This is a negative development because of the many positive effects of touching (Sluijter, 2002). Education can always be innovated, is continuously developing. Children have to educate and develop their selves on all different dimensions to become the independent person who have to take part in the society on a later age. This information has been enough to start a research to the influences of physical contact in (physical) education. The school where the research found place is Murrays Bay Intermediate School (MBI School), Auckland, New Zealand. MBI School offers their students a wide curriculum with lots of opportunities for (personal) development. MBI School is open minded for new ideas and better ways for teaching and development of their students. The method of physical contact fits the theories of Howard Gardner and Anderson, which can be seen as the fundamentals where the education of MBI School is based on. The actual problem is the decreasing amount of physical contact and tactile stimulation (in education). Educators can prevent that children grow up in circumstances of poverty of touching (Sluijter, 2002). They can learn their pupils that touching is a normal phenomenon, and that wished and intentional touching supports the social emotional development. The schedule below shows the aim of the thesis and the learning questions which will be answered at the end of the thesis. The answers will be based on both the literature study as well on the practical research on MBI School.

### **Aim of the thesis;**

Getting insight in the impact of physical contact in the PE lessons on the social emotional development of year 7 and 8 students of Murrays Bay Intermediate School (Auckland, New Zealand) and advise Murrays Bay intermediate School about how the developed source of activities (practical part) can be used in the PE lessons.

### **Learning question:**

What is the impact of physical contact in the PE lessons on the social emotional development of year 7 and 8 students of Murrays Bay Intermediate School (Auckland, New Zealand) and in which way is it possible to apply physical contact as a method in the education?

### **The following questions will be answered at the end of the research;**

1. How does de New Zealand education work?
2. What is physical contact?
3. What is the impact of physical contact?
4. How does the social emotional development of year 7 and 8 students look like?
5. Why physical contact in (physical) education?
6. How can the method of physical contact be integrated within (physical) education?

The actual aim of the thesis is to innovate the education with a new method. This method is overarching and supports students to work on their social skills. Social skills and other skills like cooperation and social cognition which are required in this method, prepare the students for the place in the society. The method will create a safe atmosphere for the students to work in. Solidarity will become a key word. The social emotional development will be stimulated by this method. A healthy social emotional development is of great importance for success in life.

This thesis is written for MBI School. Of course, also other schools can work with the method. Every school can identify itself with problems as bullying and behavior problems. The method described in this thesis will not be a solution immediately, but it is another way of thinking

which stimulates students as well teachers to take care of others in their environment. Every school, teacher, educator or interested person is free to read this thesis and to use the method in education.

Lots of researches are done to the influences of physical contact on the well-being of people. Sluijter (2002) describes lots of positive effects of touching, found in different researches. The research in this thesis will zoom in on the influences on the social emotional development of year seven and eight students of MBI School. The research of this thesis is about the experiences with physical contact. The method will especially be used in physical education (PE). Team sport, cooperation and the practical character of the subject PE lends itself very well for the application of this method.

Lots of steps are made prior to the actual writing of this thesis. After the idea arose, the "problem" has been formulated to get a more clear idea about how the research should be about. The literature study was a good start to come into the subject of the thesis. After finishing the literature study, the research on MBI School followed. Students of five different classes were asked to participate in a lesson and to fill in a questionnaire afterwards. All the data have been processed, and finally conclusions could be made. The recommendations have been done to MBI School; the practical part (part two) is the result of this.

The thesis is build up out of two parts; the first part is a more theoretical part based on literature and on the research on MBI School. The second part is a more practical part; it describes different activities for the students of MBI School. The first part includes a literature study which has 5 chapters. The first chapter is an introduction about the New Zealand education and about MBI School. After the first chapter, chapter two starts with the explanation of physical contact in the context. It will also describe the impact of physical contact. The effects of touching and other physical contact can be found in chapter three. The influences of physical contact on the social emotional development of kids will be the title of chapter four. Physical education as a subject has to deal with situations of physical contact. These issues will be discussed in chapter four. Chapter five follows with a description of the aims of physical contact within (physical) education. These 5 chapters will be based on literature. Chapter six is about the research which found place on MBI School, New Zealand, the whole research will be explained of which the results can be found in chapter seven. The results of the research as well the literature study will lead to a conclusion and recommendations to MBI School. The practical part (part two) can be seen as a recommendation for MBI School. It is a source with all kind of different activities and games to play in the PE sessions.

# PART I

## Chapter 1 The New Zealand education

The research has found place on MBI School in Auckland, New Zealand. It is important to know how the educational system of New Zealand looks like, because of the practical part which can be found in part two. This practical part, which will include all kind of different activities and games for the PE lessons, has to be adapted on the education of MBI School. In this chapter the New Zealand educational system will be explained, but also the education of MBI School will be explained in paragraph 1.2. It is interesting to know which theories the education is based on, and how the curriculum looks like. Paragraph 1.3 explains why the research of this thesis can be an extra value for the MBI School curriculum.

### § 1.1 Educational system of New Zealand

*“New Zealand has an international reputation as a provider of quality education. It has a comprehensive, progressive system with a range of learning options and many state of the art facilities. It offers a safe learning environment with excellent study opportunities and support services for international students”* ([www.internationaleducationmedia.com](http://www.internationaleducationmedia.com)). The New Zealand education has a very good reputation. Lots of international students make the choice to go studying in New Zealand. The educational system of New Zealand can be divided in to three parts ([www.internationaleducationmedia.com](http://www.internationaleducationmedia.com)). These categories will be explained below:

1. Early childhood education.
2. Compulsory schooling
3. Tertiary education

#### Early childhood education (see figure 1.1)

*“Early childhood services include kindergartens, childcare centres, play centres, home-based care centres, Kohanga Reo (which are based on total immersion in the Maori language and values), Pacific Islands language groups and playgroups. Each one has its own philosophy and way of working”* ([www.education.auckland.ac.nz](http://www.education.auckland.ac.nz)).

#### Compulsory schooling (see figure 1.1)

(This includes Primary school, Intermediate school, Secondary school).

*“Schooling is compulsory in New Zealand for all children from their 6th until their 16th birthday, although most start on their 5th birthday or soon after. It is free at state (government-funded) schools until the age of 19, or 21 for special education students”* (who have disabilities, learning or behavioural difficulties) ([www.education.auckland.ac.nz](http://www.education.auckland.ac.nz)).

*“New Zealand's state school system provides for children's individual learning styles and for different philosophies of education. Some schools develop programmes with a strong focus on particular interests of the children, and others work in a more formal, structured style”* ([www.education.auckland.ac.nz](http://www.education.auckland.ac.nz)).

#### Tertiary education (see figure 1.1)

*“New Zealand's tertiary education system includes 8 universities, 24 polytechnics, 4 colleges of education, Wananga (Maori tertiary institutions) and private training establishments”* ([www.education.auckland.ac.nz](http://www.education.auckland.ac.nz)).

*“The universities all offer general undergraduate and graduate degrees and diplomas in arts, sciences and commerce, as well as specialist degrees in particular disciplines”* ([www.nz-immigration.co.nz](http://www.nz-immigration.co.nz)).

Figure 1.1 on the next page shows the educational system of New Zealand. The different stages in schooling are displayed in a schedule. The tertiary education in the schedule can be found under: “Universities and Colleges of education” and “Polytechnics, institutes of technology and private education providers”.

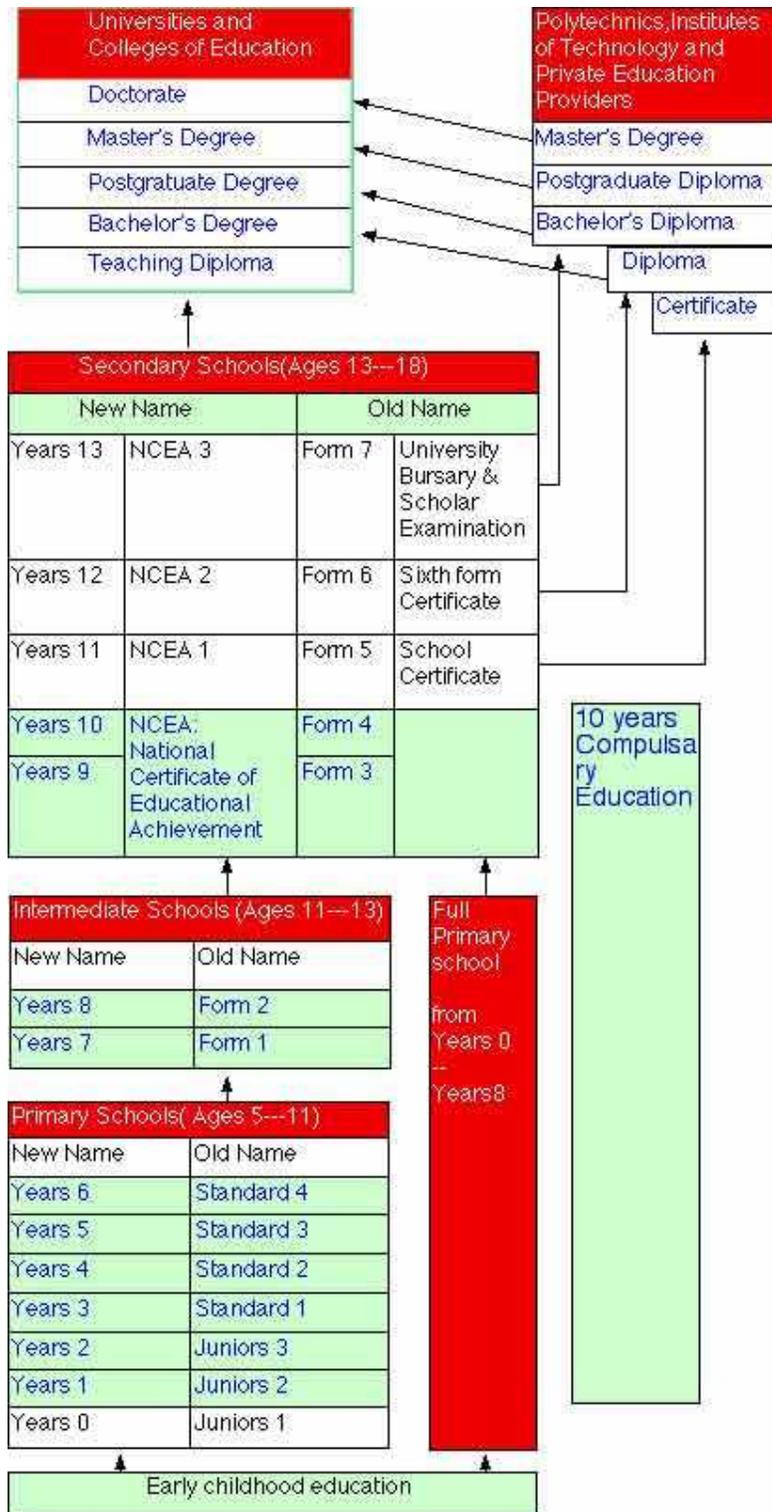


Figure 1.1 The educational system of New Zealand ([www.education.auckland.ac.nz](http://www.education.auckland.ac.nz))

## § 1.2 Education at Murrays Bay Intermediate School

MBI School has over 900 year 7 and 8 students (11-13 year old) in the East Coast Bays area in Auckland City, New Zealand. Intermediate education is separated from Primary education (see figure 1.1). Normally year 7 and year 8 are included in the Primary education, but parents can choose for Intermediate education. After year 6 on a Primary school, a kid has the opportunity to go to an Intermediate school. Intermediate education offers extra specialization in preparation for college. Besides, the students will be introduced to many new and interesting aspects of a wider curriculum, compared to Primary education ([www.mbi.school.nz](http://www.mbi.school.nz)). The class teacher teaches most of the subjects on an intermediate school. Specialist staff gives instruction in music, art, computers, textiles, food, biotechnology and materials technology. MBI School based their education on Howard Gardner's Theory of multiple intelligences and Anderson's revised Taxonomy. These theories will be further explained in paragraph §1.3.

## § 1.3 Fundamentals of education on Murrays Bay Intermediate School

As already said in paragraph 1.2, the education on MBI School is based on two different theories. The theory of Howard Gardner (the theory about multiple intelligences) and the theory of Anderson (the revised Taxonomy). The reason why these theories are incorporated in this chapter is because they have affinity with the subject of the thesis. The theories will be further explained below.

- Howard Gardner's Theory of multiple intelligences

*"Howard Gardner (1943) has questioned the idea that intelligence is a single entity, that it results from a single factor, and that it can be measured simply via IQ tests. He has also challenged the cognitive development work of Piaget. Bringing forward evidence to show that at any one time a child may be at very different stages for example, in number development and spatial/visual maturation, Howard Gardner has successfully undermined the idea that knowledge at any one particular developmental stage hangs together in a structured whole"* ([www.infed.org](http://www.infed.org)).

MBI School based their curriculum on the Theory of Howard Gardner. The school has a very wide curriculum (this will be discussed in paragraph 1.4) and gives the individual students space to 'explore' their talents in different areas and learn them to see things from different angles.

- Anderson's revised Taxonomy

*"The revised taxonomy (Anderson and Krathwohl, 2001) incorporates both the kind of knowledge to be learned (knowledge dimension) and the process used to learn (cognitive process), allowing for the instructional designer to efficiently align objectives to assessment techniques. Both dimensions are illustrated in the following figure (1.2) that can be used to help write clear, focused objectives"* ([www.coe.sdsu.edu](http://www.coe.sdsu.edu)).

The Knowledge Dimension	The Cognitive Process Dimension					
	Remember	Understand	Apply	Analyze	Evaluate	Create
Factual Knowledge						
Conceptual Knowledge						
Procedural Knowledge						
Meta-cognitive Knowledge						

Figure 1.2 The revised Taxonomy of Anderson and Krathwohl (2001) ([www.coe.sdsu.edu](http://www.coe.sdsu.edu)).

The revised Taxonomy also helps educators to create more clear learning objectives. Except of the explanation below, figure 1.3 shows the difference between unclear and revised learning objectives.

*“Because the purpose of writing objectives is to define what the instructor wants the student to learn, using detailed objectives will help students to better understand the purpose of each activity by clarifying the student’s activity. Verbs such as “know”, “appreciate”, “internalizing”, and “valuing” do not define an explicit performance to be carried out by the learner”* (Mager, 1997 on [www.coe.sdsu.edu](http://www.coe.sdsu.edu)). Anderson’s Taxonomy is the second theory where the education on MBI school is based on. This theory gives educators more insight in the way students learn. This can be an effort to create more clear learning objectives. The following examples (figure 1.3) show the differences between unclear and revised objectives.

Unclear objective	Revised Objective
Students will know the best way to solve a problem	Each student will judge which of the (two) solutions is the best to solve the problem.
Students will understand the relevant and irrelevant of rules of a softball game	Each student will distinguish between relevant and irrelevant rules of a softball game.

Figure 1.3 Examples of unclear and revised learning objectives

#### § 1.4 The research integrated within Murrays Bay Intermediate School

The theories on which the education of MBI School has been based have a central place within this chapter. The students Of MBI School get time and space to explore their selves and their environment. Because the students get this time and space for development, they learn to speak out their preferences based on their experiences. On MBI School there are many possibilities for the development of talents. Such as Day Talent, on which students can choose out of several activities to participate in. Students are encouraged to enter the annual Australian Maths, Science, English, Writing and Computer Competitions. Except of these skills, there is a focus on sport as well and of course this is an interesting fact for the research. Outside the general movement skills, the curriculum of Physical Education (PE) can have learning objectives which are wider formulated than just movement. Fair Play, cooperation, team spirit, physical contact, reciprocal respect, social en communicative skills are thereby aspects which will have a central place on MBI School as well in the practical part of this thesis (part two) ([www.mbi.school.nz](http://www.mbi.school.nz)). It should be obvious to work on these skills in a subject which lends itself for that so well. The next chapter will tell more about the context of physical contact, where several definitions will be explained.

## **Summary**

Intermediate education is a part of the compulsory schooling in New Zealand ([www.education.auckland.ac.nz](http://www.education.auckland.ac.nz)). Compulsory education exists of primary education, intermediate education and secondary education. MBI School offers a curriculum with much variety and options to let the students develop their selves on different dimensions. The education of MBI School is based on Howard Gardner's theory of multiple intelligences and Anderson's revised taxonomy which justifies the way they offer education. The method of physical contact in (physical) education encourages these theories. The character of the method with physical contact fits the theories where the education of MBI School is based on.

## Chapter 2 Physical contact

It is not a thing people dwell on, perhaps the knowledge of it is unknown. Touching is a vital necessity, everybody needs it to feel well and to grow up healthy, but what exactly does it mean? What is it and what is the effect of touching for people? Touching is happening fewer and fewer, and to prevent the situation of children ending up in a stage of paucity of touching, in this research will be searched for ways on which touching in more frequent manner will return in daily activities. Mutual massage of children is a way to stimulate the sense of touch. Therefore in the practical part of this paper handles will be offered for this apply. But first of all a piece of theory and background to start this chapter.

### § 2.1 Definitions

To understand on what notions the method is based, an explanation is searched for. The explanation of the most important notions will not find right away in a dictionary. The definitions of “touching”, “sense of touch” and “massage” will be talked about below. Different dictionaries are consulted to make the definitions more clear. Further is chosen to set those definitions in a context to mark out more clearly the domain that is meant within this research of literature and the practical part. For the definition of “touching” is found a description not very appropriate. “Touching” shortly is defined as: “*the touching*” or “*contact*”, “association” ([www.vandale.nl](http://www.vandale.nl)). For this research this is a very thin description for a very important term. Therefore in this research the following description will be used permanently: “*Een aanraking is een bewust fysiek contact tussen (in dit geval) leerlingen, die met zorg en concentratie wordt uitgevoerd*” (Sluijter, 2002, p.11). [Touching is intentional physical contact between (in this case) pupils that is done with care and concentration]. Also the definition of “sense of touch” may not be missing. It is one of the faculties man knows. The dictionary describes the notion “*tastzin*” [“sense of touch”] as “*één van de zintuigen, het vermogen om tast- en gevoelsindrukken waar te nemen*” ([www.vandale.nl](http://www.vandale.nl)) [one of the faculties, the ability of perceiving impressions of touching and feeling]. Because the description of the notion of “sense of touch” needs no specific explanation, it will be used as described. “Massage” is described as: “*de spieren soepel maken*” ([www.blackorwhite.nl](http://www.blackorwhite.nl)) [making the muscles supple]. Of course the manners of massage in education will not have the aim of benefiting the suppleness of the muscles. Some elder children are educated to give a massage for relaxation, but in principle the manners of massage have the aim to learn to touch positively to get the wished effects. Specific tries therewith have no special accent. Considering the context of the research the following definition will give a description more clear of the manner on which the term “massage” will have to be interpreted in this research: “*Onderlinge kindermassage is speels huidcontact, gestructureerd aangeboden door middel van spelvormen en liedjes die het gemakkelijker maken om de mogelijkheden van massage te verkennen*” (Sluijter, 2002, p. 11) [Mutual massage of children by playful contact of the skin, offered structured by forms of playings and songs, that make it easier to explore the possibilities of massage]. According to this definition it is directed that children should be instructed to cope with touching and stimulation of the skin. This can be offered in a form of playing, of stories or by using music. Because the effects of touching are so surprising, it is interesting to know how people can stimulate touching in daily life (Sluijter, 2002).

Except of the definitions which are pointed out so far (“massage” and “touching”), there are other definitions which need an explanation. The research is about the influences of physical contact on the social emotional development. This development can be seen as complex; many factors have an influence on this development. The self image of a kid is very essential in the way he or she reacts on others. There are two definitions which need an extra explanation:

- Self- confidence:

“*Belief in one’s own abilities*” (Makins, 1993, p.249).

- Relations:

“*Connection between things*” (Makins, 1993, p.414). Or “*The way in which one thing stands in respect to another*” (Geddes, 2001, p.275).

The definition of massage is used because it was very hard to find a definition that is more suitable for the context of physical contact and massage in education. Not only the definition ‘massage’ will be used in this thesis. Also the terms “physical contact”, tactile stimulation”, “bodily contact” and “touching” refer to the application of the method in education. The reason behind this choice is the term “massage” which can be misunderstood because of it’s therapeutically background. The aim of massage or physical contact in education is not to make supple the muscles. The other terms are more suitable in the context of this research, but a right definition in context could not be found. The definition which is found for the term “massage” has reference to all other descriptions named above; “*Onderlinge kindermassage is speels huidcontact, gestructureerd aangeboden door middel van spelvormen en liedjes die het gemakkelijker maken om de mogelijkheden van massage te verkennen*” (Sluijter, 2002, p. 11) [Mutual massage of children by playful contact of the skin, offered structured by forms of playings and songs, that make it easier to explore the possibilities of massage].

## § 2.2 The underlying mechanism of touching

From researches it appears (Donovan, w.y. (without year) in Sluijter, 2002), that touching has much positive effects upon the well-being of people. Before it is possible to look at these effects at close quarters, it will be interesting to know which process brings about these consequences. Our sense of touch is the organ of sense, by which we get the most of information in our brains. In the moment in which someone is touched, this stimulation goes by way of receptors in his skin to the hypophyse in his brains. These receptors are in contact with our emotional brain, and consequently depending of the “emotional load” of the touching the hormone Oxytocine is produced (Oden, 2005). Oxytocine is a hormone of mood that people need to commit themselves (Sluijter, 2002; Oden, 2005; Kok, 2005). Moreover it gives a feeling of well-being and inclination to tend other people (Sluijter, 2002). Besides, touching stimulates the activity of the ‘nervus vagus’; “*dit is de zenuwbaan die de afscheiding van hormonen bij voedselopname, hartslag en ademhaling verzorgt*” (Sluijter, 2002, p.18) [this is the nerve-channel that regulates the secretion of hormones at absorption of food, at the heart beating and breathing] Oxytocine works opposite to the hormone adrenaline. Adrenaline is the so called “stress hormone”, that makes us alert at (threatening) danger (Sluijter, 2002). By touching not only the production of Oxytocine is stimulated, but also the production of adrenaline is restrained (Oden, 2005). This change makes that a person after a positive caress becomes more quiet and kind.

### § 2.3 Touching changes throughout the years

Logically the degree of touching has decreased during the years; by result of industrialisation, automation and changes of habits of living, people today steadily acquire less experience of touching (Sluijter, 2002). Apart from these causes also from investigations it has become clear that people have become more careful in touching. In connection with the growing revealing and publication of private data, unwanted harassment and sexual abuse, touching gets a wrong mark (Sluijter, 2002; Oden, 2005; Kok, 2005). An investigation of *Psychologie Magazine* (October 2005) even shows, that a third part of the Dutch people touches less, in connection with the risks mentioned above and the influence of the media upon it. Only in this frame it would already have a great additional value to teach the children, what positive effects are as the result of wished touching. By mutual massage of children this easily can be learned. When children learn this technique during their youth, there is less chance, that in older age they will perceive the consequences of poverty of touching in different contexts (Sluijter, 2002).

#### Summary

*“Een aanraking is een bewust fysiek contact tussen (in dit geval) leerlingen, die met zorg en concentratie wordt uitgevoerd”* (Sluijter, 2002, p.11). [Touching is intentional physical contact between (in this case) pupils that is done with care and concentration]. Touching has to be done intentional and with care, otherwise, the positive effects of touching will stay out. The application of physical contact had a specific definition: *“Onderlinge kindermassage is speels huidcontact, gestructureerd aangeboden door middel van spelvormen en liedjes die het gemakkelijker maken om de mogelijkheden van massage te verkennen”* (Sluijter, 2002, p. 11) [Mutual massage of children by playful contact of the skin, offered structured by forms of playings and songs, that make it easier to explore the possibilities of massage]. After intentional physical contact the hormone Oxytocine will be produced. This hormone gives a feeling of well being and inclination to tend other people (Sluijter, 2002). Nowadays, people are touching less and less by the results of industrialisation and automation (Sluijter, 2002). When children accept positive physical contact as a normal phenomenon, the chance decreases that they will perceive the consequences of poverty of touching in older age (Sluijter, 2002).

## Chapter 3 The effects of touching

The effects of a loving touch are surprising, especially when they are repeated with some regularity. After the description of the mechanism which lies behind touching in chapter two, in this chapter the effects will be discussed. In this case the physical and the mental health cannot be seen totally apart from each other; the effects particularly have relation to social emotional development too. The social emotional development and the effect of touching on this development will be discussed in chapter four. The effects upon this development will only have a small place in this chapter for now.

### § 3.1 A grasp from the researches

Especially in the last years much research has been done about the effects of touching. Provided that touching is executed lovingly and sincerely, and is experienced by the receiver as pleasantly, no negative effects are known that are caused by touching or massage. On the contrary it is known that children who are touched too rarely, are growing more badly, are more vulnerable for illness, are less able to empathize with other people and in addition are more vulnerable for sexual abuse. Because these children acquire too little positive tactile experience, for them it is difficult to draw the line between wished and not wished touching (Sluijter, 2002). Since it is known that people are also touching less in connection with the growing publicity about sexual abuse, it is important to do something about this problem, at least in the interest of the development of the children. Since some time good and pleasant touching is used as a method to teach children what is good and what is bad. In addition it is taught to them to decide and to utter what they like and what not. Many researches have shown that that massage or physical contact has many positive effects if the touching or massage is done intentionally and lovely. *“Regelmatig gemasseerde peuters slapen namelijk intensiever na massage, gedragen zich beter en zijn productiever”* (Sluijter, 2002, p. 18) [Toddlers that are massaged regularly, sleep and play more intensively after massaging, behave themselves better and are more productive]. On schools the method can be applied to decrease bullying. Jørn Jørgenson is principal of a school in Denmark and he also invented the method. Research showed, that the percentage of bullied children dropped from 12% to 1% (Kiene, 2005). Also children who suffer of trouble of attention like ADHD and autism benefit from regular touching (w.a. (without author), ADHD, Autisme en veranderingen in de lichaamsbiochemie, w.y.). John Bowlby (1969, 1973, 1980; in Sluijter, 2002) developed the “gehechtheidstheorie” [so-called theory of being attached], in which he describes, that a safe, normal attachment leads to a healthy social-emotional development. Especially when a child in the first four years of his life has a healthy and warm attachment towards his elders or caretakers, he builds a good base to learn to get on with others on a later age (Sluijter, 2002; w.a., Jongen/Meisje, December 2003). Of course these positive effects not only apply to children. Research of patients of rheumatism, aids, cancer and diabetes show, that the system of immunization improved, and pain decreased after regular touching (w.a. Jongen/Meisje, December 2003). In companies employees massage each other two times a week for fifteen minutes to relax for a moment. Here also surprising results: they reported that they could think more clearly, make less mistakes and worked on a higher tempo. A EEG-scan, that measures the waves of the brain, confirmed this (Sluijter, 2002, w.a., Jongen/Meisje, December 2003). From these dates consequently can be concluded, that the touching or the massage benefits the total health. Despite of the fact, that interest in massage and the effects of touching is growing, it is still wide of the mark to say that consequently in this case children are educated with enough love and attention. Now that the methods of research develop rapidly therefore it becomes easier to make a diagnosis, one should act with responsibility to give a child actual chances to develop on all levels. Probable a primer task of the elders, to which the school definitely can fill up and contribute!

### § 3.2 The underlying thought of touching

Why on school should we teach children to be on familiar terms with bodily contact? Except for the positive effects named above the mutual massaging is to be looked at within a subject more coordinated: namely solidarity. Massaging is a method that asks aims as cooperation, attention and concentration. The advantage of the practical method is, that it appeals to the children's domain of personal experience. According to Sluijter (2002) it is important to address the bodily and emotional domain inside the evolution of children by involving them into the process of learning. The results of the massage have their effect to both sides: massage means giving and receiving, and when it means well meaning touches, it moves both the massaged and the masseur. In both persons in that situation the hormone Oxytocine is produced. Children learn the importance of touching and being touched, they learn about the interaction, and acquire in practical manner experience of learning about mutual concepts as respect and being subservient (Sluijter, 2002). So the point is learning to read the language of the body. *"In het kort heeft tactiele stimulatie, ofwel de toegepaste massagemethode dus uitwerking op de groei, de gezondheid, het welbevinden, het leervermogen, het vermogen tot sociaal gedrag, het lichaamsbesef en op het communicatieve vermogen"* (Sluijter, 2002, p.20) [In brief tactile stimulation, or the applied method of massage has its effect on the growing, the health, the well-being, the capacity of learning, the capacity of social conduct, the awareness of one's body and the capacity of communication].

### § 3.3 The effects upon the social emotional development

That the effects of touching are great and versatile (many-sided) may be clear. This is shown by a great number of researches mentioned above (see paragraph §3.1). When massage is seen in the context of instruction, it is particularly important to look at the social-emotional development. By schooling after all educators wish that children should be prepared to participate in society, and then the social-emotional development should not be forgotten. Man lives with other people is a datum, which will remain unchanged. We don't think of it so much, but the social emotional development is of unprecedented importance in gaining successes. Children develop a positive self-image on the basis of successes that are confirmed and praised by the environment. Going back to the method of massaging the effects are working on two sides: both with the massaged person and with the masseur by well-meaning touching hormones are produced. Contact of skin has as result emotional confidence, and in addition it makes people easier to communicate (Sluijter, 2002). Everyone can imagine that, when a reward or a compliment is confirmed by a pat on the back or a stroke over the head, it strengthens the compliment. It makes, that man becomes aware of what he performed and what that means for him/her. The effect of touching, that has a great result upon the social-emotional development, in brief is acknowledgement. So it becomes clear that man needs his sense of touching to occupy his place in the world. The skin is the frontier between the personality and the world. Ever touching man discovers the world, in which the skin has an intermediary function. So touching has a clear reason, because apart from that it gives a feeling of safety, it also teaches a child how it should get on with other people in older age. Social learning gives profit to everybody. It makes somebody part of a greater whole. Touching with attention means being confirmed in existence and at the same time learning about the place on which one stands in life (Sluijter, 2002). It would be a gain, if the domain of personal experience in teaching should get more attention and should be seen as a condition for learning. This corresponds to the present adaptive teaching, in which every pupil is considered with his stronger and weaker qualities, and in which one bases himself on the possibilities of the child (Vugt, 2002). Children more and more learn to develop themselves on their own level.

## Summary

Researches show that children who are touched too rarely, are growing more badly, are more vulnerable for illness, more vulnerable for sexual abuse and are less able to empathize with others. For children who are touched too rarely, it seems to be very difficult to draw the line between wished and not wished contact (Sluijter, 2002). Not only children benefit from regular touching; research of patients of rheumatism, aids, cancer and diabetes show that the system of immunization improved and pain decreased after regular touching (Sluijter, 2002). In schools and education touching and physical contact also has a overarching thought of solidarity. The method requires skills as cooperation, social cognition and always has to do with giving and receiving. Not the child itself, but his or her partner is the central point. *“In het kort heeft tactiele stimulatie, ofwel de toegepaste massagemethode dus uitwerking op de groei, de gezondheid, het welbevinden, het leervermogen, het vermogen tot sociaal gedrag, het lichaamsbesef en op het communicatieve vermogen”* (Sluijter, 2002, p.20) [In brief tactile stimulation, or the applied method of massage has its effect on the growing, the health, the well-being, the capacity of learning, the capacity of social conduct, the awareness of one's body and the capacity of communication]. Also the social emotional development benefits of this method. This development is of unprecedented importance for success in life (Sluijter, 2002). The skin in this case is the frontier between personality and the world. Touching with attention means confirmation in existence and at the same time learning about the place on which one stands in life (Sluijter, 2002).

## Chapter 4 Characteristics of adolescents on the domain of social emotional development

The development of a child is described on different levels: the cognitive, moral, physical, motorial, identity- and social-emotional development. In the interest of the research of literature particularly the social-emotional development is discussed, because the development on this level has the most affinity in the context of this literature research. However the development on other levels cannot entirely be omitted. Therefore successively will be discussed, what are the characteristics of the development of adolescents (especially on the social-emotional level), how the behaviour can return in situations of teaching, and on which manner educators could get on with this behaviour or these situations.

### § 4.1 Distinguishing marks of the development of adolescents (aged 12-18 years)

It is very difficult to see the different levels of the development of a child apart from each other. Apart from the distinguishing marks of the social-emotional development there also are other distinguishing marks that are of importance more to found the social-emotional development. In the phase of adolescence (12-18 years) young people learn to think more flexible on the cognitive domain, in contrast with younger children. By logical reasoning they can come to a conclusion. This is the formal-operative phase that was described by Piaget (1970, in Beemen, 2001). Besides the changes in the cognitive domain also the development of identity plays a deciding part. Adolescents ask themselves who they are, what they want, and get thereby more insight in their self-image. They also develop loyalty: *"de bereidheid om verplichtingen aan te gaan en deze ook na te komen"* (Beemen, 2001, p.179) [willingness to enter obligations and also to meet them]. On the moral level they are able to argue on the basis of personal choices and deliberations which they mostly have in common with others, or based on choices of other people (Beemen, 2001).

However: *"Denken en doen staan niet los van elkaar"* (Beemen, 2001, p.205) [Thinking and doing cannot be seen apart from each other]. In contact with other children with a negative self-image they don't know how to behave themselves and are unsure to get in touch with others. Often previously they have the idea that situations, in where they have an important role, this situation or action will fail. This can manifest itself in shrinking into themselves, but also in tough, striking behaviour (Bongaards and Sas, 2000).

The characteristics of behaviour just mentioned a child can show, are related to the self-image and the amount of contact with other children. As a teacher you have to try to get a good pedagogical climate (Woltjer and Janssens, 2000; Bongaards and Sas, 2000). When children feel pleasant in a group, the communication and the self-image becomes better and that increases the social cognition. *"Sociale cognitie is het waarnemen en interpreteren van de gevoelens en gedachte van anderen en het denken over de ander als persoon"* (Beemen, 2001, p. 205) [Social cognition is the perceiving and interpreting of the feelings and the thoughts of other people and the thinking about the other as a person]. The notion of social cognition also shows a clear connection with the co-called "reciprook perspectief" [taking perspective]. This means: *"de mate waarin een kind zich kan verplaatsen in de gevoelens van een ander"* (Beemen, 2001, p. 206) [the degree in which a child can put himself in the feelings of someone else]. When a child grows older, the power to put himself in the place of someone else, is increasing more and more. A child can discover a motif of another person and take it into account in his own choices. This is called taking reciprocal-perspective (reciprook perspectief nemen). Children own the power of taking reciprocal-perspective from about eleven years (Selman, 1980 in Beemen, 2001). According to Selman (1980) *"adolescenten maken zich bij beoordelen meer los van de concrete situatie en generaliseren meer"* (Beemen, 2001, p. 209) [adolescents in judging detach themselves more from the concrete situation, and are more generalizing]. On the following page the social-emotional development will be rendered by a diagram. The diagram shows different items which are all part of the social emotional development. All the different "boxes" in the diagram have a relation with the social emotional development. The "boxes" "identity & autonomy", "social cognition", "social competences" and "values and standards" say a lot about the character and competences of a person. "Self confidence" & "Self image" and feeling tells something about the image a person has of itself and how he or she deals with feelings. Also "relations & sexuality" and "conflicts" have an important place in the social emotional development of a person. The diagram can be found on the following page.

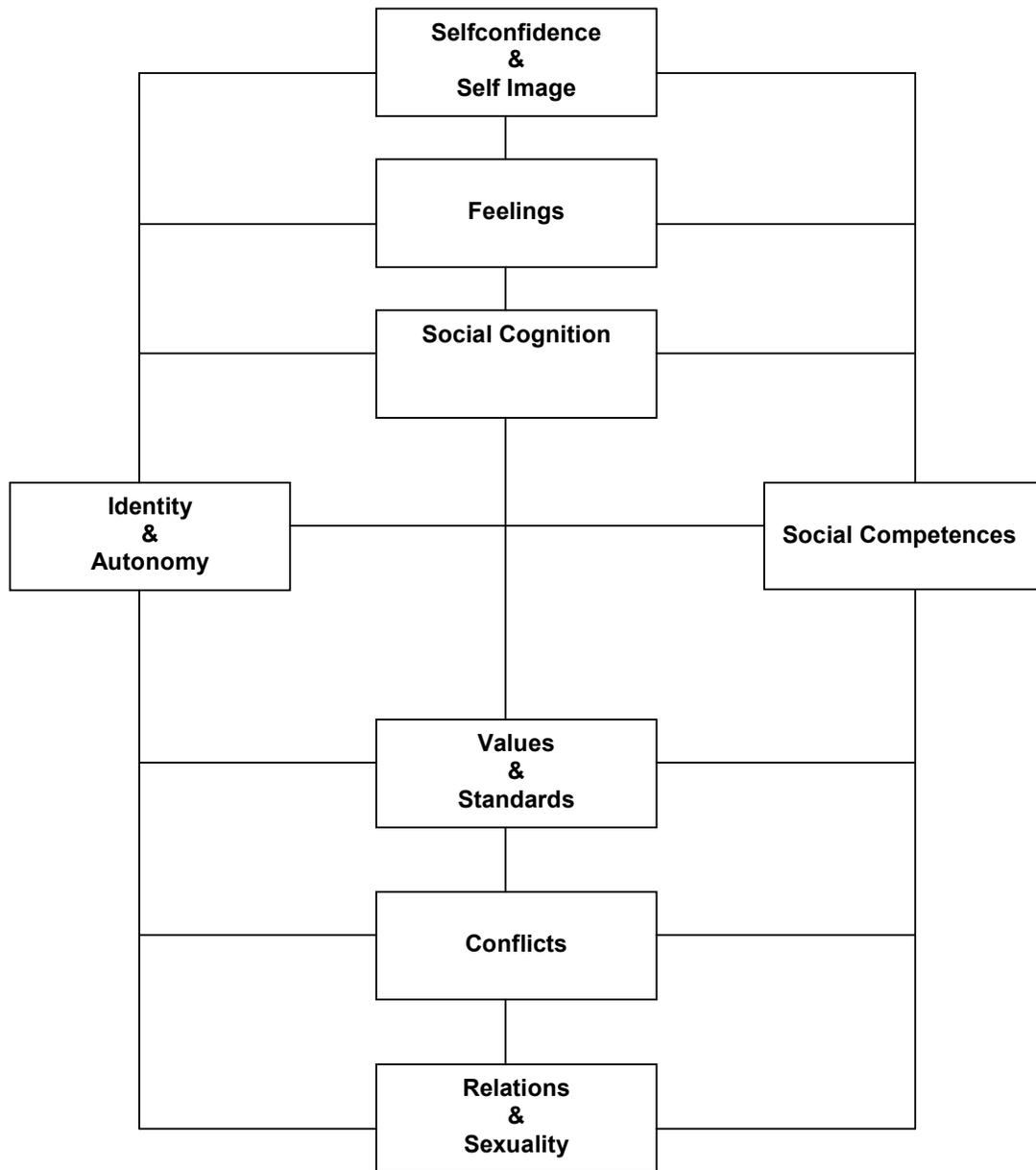


Figure 4.1 Social emotional development ([www.sociaalemotioneel.nl](http://www.sociaalemotioneel.nl))

#### § 4.2 The social emotional development in a situation of teaching

In a class pupils have much mutual contact, in which they see much of each other and are able to stimulate each other in several situations to adopt behaviour, apart from the question whether it is desirable or undesirable behaviour (Beemen, 2001). A teacher judges as it were the behaviour of the pupils, he or she influences the atmosphere in the class and by the decisive reactions of the teacher the self-image and the self-confidence of pupils are influenced ([www.sociaal-emotioneel.nl](http://www.sociaal-emotioneel.nl), w.y.) *"Door regels en continuïteit is de school een veilige plaats voor leerlingen waar zij zich op hen gemak voelen, zichzelf durven zijn, zich geaccepteerd voelen, vertrouwen hebben in zichzelf en anderen"* ([www.sociaalemotioneel.nl](http://www.sociaalemotioneel.nl), w.y.) [By rules and continuity the school is a safe place for pupils, where they feel at ease, dare to be themselves, feel themselves accepted and have confidence in themselves and others] In the lesson a teacher has to try to meet everyone to create the described safe atmosphere. On the other hand it is almost impossible to come up every moment to the expectations of every individual pupil. The degree in which a teacher pays attention to a pupil, decides for a part his or her position in a group. In a group process or in creating a group a teacher has an important role, because pupils consider the opinion of the teacher as being "true". In a situation of teaching all forms of behaviour can come forward that can be joined to the social-emotional development. In the following section this behaviour will be described more precisely.

#### § 4.3 To cope with the social emotional development

Stimulating the social-emotional development happens partly unintentional by teachers. By means of the rules in the class and the "watching eye" of the teacher behaviour is judged or condemned by the reactions. However seeing not wanted behaviour is easier than the seeing of the wanted conduct – after all this attracts less attention (Driesen, 1996). The behaviour a pupil displays always has a reason. This reason is of vital importance for understanding a pupil, to stimulate or to temper him in the behaviour he or she displays. The reason behind the behaviour lies in the social-emotional development that strongly can change by the influence of pupils of the same age. For condemning unwanted behaviour it is important that the teacher knows the motives of the pupil. To find out this it needs an open communication, empathy, understanding and respect for the pupil (Woltjer and Janssens, 2000; w.a., [www.sociaal-emotioneel.nl](http://www.sociaal-emotioneel.nl), w.y.) With this better can be judged whether to which punishment or to which reward a teacher can pass, because mostly, the teacher has a better view on the self-image of the pupil (Beemen, 2001). With this information a teacher can react better. The following ways for approaching the pupils can make this more clear (w.a. [www.sociaal-emotioneel.nl](http://www.sociaal-emotioneel.nl), w.y.):

- Giving positive attention to pupils is very important. It is a condition for good communication. A teacher should stimulate positive behaviour as strongly as possible by naming it particularly (Woltjer en Janssens, 2000).
- A teacher could stimulate children in their development. Not only when a situation asks for a reaction.
- For a teacher it works positively if he/she goes into the world of living of the child, and tries to find out what occupies the mind of the child (Sluijter, 2002).
- A teacher also should work at his or her personal development as skilled teacher. An ability of reflection improves the way of approach of pupils (Driesen, 1996).

In education few attention is paid on the reason behind the behaviour of pupils. The reason behind behaviour gives however information about the place of a pupil in the group and says very much about the self-image. When the teacher stimulates a good communication and makes pupils familiar with wanted behaviour from a positive anger, dealing punishment will be needed fewer. This strengthens the atmosphere in the class and improves the motivation (Bongaards and Sas, 2000; w.a., [www.sociaal-emotioneel.nl](http://www.sociaal-emotioneel.nl), w.y.).

#### **§ 4.4 Social emotional development and physical contact**

Being physical and physical education belong together. In the PE lessons students have to work together in a team, or in little groups. The students have to cooperate very well, to learn about competences for life. Physical contact is not just nothing for everyone. Some people find it very hard to talk about the subject. They don't like it to touch or to be touched, but if students learn what positive touching can give them, they might be thinking different about the same situation. The researches discussed in chapter two, tell about the many positive results of touching and massage. When the method of touching and massage will be integrated within the school curriculum, the atmosphere in the class can become a lot more quiet and peaceful. Children train their social cognition and there will be more space for other learning tasks. The moments a teacher spends on a little activity or game will be received as a reward by the students. They learn to live with each other and that's what it is all about. Especially in the stage of puberty, children are very sensitive for their environment (Beemen, 2001). The activities with physical contact can be seen as a method, a contribution to every single person with one's own qualities. This is a contribution which has its fundamentals in the adaptive education and cooperative learning (Vugt, 2002).

#### **§ 4.5 Physical development**

The physical development can not be seen apart from the social emotional development as well the motorial development. Changes in the body have a big impact on the mental health, especially in the puberty (Beemen, 2001). These changes, for example the development of breasts by girls or the lower voice by boys can influence their self-image and confidence. They can feel embarrassed against their peers. Changes or development of the body can also have influences on the motorial situation of an adolescent. The physical and motorial development has a big affinity as well. During the puberty, bones are growing bigger and getting stronger. The muscular system undergoes big changes, hormones will be produced, and also the nerves develop quickly (Beemen, 2001). Development of the body means that there can be more opportunities created for movement. For the subject physical education (PE), this is an important fact. Using the method about physical contact, might take away the taboo around physical contact and sexual abuse (Sluijter, 2002). In a stage of physical and mental development as described above, security must be captured to protect the students.

#### **Summary**

The social emotional development of adolescents is described in this chapter. Thinking and doing can not be seen apart from each other (Sluijter, 2002). A teacher has an important role and influence on the social emotional development of a child as a part of a class or group (Woltjer en Janssens, 2000, Bongaards en Sas, 2000). When a child feels pleasant in a group, the communication and the self-image becomes better and that increases the social cognition (Sluijter, 2002). The behavior of a child always has a reason and the reason behind behavior lies in the social emotional development that strongly can change by the influence of pupils of the same age (Woltjer en Janssens, 2000; w.a. [www.sociaalemotioneel.nl](http://www.sociaalemotioneel.nl)). Especially in the stage of puberty, adolescents are sensitive for their environment (Beemen, 2001). The activities with physical contact contribute the social emotional development in a personal and specific way. Also because of big changes in the body, the method with physical contact might take away the taboo around physical contact. Adolescents will grow up in a world where physical contact is a normal phenomenon.

## **Chapter 5 Physical contact in (physical) education**

Although the skin is the greatest organ of sense, few attention is paid to it in teaching. Why should we need to practise massage in teaching? From the former chapters it becomes clear that massage and contact of the skin brings about much positive effects, but thereby the link to teaching not yet is self-evident. Moreover sexual abuse, paedophilia and situations of power inside teaching in a way are a taboo. Would learning of “right” touching make more discussable and/or solve the problems mentioned above? And on which way one should imagine that? In this chapter will be given an account of the added value of massage and touching within teaching.

### **§ 5.1 Aim of massage in schools**

Massage and touching within teaching should be placed in a larger frame when there is talked about a specific aim. “Alliance with each other” is an important keyword. Inside the theme alliance different steps are to be distinguished. By massage and contact of the skin the sense of touch is stimulated, and that makes an appeal on the domain of personal experience of a child (Sluijter, 2002). The way, on which massage gets an interpretation in teaching, has to be seen as an interaction between pupils, with a giver and a receiver (Maxwell-Hudson, 1984; Sluijter, 2002). With massage we have aims as cooperation, tuning-in, and empathizing-with. Children learn that they not themselves but the other is the starting point. Surely not to be missing is the fact that the physical contact or massages are the origin of better achievements of learning. The feeling of solidarity and friendship are strengthened by the cooperation. The children get to know each other and admit each other, whereby the feeling of acquaintance and safety is strengthened (Oden, 2005). The practical character brings about that during the “minutes of massage” the pupils can let drop the theoretical knowledge they just got, or perhaps at the same time learn to practise it. Touching thereby at the same time gets a broader meaning, for it means tuning in and communicating, and these are fundamental skills for life!

### **§ 5.2 The present situation of teaching in society**

We touch increasingly fewer today. As already is discussed about in Chapter two, as a result of the industrialisation and automation touching has become much lesser self-evident (Sluijter, 2002). Besides that there is another reason why touching happens lesser. Touching becomes increasingly dangerous: one can get many problems by it, and at the worst case loose your job (Oden, 2005). Particularly in teaching this is a problem often discussed. On which manner exactly can someone be touched? It seems to be rather difficult to answer that question. Also the role of power of the teacher is being compromised. Teachers should be critical towards them selves and decide where the frontier between correcting consequently and using power wrongly can be found. Open communication is something everybody has right to, also a child. We should try to optimize this (Sluijter, 2002). In education more and more difficulties of learning and educating problems come to light. It is different to decide whether this is brought about by the improvement of methods of research, or by developments in the community. In any case we have to get going with those problems. Much of these problems can be explained by shortcomings. Shortcomings of help, encouragement, special attention or acknowledgement. No wonder that children ask for it, or let of steam to others. The reaction often is logical, but solving the problem often appears to be a tough job. Also remedial teachers warn for one-sided cognitive overburdening (Sluijter, 2002). The concentration on the subject matter is too great. Remembering an excessive quantity of information can close the right half of the brain, and that is the cause why children cannot perform anymore. They feel themselves under pressure and direct their frustration towards other people (Sluijter, 2002). The task for the teachers, elders and remedial teachers in this case is to restore the balance and to address the domain of social and personal experience and to integrate it into the process of teaching and educating. Of course these problems also have points of impact in the changing society. Parents present-day are working more and longer than in former days. Besides, children have to sit still at school for a longer time, after school they play more time indoor behind the computer and the television than outdoors, and that also results in problems of health. Bullying and violent conduct increasingly belong to the

daily problems. Bullying turns out to be difficult to solve and happens often. It has turned out, that there is a strong statistical connection between the lack of bodily affection and violent and anti-social conduct (Lichamelijke affectie, w.a., 2003; Depuydt in Sluijter, 2002). Of course massage and other methods with bodily contact will not bring the solution from one moment till the other, but it will be at least a step in the right direction. It is a change in the offering and the method of thinking of teaching, but with a very common idea of solidarity. It is focused more practical and exploration minded. The question is, that in the first place the parents, but also the teachers have to find a balance in what a child needs, something that in any case fits better to the needs of the child. The point is the manner in which that once more can be integrated in the process of education.

### **§ 5.3 The application in education**

Of course in the final carrying out of the method it is necessary to reflect upon the way on which the methods of massage should be offered in teaching. Apart from an eventual account towards the parents (to give insight in the methods of working), surely also an explication should be given to the students. There at the same time an important point must be noted, for generally in a primary school there will be worked with children of different ages, and being in different stages of development. Depending on the batch of pupils the methods of working can be introduced or explained after a story or for example a group discussion. To get a result most favourable it is advisable to create rest in the group and in the environment. Everybody has to fulfil the instructions with attention. When an instruction is given, further clear borders should be put. It is important that a child knows what is allowed and what not. Sometimes an explanation is on its place. During the happening the role of the teacher is utterly important. In spite of the fact that not with each method specific guidance is needed, it is very important that the process will be observed and “controlled” by the teacher. Dependent on the character of the instruction materials and tools can be used. At the end of the order the pupils/ teams/ little groups thank each other for the cooperation or the massage (Kiene, 2005).

On the Burghtschool in Amsterdam – as the first school in The Netherlands – this was tried out successfully. Of course physical education (PE) is a subject which lends itself very well for these kinds of activities. Especially because a PE session has a “free” character. The activities described in part two are developed to use in PE sessions. Of course, with the help of some creativity the activities can be modified to use in the classroom. In the survey below the different little steps are described that are important before, during and after the instructions;

Scheme of steps for the carrying out of the instructions (Sluijter, 2002):

1 Before the lesson/instruction:

- Account, if necessary (the parents)
- Explanation of the instruction to the children
- Marking out of the domain
- Rules
- Fixation of the moment

2 During the lesson/instruction:

- The teacher observes the process and offers structure
- Control of the carrying out
- Eventually using material

3 After the lesson/ instruction

- The pupils thank each other for example by shaking hands
- Eventually evaluation

#### § 5.4 Contents of the instructions

In principle there are no specific demands for implementation of the method in teaching. Of course it is recommended to pay attention to the just named conditions and to involve them in the preparation. The method could be seen as an adaptation on the offering of education, in which bodily contact more is involved. Of course the lessons of gymnastics have a practical character, and bodily contact can be a theme within the lessons. When massaging or a similar order returns in the lesson(s) it is sensible to repeat it with permanent regularity. Of course massaging needs not to be practised each day, a frequency of once a week is sufficient (Sluijter, 2002).

In the first instance perhaps it looks difficult to invent orders in which bodily contact returns. This does not at all need to be difficult, because usual tasks and plays can be used to try out the method. When a class for a longer time has worked on a specific task, then a little play or a moment of rest can be a reward for the children and also a moment to be roused awake. Also while reading a story, while listening to music or during an instruction of sketching the method can be applied. In the lessons of PE, stories of movement, plays of romping and forms of cooperation can be combined with massage and touching. The children can be taught to use a specific trick, also they can be given the opportunity to discover themselves what is experienced as pleasant. The range is very wide; educators should use creativity and adapt it to the target group. In the practical part will be offered a number of games and activities that can be used during PE sessions. The domain of personal experience mentioned before on this manner should once more make set in teaching. This not always means that special time therefore should be assigned. It could be a way of approach that is applied during daily routine in the classroom and during PE.

## § 5.5 Experiences with the method

For the research worked out in this thesis; a lesson has preceded. After the students had their instructions, they started their exercises. Afterwards they filled in a questionnaire which will give an indication about how the students experienced the tasks. These results will be work out in chapter six en in the part; "Results". So the method is already introduced in education. Some of experiences will be shared in the form of cases. These can be found on the following pages. Also different pictures are integrated within this paragraph. The pictures will give a clear idea about how the method has been intergrated in the PE lessons on MBI School.

### **Tickling on my back**

*"After I gave the instructions for the last activity of the lesson, every couple got a little card. On this card, there were key-words, based on the subject of the card. One of the kids was holding the card while he or she was telling a story about these words. The other one was drawing this story on the back of his/her partner. While they were working independently, I saw them having fun. "Miss Margaret, it's tickling on my back!" they said, with a big smile on their faces".*

Case 1;: "Tickling on my back".

### **Colored teams**

*"It seemed to be a very difficult problem; all the kids had a little coloured sticker on their back. Without looking at their own colour, they had to find people of the same team, but they were not allowed to talk. I let them think about a solution to find their team mates without breaking the rules. Only a few kids knew what to do; making contact with somebody, look on the back of that person, and bring him to somebody else with the same colour of sticker. Even though some of the kids found it hard not to talk; the majority of them understood that they had to help somebody else first before they could succeed finding their own team".*

Case 2: " Colored teams"

### **Fantasy drawing**

*"The students were working in couples. One of them had a card with a subject and some words on it. The other was sitting behind that person, and had to draw the story on the back of the person with the card. The card helped the kids to stimulate their fantasy and to start talking about the subject. A kid came to me and asked; 'Miss Margaret, my subject is 'space' but is it also ok if I tell about my cat in space?' Cause Mike (his partner) is very good at drawing cats and rockets on my back; I don't want to miss out on that part!"*



Case 3: "Fantasy drawing"

### **Surprised by own idea**

*"All the pupils started their task after the given instructions. One kid didn't find a partner to work with. A little sad and lonely I saw her looking around. 'Who do you want to work with sweetheart?' I said. 'I don't know', she answered. 'What if I'm your partner?' I saw her start smiling again. I started a story, and she started drawing on my back with her fingers. I nearly stopped talking. The tickling on my back was very nice! I undermined the method, and was glad to experience the positive effect myself. It encouraged me in my research, and I made one of my kids happy again!"*

Case 4: "Surprised by own idea"



Picture 5.1 Groupsmassage on a hot day



Picture 5.2 The teacher plays games together with two pupils



Picture 5.3 Coaching and balancing in the field of landmines



Picture 5.4 Two girls drawing stories



Picture 5.5 Sensation on the field!



Picture 5.6 Two boys working together on the task

## **Summary**

The main reason for the application of physical contact in education is solidarity. One of the aims of education is to prepare students for their place in the society, where they are working and life with others ([www.education.auckland.ac.nz](http://www.education.auckland.ac.nz)). The method of physical contact also requires good social skills which will be trained working on the different activities. Even though touching is of big importance, it happens fewer and fewer by the influences of the media upon situations of sexual abuse and touching. Touching seems to become dangerous. Problems like bullying, violent behavior and learning difficulties become daily issues. Of course the method of physical contact can not solve this problem immediately, but it will definitely contribute to create a more peaceful atmosphere in the school. Different activities can be used to create this atmosphere. In this chapter, different steps are offered to make it easier to give instructions to the children. Especially the PE lesson lends itself very well for the activities of the practical part. Experiences with the method are very positive and are described in paragraph 5.5

## Chapter 6 Justification of the research

In this chapter the way of working of the research will be explained. It will also be easier to understand how the questionnaire is developed (for the questionnaire, see appendix I). Before a good questionnaire can be made, there are some very important terms to think about. It is not possible to just create some questions; some stages of justification have to be done before the questionnaire can be created. Besides, the justification will make it easier to understand the research for the reader, as well that the research makes sense when it is linked to the rest of the thesis. In every paragraph there will be a short explanation about that specific part of the justification. The research is done to come to recommendations. These will be integrated and worked out in the practical part (part two).

### § 6.1 Definitions

The research is based on a couple of definitions, as the 'subject' of the research. Definitions are inferred of the subject of the thesis. It must be 'keywords' because these words together are the fundamentals of the research.

The following definitions are chosen to work with;

#### **Definitions:**

##### Touching:

*"Een aanraking is een bewust fysiek contact tussen (in dit geval) leerlingen, die met zorg en concentratie wordt uitgevoerd"* (Sluijter, 2002) [Touching is intentional physical contact between (in this case) pupils, that is done with care and concentration].

Touching is the main subject of the research, so it is really important to clarify this definition. The choice of this definition is made because it describes "intentional physical contact" which marks the emotional part of the touching. In this research the link between touching and the emotionally development will be investigated.

##### Self-confidence:

*'Belief in one's own abilities* (Makins, 1993, p.249).

The definition of self-confidence is chosen, because there will probably be a link between the ways a 12-13 year old kid sees his/herself and how self-confident it is. A kid who is used to be touched will probably be more self-confident than a kid who is not used to be touched (Beemen, 2001; Sluijter, 2002).

##### Massage:

*'The application (usual with the hands) of pressure and strain on the muscles and joints of the body by rubbing, kneading, etc. in order to stimulate their action and increase their suppleness; an instance or spell of such manipulation'* (Trumble and Stevenson, 2002, p.1713).

*"Onderlinge kindermassage is speels huidcontact, gestructureerd aangeboden door middel van spelvormen en liedjes die het gemakkelijker maken om de mogelijkheden van massage te verkennen"* (Sluijter, 2002, p. 11) [Mutual massage of children by playful contact of the skin, offered structured by forms of playings and songs, that make it easier to explore the possibilities of massage].

Massage is a way of contact. The first description above marks the more medical background of massage. In the research massage will be seen as a way of communication. It is not the contents of the massage and not only the touching itself; it is about making time for another and listening carefully. The second definition is better because it fits in the context of the research. The other person should be the main point.

## Relationship:

'Connection between things' (Makins, 1993, p.414). Or 'The way in which one thing stands in respect to another' (Geddes, 2001, p.275).

The definition of relationship is really important. Many questions in the questionnaire have to do with the way kids see their selves. Relationships with other people tell a lot about how people think about their selves that is why this definition is chosen a one of the important parts of the research.

### **§ 6.2 Justification from definition to dimension.**

To start with making a questionnaire, there have to be some definitions where the research is based on.

In this research, the following 'keywords' will be used;

- Touching (See § 2.1)
- Self- confidence (See § 2.1)
- Massage (See § 2.1)
- Relationship (See § 2.1)

These definitions are chosen, because of their affinity with the subject. Moreover, it has a social aspect in it as well. The dimensions are based on the definitions, and the indicators (later on in this chapter) are based on the dimensions. This is important to make it possible to 'measure' or to assess the learning questions. In Table 6.1 the definitions and the dimensions are further explained.

Table 6.1 From definition to dimension

<b>Definitions</b>	<b>Dimensions</b>
<p><u>Touching:</u></p> <p><i>"Een aanraking is een bewust fysiek contact tussen (in dit geval) leerlingen, die met zorg en concentratie wordt uitgevoerd"</i> (Sluijter, 2002) [Touching is intentional physical contact between (in this case) pupils, that is done with care and concentration]. (see also § 2.1)</p>	<p>-touch -perception</p>
<p><u>Self confidence:</u></p> <p><i>"Belief in one's own abilities"</i> (Makins, 1993, p.249). (see also § 2.1)</p>	<p>-feeling comfortable/ uncomfortable -being bossy/shy -body -perception -opinion -external/looking -socially emotional development -personal</p>

<p><u>Massage:</u></p> <p>“Onderlinge kindermassage is speels huidcontact, gestructureerd aangeboden door middel van spelvormen en liedjes die het gemakkelijker maken om de mogelijkheden van massage te verkennen” (Sluijter, 2002, p. 11) [Mutual massage of children by playful contact of the skin, offered structured by forms of playings and songs, that make it easier to explore the possibilities of massage]. (see also § 2.1)</p>	<ul style="list-style-type: none"> <li>-hands</li> <li>-feet</li> <li>-neck</li> <li>-back</li> <li>-games</li> <li>-touching</li> <li>-cooperation</li> <li>-teamwork</li> <li>-giving</li> <li>-receiving</li> </ul>
<p><u>Relationship:</u></p> <p>“Connection between things” (Makins, 1993, p.414). Or “The way in which one thing stands in respect to another” (Geddes, 2001, p.275). (See also § 2.1)</p>	<ul style="list-style-type: none"> <li>-cooperation</li> <li>-being bossy/shy</li> <li>-perception</li> <li>-confirmation</li> <li>-relationships</li> <li>-friends</li> <li>-socially emotionally development</li> <li>-personal</li> </ul>

Table 6.2 Explanation of the dimension ‘touching’.

Dimensions of the definition ‘Touching’	Explanation of dimension	Why is it valuable for the research?
Touch	In this context it is about the touching of another person, but also about the way a person experience touching (giving and receiving)	Touching is the main subject of the research. It is important to know how touching can be seen by different people.
Perception	The perception of somebody’s work doesn’t have to be the same as the perception of other people.	It is really important to know what the perception of people is.

Table 6.3 Explanation of the dimension ‘self- confidence’.

Dimensions of the definition ‘Self-confidence’.	Explanation of dimension	Why is it valuable for the research?
(un)comfortable	This can be a description of the feeling of somebody which can be very valuable.	Especially the lesson which is taught has to do with physical contact. It can be really important to know how kids react on tasks and what the reason of that reaction could be.
Bossy/ shy	Being bossy or being shy tells something about the character of a person.	The character of a person is important, because it tells something about how he or she deals with others in a group.
Body	The body of the kids is really important for them in this stage of life (puberty).	The body is a central item in the research. Because of physical contact, personal qualities will be shared.
Perception	The perception of somebody’s work doesn’t have to be the same as the	The perception of the kids in the class can be different. Especially for this lesson, it can be helpful to

	perception of other people.	'name' some expectations.
Opinion	The way a person thinks about something, his personal point of view.	Everyone can have a different opinion about physical contact. It's important that every kid has the opportunity to speak about his or her thoughts if wanted.
Social-emotional	This is about the way a person has contact with others, and the way he or she deals with emotions.	The aim of physical contact is learn to live with others. This is the socially-emotionally development. Every kid needs his/ her own place in a bigger group. Everyone needs some space, which is an important item for the lesson. Freedom of point of view and safety.

Table 6.4 Explanation of the dimension 'massage'.

<b>Dimensions of the definition 'Massage'.</b>	<b>Explanation of dimension</b>	<b>Why is it valuable for the research?</b>
Feet, neck, hands, back	Parts of the body which will be massaged.	It is important to know how the kids think about touching/ massage and parts of their body to get the expected result.
Games	Playing games is a activity children of year 7- 8 like a lot.	Playing a game while having PE can be a way to introduce the physical contact in daily educational activities.
Touching	In this context it is about the touching of another person, but also about the way a person experience touching (giving and receiving)	Touching is the main subject of the research. It is important to know how touching can be seen by different people.
Cooperation	The link between people and cooperation.	Cooperation is a very important skill. It is an important item in the lesson.
Teamwork	Working together while sharing qualities and competences.	Teamwork will be a part of the lesson which will be taught.
Giving and receiving	Life is about giving and receiving. When kids know about it, they start thinking from another point of view.	Kids have to learn to listen very carefully to others, also when that 'other' is not speaking.

Table 6.5 Explanation of the dimension 'relationships'.

<b>Dimensions of the definition 'Relationships'.</b>	<b>Explanation of dimension</b>	<b>Why is it valuable for the research?</b>
Cooperation	The link between people and cooperation.	Cooperation is a very important skill. It is an important item in the lesson.
Being bossy/shy	Being bossy or being shy tells something about the character of a person.	The character of a person is important, because it tells something about how he or she deals with others in a group.
Perception	The perception of somebody's work doesn't have to be the same as the perception of other people.	It is really important to know what the perception of people is.

Confirmation	Everyone needs confirmation in what he or she is doing.	Physical contact can be a way of confirmation.
Relationships	The way people live with others and how they react on others.	Relationships are fundamentals for life.
Friends	People persons see a lot and share their feelings with. These can be peers.	Friends are important for everybody. It can be essential for your life.
Social emotional	This is about the way a person has contact with others, and the way he or she deals with emotions.	The aim of physical contact is learn to live with others. This is the social-emotional development. Every kid needs his/ her own place in a bigger group. Everyone needs some space, which is an important item for the lesson. Freedom of point of view and safety.

### § 6.3 Justification from dimension to indicator

Dimensions are based on the definitions. By combining more definitions, it became easier to create the dimensions. In this part of the justification, the indicators will become clear, and like the dimensions are based on the definitions; the indicators are based on the dimension. Again, this will be a step forward to the questions in the questionnaire. In table 6.6 the consistency between dimensions and indicators is further explained.

Table 6.6 From dimension to indicator.

Dimensions	Indicators	Explanation
-touch	-reaction -body -feelings -comfortable	The consistency between the dimension 'touch' and the indicators as 'reaction' has to do with way the touch will be received. Mostly, the body will be used to touch and to touch with. A touch can cause a specific feeling and it can be comfortable as well uncomfortable.
-perception	-different -opinions	'Perception' is a very important dimension, which can be explained in different ways. Except of that, the way how people see something is their perception. It can cause different opinions.
-feeling comfortable/ uncomfortable -personal	-how to deal with feelings	The way people deal with feelings says something about their selves and their relationships with others.
-being bossy/shy	-cooperation -leader	Being bossy or shy says something about the function people can have in a group.
-perception -opinion	-talking about feelings -emotions	When people give their opinion from their own perception, than it can be based on their experiences and emotions.
-socially emotionally development	-lonely -proud	Being lonely or being proud of yourself says something about your self-confidence. Having self- confidence is part of the socially-emotionally development as it has to do with the way you see yourself and how others see you.

<ul style="list-style-type: none"> <li>-touching</li> <li>-hands</li> <li>-feet</li> <li>-neck</li> <li>-back</li> <li>-giving</li> <li>-receiving</li>   <li>-games</li> <li>-cooperation</li> <li>-teamwork</li> </ul>	<ul style="list-style-type: none"> <li>-cuddling</li> <li>-like massages</li> <li>-physical contact</li>         <li>-like playing games</li> </ul>	<p>Touching or cuddling somebody's is a way of physical contact. The reaction people give on physical contact can be very different. Touching is an inter action between the giver and the receiver.</p> <p>Playing games on your own is not the same as playing with somebody else of in a group. Teamwork can influence the way you see yourself. Every person can have a different function.</p>
<ul style="list-style-type: none"> <li>-relationships</li>       <li>-friends</li>       <li>-cooperation</li> <li>-being bossy/shy</li>       <li>-socially emotionally development</li>       <li>-personal perception</li> </ul>	<ul style="list-style-type: none"> <li>-lot of friends</li> <li>-lonely</li>       <li>-best friend</li>       <li>-being assertive</li> <li>-bullying</li>       <li>-relationships</li> <li>-self-image</li>       <li>-self-image</li> <li>-confirmation</li> <li>-opinion</li> </ul>	<p>Having relationships is very essential for the well-being of people. Friends are a part of the relationships in life.</p> <p>Having a best friend can be very valuable to share nice and hard moments with.</p> <p>The character of people says something about the way their cooperating, and which place or function people can have in a group.</p> <p>Relationships and the self-image of a person have their influences on the socially-emotionally development.</p> <p>A person's perception depends on his/ her self/image. Every person needs confirmation and feedback about who he/she is en if that what he/she is doing is correct.</p>

#### § 6.4 Justification from indicator to the question

After finishing the dimensions, only the last step has to be made before the questionnaire is ready. When the indicator is there, only the question has to be formulated. There are two different types of questions in the questionnaire; there are questions on nominal level and on ordinal level. Questions on interval level and ratio level have not been used, because for results of the research there were no difficult calculations required. For the completeness, the definitions are all explained.

**Questions on nominal level:** *'Het ene antwoord is niet "meer" of "beter" dan het andere; bijv. 'geslacht' (www.studenten.samenvattingen.com).* [Questions where the answer is not 'more ' or 'better' than the other one, for example ; 'gender'].

**Questions on ordinal level:** *' Het ene antwoord is wel "meer" of "beter" dan het andere, maar er valt niet in cijfers uit te drukken hoeveel, bijvoorbeeld het opleidingsniveau'.* ([www.studenten.samenvattingen.com](http://www.studenten.samenvattingen.com)). [questions where one answer is 'more' or better than the other one, but without the possibility to express the answers in a specific amount; for example the level of education]. In table 6.7 the questions will be created for the questionnaire (see appendix I).

**Questions on interval level:** *'Wanneer variabelen op intervalniveau gemeten zijn, zijn er gelijke verschillen tussen de waarden van die variabelen. De variabele gemeten op intervalniveau kent echter geen natuurlijk nulpunt. Bijvoorbeeld; Graden in Celcius'* (Tijmenssen,

2006, p.15). [When variables are measured on interval level, there are equal differences between the values of these variables. However the variable is measured on interval level it doesn't have a zero point, for example; degrees in Celsius].

**Questions on ratio level:** *'Het verschil tussen interval- en ratio- niveau is dat bij ratio-niveau wel een natuurlijk nulpunt is, bijvoorbeeld de variabele gewicht'* (Tijmenssen, 2006, p.15). [The difference between interval level and ratio level is the zero point. Measuring on ratio level means that there is a zero-point, for example the variable weight].

Table 6.7 From indicator to the question

	<b>Indicator</b>	<b>Question</b>	<b>Explanation</b>	<b>Question type</b>
<b>1</b>	None; general question	Gender	This includes general information for the research.	Nominal
<b>2</b>	None; general question	What age are you ?	This includes general information for the research.	Ordinal
<b>3</b>	None; general question	In which year are you?	This includes general information for the research.	Ordinal
<b>4</b>	Playing games	How did you experience the first task?	It is interesting to know how the kids think about the activities they participated in. It gives information about the first task, which had to do with cooperation.	Ordinal
<b>5</b>	Cooperation Touching Physical contact Playing games	How did you experience the second task?	The answer of this question can be valuable for the research, because it gives information about how kids experience physical contact.	Ordinal
<b>6</b>	Cooperation Leader/ leading Playing games	How did you experience the third task?	It is interesting to know how the kids think about the activities they participated in. It gives information about the third task, which had to do with cooperation.	Ordinal
<b>7</b>	Body Touching Physical contact Playing games	How did you experience the fourth task?	The answer of this question can be valuable for the research, because it gives information about how kids experience physical contact.	Ordinal
<b>8</b>	Lonely Friends Best friend	Do you have the feeling that you have a lot of friends?	Having friends does say something about the social contacts of the kid. This can influence the self-image of the kid a it's well-being.	Nominal
<b>9</b>	Comfortable Lonely Emotions	Do you ever have the feeling that your lonely?	Being lonely is a feeling a kid can have. This feeling can influence the self-image and besides, it says something about how a kid deals with his/ her feelings.	Nominal
<b>10</b>	Friends	Do you have a best friend?	Having friends is very essential if you ask kids about their self-image. Without the feedback of others, it is very hard to create	Nominal

			a situation of well-being.	
11	Reaction Bullying Friends	Do you ever get bullied?	Kids who get bullied can be very less confident about their selves.	Nominal
12	Reaction Bullying Being assertive	How do you react if you get bullied?	The reaction of a kid when he/she get bullied can say something about the cause of the bullying.	Nominal
13	Comfortable Cooperation Being assertive	Do you like to cooperate (working together in a team)?	Working together in a group can be very encouraging for kids. On this age, it should be getting easier to work with others.	Nominal
14	Leader	Do you like being a leader of a team or group?	Being a leader of a group can tell a lot about the character of a kid.	Nominal
15	Dealing with feelings	Do you easily talk about your feelings with others?	Everyone deals with problems, and everyone deals with problems on his/ her own way.	Nominal
16	Dealing with feelings	Who do you usually talk to about your feelings?	A lot of kids talk about their feelings with others, in this question, they tell who they they talk with.	Nominal
17	Proud Reaction	Can you be proud of yourself after doing something good?	Being proud of yourself is a part of having self-confidence. I is a way of appreciating and accepting yourself.	Nominal
18	Comfortable Physical contact Body	Do you mind if there is physical contact for example in the PE session?	Because of the subject of this thesis, it is very interesting to know, how kids experience physical contact in the PE lesson.	Nominal
19	Physical contact Massage Reaction	Do you like it when you receive a massage like we did during the session?	Receiving a massage is different from giving a massage. It has to do with giving and receiving. In both situations, a kid has a different role.	Nominal
20	Physical contact Massage Reaction	Do you like to give somebody a massage like we did during the session?	Receiving a massage is different from giving a massage. It has to do with giving and receiving. In both situations, a kid has a different role.	Nominal

## § 6.5 Justification of the answering categories

While developing the questionnaire, the Likert –scale (Likert, 1932, [www.wikipedia.org](http://www.wikipedia.org)) is used as a method to develop the answering categories. Normally the Lickert-scale has 5 or 7 answering categories. To make sure that people don't just fill the answer in the middle of the scale (the most neutral one) most of the questions of this research have 6 answers. When there are an equal number of answering categories, the questionnaire is forcing people to make a decision. All there answering categories can be retrieved in table 6.8.

Table 6.8 Justification of the answering categories

Question	Question type	Answering categories	Explanation of answering categories
Gender	Nominal	<ul style="list-style-type: none"> <li>• Male</li> <li>• Female</li> </ul>	There are no more answers possible
What age are you ?	Ordinal	<ul style="list-style-type: none"> <li>• 10</li> <li>• 11</li> <li>• 12</li> <li>• 13</li> <li>• 14</li> </ul>	Year 7-8 kids are normally in the age of 12-13, but it can vary a little bit, that's why there are more answers.
In which year are you?	Ordinal	<ul style="list-style-type: none"> <li>• Year 7</li> <li>• Year 8</li> </ul>	On Murrays Bay, intermediate school, there were only year 7 and 8 classes.
How did you experience the first task?	Ordinal	<ul style="list-style-type: none"> <li>• No answer</li> <li>• Not so nice</li> <li>• Ok</li> <li>• Nice</li> <li>• Very nice</li> <li>• Cool</li> </ul>	The Likert-scale is used (Likert, 1932) for this question. It is a scale from a low, to a higher level of appreciation.
How did you experience the second task?	Ordinal	<ul style="list-style-type: none"> <li>• No answer</li> <li>• Not so nice</li> <li>• Ok</li> <li>• Nice</li> <li>• Very nice</li> <li>• Cool</li> </ul>	The Likert-scale is used (Likert, 1932) for this question. It is a scale from a low, to a higher level of appreciation.
How did you experience the third task?	Ordinal	<ul style="list-style-type: none"> <li>• No answer</li> <li>• Not so nice</li> <li>• Ok</li> <li>• Nice</li> <li>• Very nice</li> <li>• Cool</li> </ul>	The Likert-scale is used (Likert, 1932) for this question. It is a scale from a low, to a higher level of appreciation.
How did you experience the fourth task?	Ordinal	<ul style="list-style-type: none"> <li>• No answer</li> <li>• Not so nice</li> <li>• Ok</li> <li>• Nice</li> <li>• Very nice</li> <li>• Cool</li> </ul>	The Likert-scale is used (Likert, 1932) for this question. It is a scale from a low, to a higher level of appreciation, this means an ordinal question.
Do you have the feeling that you have a lot of friends?	Nominal	<ul style="list-style-type: none"> <li>• No answer</li> <li>• Yes, I think I've got many</li> <li>• No, I don't think I have so many</li> <li>• I don't know</li> </ul>	This is a nominal question, because there cannot be an ordinal scale with these answers.
Do you ever have the feeling that your lonely?	Nominal	<ul style="list-style-type: none"> <li>• No answer</li> <li>• No, never</li> <li>• Sometimes</li> <li>• Very often</li> </ul>	This is a nominal question, because there cannot be an ordinal scale with these answers.

Do you have a best friend?	Nominal	<ul style="list-style-type: none"> <li>No answer</li> <li>Yes</li> <li>No</li> <li>I don't know</li> </ul>	This is a nominal question, because there cannot be an ordinal scale with these answers.
Do you ever get bullied?	Nominal	<ul style="list-style-type: none"> <li>No answer</li> <li>Yes</li> <li>No</li> <li>Sometimes</li> </ul>	This is a nominal question, because there cannot be an ordinal scale with these answers.
How do you react if you get bullied?	Nominal	<ul style="list-style-type: none"> <li>I never get bullied</li> <li>I go to my teacher</li> <li>I ask them to stop</li> <li>I get mad</li> <li>I ignore it</li> <li>Other</li> </ul>	This is a nominal question, because there cannot be an ordinal scale with these answers.
Do you like to cooperate (working together in a team)?	Nominal	<ul style="list-style-type: none"> <li>No</li> <li>Yes</li> <li>Depends on who is in my team</li> <li>I prefer to work on my own.</li> <li>Other</li> </ul>	This is a nominal question, because there cannot be an ordinal scale with these answers.
Do you like being a leader of a team or group?	Nominal	<ul style="list-style-type: none"> <li>No</li> <li>Yes</li> <li>Depends on the situation.</li> </ul>	This is a nominal question, because there cannot be an ordinal scale with these answers.
Do you easily talk about your feelings with others?	Nominal	<ul style="list-style-type: none"> <li>No</li> <li>Not really</li> <li>Only if I have to</li> <li>I don't really mind</li> <li>No problem for me</li> <li>No</li> </ul>	This is a nominal question, because there cannot be an ordinal scale with these answers.
Who do you usually talk to about your feelings?	Nominal	<ul style="list-style-type: none"> <li>I don't talk about my feelings</li> <li>Friends</li> <li>Boyfriend/girlfriend</li> <li>My parents</li> <li>Family</li> <li>Other</li> <li>No answer</li> </ul>	This is a nominal question, because there cannot be an ordinal scale with these answers.
Can you be proud of yourself after doing something good?	Nominal	<ul style="list-style-type: none"> <li>No</li> <li>Yes</li> <li>Sometimes</li> <li>No answer</li> </ul>	This is a nominal question, because there cannot be an ordinal scale with these answers.
Do you mind if there is physical contact for example in the PE session?	Nominal	<ul style="list-style-type: none"> <li>I don't like it</li> <li>Sometimes</li> <li>Not really</li> <li>Depends on who it is</li> <li>No, I don't mind</li> <li>No answer</li> </ul>	This is a nominal question, because there cannot be an ordinal scale with these answers. This question could have had other answering categories as well, but to make cross tabulations, it is not necessarily to measure ordinal level.
Do you like it when you receive a massage like we did during the session?	Nominal	<ul style="list-style-type: none"> <li>No</li> <li>Depends on who is massaging</li> <li>Yes, it's nice</li> <li>No answer</li> </ul>	This is a nominal question, because there cannot be an ordinal scale with these answers. If there would have been a scale from less to more appreciating of massage, than it could have been a ordinal question with other answering categories.
Do you like to	Nominal	<ul style="list-style-type: none"> <li>No</li> </ul>	This is a nominal question, because there

give somebody a massage like we did during the session?		<ul style="list-style-type: none"><li>• Depends on who I have to massage</li><li>• Yes, I like doing it.</li><li>• No answer.</li></ul>	cannot be an ordinal scale with these answers. If there would have been a scale from less to more appreciating of massage, than it could have been a ordinal question with other answering categories.
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## Chapter 7 Results

In this chapter, the results of the research will be shown. SPSS (a statistic program; [www.spss.com](http://www.spss.com)) is used to change the data into more visual results. Most of the questions of the questionnaire are used to come to these results. Except of some short notices, most of the questions are explained with the help of visual information like tables, diagrams and other illustrations. Only the most important questions are explained in this chapter. For more detailed information, see appendix II.

### § 7.1 General characteristics

The research has taken place at Murrays Bay Intermediate School in Auckland, New Zealand. To the research, 5 classes have participated of both year 7 and year 8. In sum there were 150 respondents (N= 150, 'N' means total number of respondents), of which 77 girls and 71 boys. Unfortunately, there has been 2 questionnaires where the question about gender was not filled in (for the questionnaire see appendix I).

### § 7.2 Tasks of the lesson

During the lesson, the students worked on four tasks. By means of these tasks they answered the questions of the questionnaire. While the students were working on these tasks in a game or activity, they had to work together very well, so except of the game, they practiced with their team-skills and communication. All the tasks are worked out below.

#### First Task

Task one was a game, where every student had a coloured sticker on his/her back. They didn't know which colour there were, and there were not allowed to talk. They had to find their team members, so cooperation was very important. The following question about this task in the questionnaire was; "How did you experience the first task (with the stickers on your back)?"

Looking at the table, it may be clear that most of the students are very positive about this task. 127 kids out of 150 reacted positive on this first task (84,7%, N=150). This means, that they choose 'nice', 'very nice' or 'cool' as their answer. Only 23 students were less positive about this first activity (15,3%, N=150). The majority of the answers which were less positive were filled in under; 'ok' (19 answers, 12,7%) (Table 7.1).

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	missing	1	,7	,7	,7
	no answer	3	2,0	2,0	2,7
	ok	19	12,7	12,7	15,3
	nice	24	16,0	16,0	31,3
	very nice	38	25,3	25,3	56,7
	cool	65	43,3	43,3	100,0
	Total	150	100,0	100,0	

Table 7.1 The experiences of the first task

### Second Task

The second task was some kind of relay game; the students had to draw a little pictogram on the back of the person in front of them. They were not allowed to talk and they had to try to get the pictogram correctly on a piece of paper after everyone in the group had his/her go. This game is a little about cooperation but especially about physical contact.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	missing	1	,7	,7	,7
	not so nice	2	1,3	1,3	2,0
	nice	20	13,3	13,3	15,3
	ok	29	19,3	19,3	34,7
	very nice	31	20,7	20,7	55,3
	cool	67	44,7	44,7	100,0
	Total	150	100,0	100,0	

Table 7.2 The experiences of the second task

The table above (Table 7.2) and figure 7.1 below shows that the students had been very positive about the second task. 127 students were positive about the second task, out of the 150 students in total. This is 84,7%. 29 students (19,3%) experienced the task 'nice', 31 students (20,7%) found the task 'very nice' and even 67 students (44,7%) said that the found this task 'cool'!

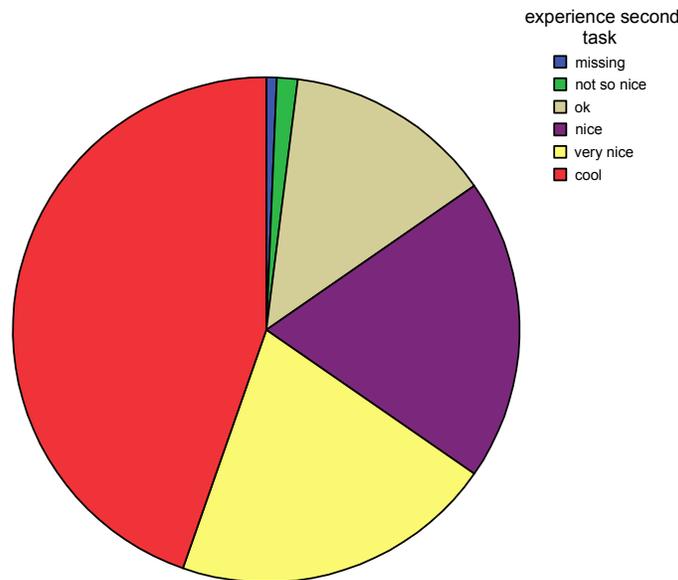


Figure 7.1 The experiences of the second task in pie

### The third task

The third task was a team-building game. Also this game was a relay, but the students had to coach each other true a field with gear all over the place. The coach was on the other side of the field, while the participant was walking backwards true the field. The coach had to give instructions about how to walk, because if the participant would hit one of the items in the field, he/she had to start over again. Cooperation was very essential in this game. Especially the participant couldn't have worked without a coach.

		which gender			Total
		missing value	male	female	
experience third task	missing	0	1	0	1
	no answer	1	0	2	3
	not so nice	0	2	0	2
	ok	0	6	6	12
	nice	0	3	6	9
	very nice	0	14	14	28
	cool	1	45	49	95
Total		2	71	77	150

Table 7.3 The experiences of the third task by gender

In the table above (Table 7.3), the results for this task are divided by gender. The students have been very positive about this task; 132 students out of 150 answered positive (88%), with; 'nice', 'very nice' or 'cool'. It is remarkable to see, that both boys and girls found this task so nice. In total there are 77 girls of which 69 gave a positive answer. This is 89,6% (N=77) of the girls. There are 71 boys of which 62 gave a positive answer. This is 87,3% (N=71).

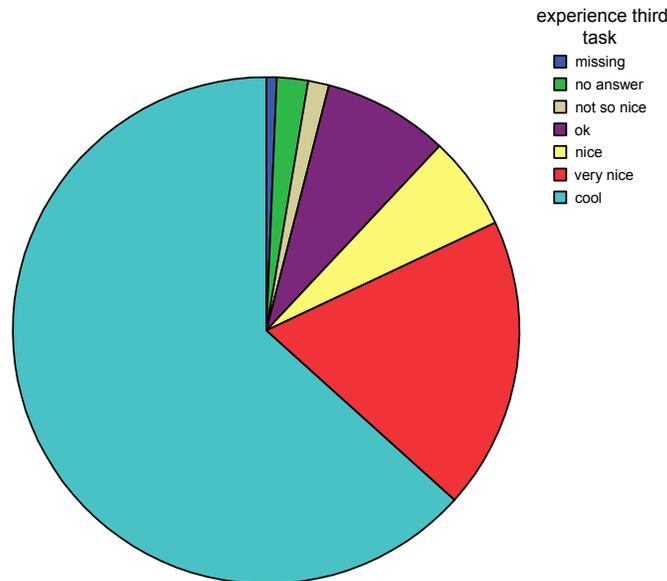


Figure 7.2 The experiences of the third task as a pie-diagram

Especially a pie-diagram (figure 7.2) shows the majority of positive answers. The blue, red and the yellow parts are one of the following positive answers; 'nice', 'very nice', or 'cool'.

### The fourth task

Task 4 had to do with physical contact. The students were working in couples. One of them had a card with a subject and some loose words on it. This person was telling a story about the subject, and was using the words on the card as a little help. The other person was sitting behind the 'story-teller' and was drawing this story on his/her back. The person who was drawing had to listen very carefully, so he/she could draw with concentration. Physical contact was the main thing in this activity (see Table 7.4).

		which gender			Total
		missing value	male	female	
experience fourth task	missing	0	1	0	1
	no answer	0	10	3	13
	not so nice	0	5	0	5
	ok	1	12	15	28
	nice	1	13	10	24
	very nice	0	14	22	36
	cool	0	16	27	43
Total		2	71	77	150

Table 7.4 Experiences of the fourth task by gender.

Touching each other can cause a different reaction if you split the group by gender. 10 boys, 14,1% (N= 71) choose for the 'no answer' compared to only 3 girls, which is 3,9% (N=77). The students who found this task 'not so nice' were only boys (5 boys, 7%). The majority of the answers are still very positive, but compared to other question, there are big differences between boys and girls. 27 girls (35,1%, N=77) said that this task was 'cool', compared to only 16 boys with the same answer (22,5%, N=71). Still, 103 answers out of 150 (N) are positive (68,7%), which means; 'nice', 'very nice', or 'cool'. There were 47 other answers (31,3%) (N=150) which could have been; 'missing', 'no answer', 'not so nice' or 'ok'.

The information and the results so far, were based on the answers the students gave in the questionnaire. The lesson they were taught, prior to filling in the questionnaire had 4 tasks. The answers from above were based on those four tasks. Except of the tasks, there were also questions in the questionnaire about other personal things like physical contact, questions about cooperation and leadership and about other personal issues can be found in the questionnaire (see appendix I). The next results are about these issues. The answers of these questions can be very important for the research, to learn a little more about the background of the students. There might be a relation between the experiences during the lesson and the answers they gave in the rest of the questions of the questionnaire; about how they feel, and what they are.

### § 7.3 Physical contact

Except of the tasks during the lesson, more often there can be physical contact during the (PE) lessons. For this research, where physical contact has a central place, it is really important to know how students experience physical contact. During the lesson which is taught around physical contact, there was a final exercise where the students were massaging each others back. Giving and receiving a massage are two different things. Accepting each other is an important condition for the cooperation of the two people (they were working in couples). All the students filled-in the next 3 questions about physical contact (Also see the questionnaire, appendix I);

- ‘Do you mind physical contact for example during the PE session?’
- ‘Do you like it when you receive a massage like we did during the session?’
- ‘Do you like to give somebody a massage like we did during the session?’

#### Question 18; ‘Do you mind physical contact for example during the PE session?’

Physical contact happens a lot during PE session, as students are moving in a area with their body. Physical contact is a characteristic part of PE. Movement and cooperation are key-words of the subject. Physical contact can be a difficult issue for some students. For others is can be very normal. Fact is, that opinions will strongly vary. This research tells that only 5 students, 3.3% (N=150) indicate that they don't like physical contact. 45 students, 30% (N=150) tell that their opinion about physical contact depends on the situation. Of these 45 students (N=45), 17 of them were boys (37,8%) and 28 were girls (62,2%). 48 students indicated that they don't mind physical contact. This is 32% (N=150). 27 boys (56,3%, N=48) gave this answer compared to 21 girls (43,8%,N=48).

		which gender			Total
		missing value	male	female	
do you mind physical contact	missing	0	3	2	5
	I don't like it	0	3	2	5
	sometimes	1	8	11	20
	not really	1	11	13	25
	depends on who it is	0	17	28	45
	no, I don't mind	0	27	21	48
	no answer	0	2	0	2
Total		2	71	77	150

Table 7.5 ‘Do you mind physical contact?’ by gender

**Question 19; ‘Do you like it when you receive a massage like we did during the session?’**

Receiving a massage and touching each other can cause different results if the answers of boys and girls are compared. Looking at the results in Table 7.5; there are 9 boys, which is 12, 7% (N=71) who indicate that they don't like it to receive a massage, comparing to 3 girls, which is 3,8% (N=77). A lot of students indicate, that their opinion depends of who they have to massage. 53 students (35,3%, N=150) choose for this answer, of which 33 girls (62,3%, N=53) and 19 boys (35,8%, N=53). 26 boys indicate that they like it to receive a massage, this is 36,6% of all the boys (N=71). Out of the girls, 33 of them (42,8%, N=77) said that they liked it to receive a massage.

		which gender			Total
		missing value	male	female	
do you like receive a massage	missing	0	4	2	6
	no	1	9	3	13
	depends on who I have to massage	1	19	33	53
	I like doing it	0	26	33	59
	no answer	0	13	6	19
Total		2	71	77	150

Table 7.5 ‘Do you like to receive a massage?’ by gender

**Question 20; ‘ Do you like to give somebody a massage like we did during the session?’**

Just like the previous question; also giving a massage can cause different results if the answers of boys and girls are compared. Giving a massage means that the one who is masseur won't get touched. This can cause different results compared to the previous question. 16 boys (22,5%, N=71) indicate that they don't like to give somebody a massage, compared with only 1 girl (1,3%, N=77). In picture 7.6 it also becomes very clear that there are more differences. 25 boys (35,2%, N=71) says that their opinion about giving a massage depends on who they have to massage, compared to 49 girls (63,6%, N=77) who gave the same answer. Nearly the same number of students (17 boys, 47,2% and 19 girls, 52,8%, N=36) answered that they like it to give a massage. This means 36 students (N=150), which is 24% of all the participating students (see picture 7.6).

		which gender			Total
		missing value	male	female	
do you like to give a massage	missing	0	3	2	5
	no	0	16	1	17
	depends on who I have to massage	1	25	49	75
	yes, I like doing it	1	17	19	37
	no answer	0	10	6	16
Total		2	71	77	150

Table 7.6 ‘Do you like to give somebody a massage?’ by gender

## § 7.4 Personal issues

There are a lot of other factors which can influence the opinion and answers the students gave in the already discussed questions. If a kid feels really lonely, it could be likely that it want to be touched more. The self-confidence of a human being can change, especially during the puberty. The opinion of other, peers of friends, can have big influences on how a child sees itself. Having friends, talking with others and cooperation are important. There were a couple of questions in the questionnaire about these issues, which will be discussed below.

If a child feels lonely, than this can have influences on their self-image. Out of 150 students, 39 of them answered that they never have the feeling that they are lonely, this is 26%, this were 27 boys (69,2%, N=39) and 12 girls (30,8%, N=39). 89 students indicated that they feel lonely only 'sometimes', this is 59,3% (N=150). 11 students feel themselves lonely very often, this is 7.3% (N=150), of which 5 boys (45,5%, N=11) and 6 girls (54,5%, N=11) (see table 7.7).

		which gender			Total
		missing value	male	female	
do you feel lonely	missing	0	3	2	5
	no answer	0	3	3	6
	no never	0	27	12	39
	sometimes	2	33	54	89
	very often	0	5	6	11
Total		2	71	77	150

Table 7.7 'Do you ever have the feeling that your lonely?' by gender

Having friends and being together is an important part of the social development of a human being. If children have no friends, than it could be likely that such a kid feels lonelier than a kid who has lots of friends. In table 7.8 there are no specific answers like this. The only thing which is really remarkable, it that there are 32 students, or 21,3% (N=150) who say that they never feel lonely, and that they have many friends. Also students who feel lonely sometimes (62 students, 41,3%, N=150) still say that they have many friends. 4 students who say that they feel lonely very often are unsure about how many friends they have. Out of 150 students, this is 2,7%.

		do you feel lonely					Total
		missing	no answer	no never	sometimes	very often	
do you have feeling lot of friends	missing	5	0	0	0	0	5
	no answer	0	1	1	3	1	6
	yes, many	0	2	32	62	1	97
	no I don't think so	0	0	3	9	5	17
	I don't know	0	3	3	15	4	25
Total		5	6	39	89	11	150

Table 7.8 'Do you feel lonely?' & 'Do you have a lot of friends?'

If a kid gets bullied, than this can have different causes. Getting bullied can have a negative effect on the self-image and the self-confidence of a kid. Table 7.9 shows that there are 24 students who get bullied (16%, N=150) of which 10 boys (41,7%, N=24)) and 13 girls (54,2%, N=24). One of the answers is missing. 70 students indicate that they never get bullied, which is 46,7% (N=150). 33 students said that they get bullied sometimes, which is 22% (N=150) of all the students.

		which gender			Total
		missing value	male	female	
do you ever get bullied	missing	0	4	2	6
	no answer	0	4	13	17
	yes	1	10	13	24
	no	0	41	29	70
	sometimes	1	12	20	33
Total		2	71	77	150

Table 7.9 'Do you ever get bullied?' by gender

The next table (7.10) shows the results of two questions; 'Can you be proud of yourself after doing something good?' and 'Do you ever get bullied?'. Children who get bullied can have less self-confidence than children who don't get bullied. A child who has enough self-confidence should be able to be proud of things he or she has done. The answers in the table (7.10) shows that there are 47 students (31,3%, N=150) who never get bullied and who can be proud of their selves. There are only 2 students (1,3%, N=150) who answered with 'no' on the question; 'Can you be proud of yourself after doing something good?'. 95 students said that they can be proud of their selves, which is 63,3% (N=150). 46 students (30,7%) answered with 'sometimes'. The other 9 answers (6%, N=150) were spread concerning answers like; 'no' (2), 'no answer' (1) and the rest of the answers weren't filled in (6)(4%).

		can you be proud of yourself					Total
		missing	no	yes	sometimes	no answer	
do you ever get bullied	missing	5	0	0	0	0	5
	no answer	0	1	8	8	0	17
	yes	0	0	17	7	0	24
	no	0	1	47	21	1	70
	sometimes	1	0	23	10	0	34
Total		6	2	95	46	1	150

Table 7.10 'Do you ever get bullied' & 'Can you be proud of yourself?'

The next table (7.11) can be very interesting for the research. It is about the link between people who do and do not get bullied compared with the question; 'Do you mind physical contact?' There are no kids who indicate that they get bullied and don't like physical contact, which is positive, but unexpected fact. Two students (N=150) say that they get bullied sometimes, who indicate that they don't like physical contact (1,3%). The opposite of this can be found looking at the table; 30 students indicate that they don't get bullied, and that they don't mind physical contact (20%). Also 17 students (N=150) say that they don't get bullied and that their opinion about physical contact depends on the person they have physical contact with (11,3%).

		do you mind physical contact							Total
		missing	I don't like it	sometimes	not really	depends on who it is	no, I don't mind	no answer	
do you ever get bullied	missing	5	0	0	0	0	0	0	5
	no answer	0	1	5	4	4	2	1	17
	yes	0	0	1	5	9	9	0	24
	no	0	2	11	9	17	30	1	70
	sometimes	0	2	3	7	15	7	0	34
Total		5	5	20	25	45	48	2	150

Table 7.11 'Do you ever get bullied' & 'Do you mind physical contact?'

### § 7.5 Cooperation and leadership

Children are trained to learn to have their own function in the society. Living is something you can not do on your own in a world full of other people. Therefore cooperation skills are very important. One of the questions is the questionnaire was; 'Do you like to cooperate?' The answers are shown below by gender, in table 7.12.

68 students (45,3%, N=150) indicated that they like cooperation, of which 35 boys (51,5%, N=68) and 31 girls (45,6%, N=68). Cooperation can depend on the group, the table below, tells more about this.

		which gender			Total
		missing value	male	female	
do you like to cooperate	missing value	0	3	3	6
	no	0	1	1	2
	yes	2	35	31	68
	depends on who is in my team	0	26	33	59
	I prefer to work on my own	0	3	3	6
	other	0	3	6	9
Total		2	71	77	150

Table 7.12 'Do you like to cooperate?' by gender.

Cooperation is one thing. students can be part of a group, but being leader is another thing. Table 7.13 shows that 37 students (24,7%, N=150) like it to be a leader. 88 students (58,7%, N=150) say that it depends on the situation if they want to be a leader or not. 19 students

(12,7%, N=150) don't want to be a leader, of which 8 boys (42,1%, N=19) and 10 girls (52,6%, N=19) (1 answer is missing, 5,3%).

		which gender			Total
		missing value	male	female	
do you like being leader	missing	0	4	2	6
	no	1	8	10	19
	yes	0	19	18	37
	depends on the situation	1	40	47	88
Total		2	71	77	150

Table 7.13 'Do you like being leader?' by gender

The last table (7.14) is a table where 2 questions are combined; 'Do you have a lot of friends?' and 'Do you like to cooperate?' These questions are combined because of their affinity. Children who have a lot of friends might like it to be a leader. Table 7.13 shows that 27 students (18%, N=150) who have many friends like it to be a leader. 60 students (40%, N=150) indicate that they have many friends, but that the question if they want to be a leader depends on the situation. 19 students (12,7%, N=150) answered that they don't like it to be a leader, but it is not really clear if this depends on the number of friends they have. 11 students (7,3%, N=150) who indicate not to have so many friends, say that the choice for leadership depends on the situation.

		do you have feeling lot of friends					Total
		missing	no answer	yes, many	no I don't think so	I don't know	
do you like being leader	missing	5	0	0	0	0	5
	no	0	2	9	2	6	19
	yes	0	2	27	4	4	37
	depends on the situation	0	2	60	11	15	88
Total		5	6	97	17	25	150

Table 7.14 'Do you have a lot of friends?' & 'do you like being a leader?'

## Conclusion

As a result of the literature study and the research which found place on MBI School, conclusions can be made. Both of these parts (literature study and research) have had a important place in the process to come to conclusions. In the introduction of this thesis, the aim of the thesis, the learning question and other questions were formulated to make it easier to start the research for literature and the research. For the completeness, the aim of the thesis and the learning questions will be repeated:

### **Aim of the thesis;**

Getting insight in the impact of physical contact in the PE lessons on the social emotional development of year 7 and 8 students of Murrays Bay Intermediate School (Auckland, New Zealand) and advise Murrays Bay intermediate School about how the developed source of activities (practical part) can be used in the PE lessons.

### **Learning question:**

What is the impact of physical contact in the PE lessons on the social emotional development of year 7 and 8 students of Murrays Bay Intermediate School (Auckland, New Zealand) and in which way is it possible to apply physical contact as a method in the education?

### **The following questions will be answered at the end of the research;**

- 1 How does de New Zealand education work?
- 2 What is physical contact?
- 3 What is the impact of physical contact?
- 4 How does the social emotional development of year 7 and 8 students look like?
- 5 Why physical contact in (physical) education?
- 6 How can the method of physical contact be integrated within (physical) education?

Even though physical contact is a vital necessity, it happens fewer and fewer. Touching should be reintegrated within daily activities. Touching in the context can be described as; *“Een aanraking is een bewust fysiek contact tussen (in dit geval) leerlingen, die met zorg en concentratie wordt uitgevoerd”* (Sluijter, 2002, p.11). [Intentional physical contact between (in this case) pupils, that is done with care and concentration]. Correctly touching can be an extra value in teaching and the school curriculum, as it has many positive results (Sluijter, 2002). Especially in the development of adolescents, touching can help the students to learn what and how positive physical contact should be like. In the stage of development which can be characterised as ‘confusing’ for adolescents, this way of touching and contact with their peers can give them more self-confidence (Sluijter, 2002; Beemen, 2001). Using the method of physical contact within the school curriculum will result in a more quit en peaceful whole. More time can be spend on other learning tasks, and besides, the method will train the students social skills as well. Especially in PE, physical contact can not be ignored. By using physical contact within the lessons, students will accept touching and physical contact as being a normal phenomenon. The method is not only introduced because of the necessity of tactile stimulation, cause regardless of the physical effects, touching becomes the way to acquire other skills which are essential for life. For example: social cognition and cooperation. As a subject with a very practical character and affinity with physical contact, the method should become a part of the PE curriculum. The method described in the practical part is therefore designed as games and activities.

Some researches have preceded to the research of this thesis, which is a advantage when comparing different results. There must be mentioned, that not all researches can be just compared to each other and not all results can be accepted or will be a standard for every situation were touching is the subject or the method, as the situation can be different at all times. Some of the following examples will explain this:

Jørn Jørgenson is principal of a school in Denmark and he also invented the method. Research showed, that the percentage of bullied children dropped from 12% to 1% (Kiene, 2005). Compared to the research of this thesis on MBI School, question eleven gives information about the number of students who indicate to get bullied (see table 8.1). 24 students (N=150) indicate to get bullied. 34 students (N=150) say that they get bullied sometimes, which still is 22,7%. It is hard to prove if these bullied kids are helped with the method of touching, because the research is based on one specific moment in one single lesson.

**Question 11: Do you ever get bullied?**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid missing	5	3,3	3,3	3,3
no answer	17	11,3	11,3	14,7
yes	24	16,0	16,0	30,7
no	70	46,7	46,7	77,3
sometimes	34	22,7	22,7	100,0
Total	150	100,0	100,0	

Table 8.1: Question eleven; “Do you ever get bullied?”

Looking at table 8.2, in this research can not be concluded that using the method of physical contact decreases the number of bullied kids, because there are no bullied students who indicate that they don't like physical contact. The other side of the story tells, that there are 30 students (N=150, 20%) who indicate that they don't get bullied and don't mind physical contact. Students who don't get bullied normally have a more positive self-image than students who do get bullied (Beemen, 2001). Out of this results can be concluded that not-bullied students who don't mind physical contact will experience the positive effects of touching when they use the method on a frequent base.

		do you mind physical contact						Total	
		missing	I don't like it	sometimes	not really	depends on who it is	no, I don't mind	no answer	
do you ever get bullied	missing	5	0	0	0	0	0	0	5
	no answer	0	1	5	4	4	2	1	17
	yes	0	0	1	5	9	9	0	24
	no	0	2	11	9	17	30	1	70
	sometimes	0	2	3	7	15	7	0	34
Total		5	5	20	25	45	48	2	150

Table 8.2: “ Do you ever get bullied?” & “Do you mind physical contact?”

Because the research and questionnaire is based on only one lesson with four tasks, it is important to know how the students experienced those tasks. The lesson which is taught can be found in appendix III. The tasks will be explained below.

The four tasks will be discussed because the experiences with the lesson and the specific tasks have led to the final answers. The lesson includes four different games which are already discussed in paragraph § 7.2. Task 1 was a cooperation game where students had to find their own team with the same coloured sticker on their back, while they were not allowed to talk. 84, 7% (127 students N=150) answered positive (answering positive means; “nice”, “very nice”, or “cool”), only 15,3% answered less positive (23 students, N=150). Out of these

data can be concluded that the students like to cooperate (answering less positive means “not so nice” or “ok”).

Task two was a relay game, where the students had to draw a object on the back of the person in front of them. Also this game can be seen as a cooperation game, where physical contact is the way to communicate. Also with this task, the same percentages of students experienced this task positive (84,7%, 127 students, N=150). 15,3% ( 23 students, N=150) of the students answered less positive. Out of this information can be concluded that students like being in a team as well that they like to cooperate (see paragraph § 7.2).

Task three, where the students had to coach and lead each other true a field with objects resulted in even more positive answers; 132 students gave a positive answer (88%, N=150), only 18 students were less positive (12%). Especially task one and three (and two) had an aspect of cooperation in it, the kids enjoyed working on the tasks.

Task four was about physical contact that is why it was planned at the end of the other activities, so the students had a little more time to get used to different activities from less to more physical contact. Task four included an activity where the students were working in couples. One of them had a card and was telling a story, the other one had to draw this story with his finger on the back of the story teller. This way of physical also stimulates the fantasy of the students. Even though this activity asked for more physical contact, still 68,7% of the students answered positive (they gave the answer “ I don’t mind physical contact”), which are 103 students (N=150). 31,3% (47 students) choose another answer. In brief can be said that the students like coaching and cooperation, which also confirms their opinion about cooperation of task one. Their opinion about physical contact can be supports as well: nearly seven out of ten students reacted positive on physical contact.

Except of the experiences with the activities about physical contact, cooperation and communication, information about personal issues is needed to say something about the effect of physical contact on the social emotional development. As discussed in the literature research, the social emotional development can be seen from different dimensions and different angles. Fact is that there are a lot of factors which can have an influence on this development. Students who feel unsure and less confident about their selves will probably be not touching as easily as somebody who is used to touching or to be touched. On the question: “Do you mind physical contact?” both boys and girls answered positive. It is surprising to see that 27 boys (56,3%, N= 71) are so positive about the task, compared to 21 girls (43,8%, N=77). Often, boys are not touching as easy as girls, as girls have a more ‘caretaking role’ compared to boys (Beemen, 2001). Out of the information of this question there can be concluded that the activity must have been attractive and challenging enough for both boys and girls to answer positively. For the development of the activities of the practical part, this is very important information.

From the information of the literature study we can presume that physical contact definitely contributes to the social emotional development of students. The research which found place on MBI School can not fully confirm this. To know more about the influences of physical contact on the social emotional development, more research has to be done with a more frequent character for over a longer period of time. Something which has to be mentioned about the research is, that it does give lots of positive answers, so it is supporting the fact that physical contacts contributes to the social emotional development, but the results are not reliable enough because they are based on one single lesson with four different tasks. When students work with the method on a more frequent base, they will experience the positive effects of touching. The lesson which is taught prior to filling in the survey was an introduction on the theme. One lesson may not give a reliable result for the answer of the main question of this thesis, but does give an indication of the first reaction of kids with the method of touching and physical contact, so the results of the research are still valuable. The positive answers they gave are encouraging enough to go on with the research and to try to implement the method in education. Other researches, which are discussed in chapter three, do confirm the many positive results of physical contact. From these dates consequently can be concluded, that touching or physical contact benefits the total health (Sluijter, 2002). Even if the biological effects of touching would stay out, there are still many other effects which are encouraging

anyway to go on with the application of the method in schools. The process of coming to a certain point may not be forgotten. Much more attention should be paid to the social aspects within PE. This method will join the practicing of many team skills. It would fit perfectly in the curriculum because of its practical character. This method is just the beginning of something new which needs to be encouraged by more researches and enthusiastic educators who believe in the method. Fact is, that there must be fought against the taboo of touching in (physical) education to give the students what they should be given: a safe environment to grow up in.

## Recommendations

As a result of the research and literature study, recommendations can be done to enrich the curriculum of MBI School. Lots of positive results can be converted to an important and valuable advice.

Touching and physical contact is found as a method which should be more encouraged. Even though lots of positive results confirm the working and wide development of students, people are reserved to openly use physical contact in education. Touching and physical contact needs to renew its name to get rid of the negative reputation. Activities with physical contact make students aware of the fact that they are living with others. Not their selves but their partner or peers are the “central point”. Physical contact must be stimulated to create a situation of solidarity. The method must be introduced in the education, to stimulate and to circulate it on other schools as well. It should be promoted on schools, and educators must be offered a workshop to experience the positive effects of the method and how to implement it in daily activities. It is very important that educators approach their students positively and help them become independent. In the practical part (part II) a whole range of activities is described to use in the PE lessons. This can be seen as the product of this thesis, specially developed for MBI School. Except of this research and the researches described in chapter three, more research has to be done on a more frequent base to come to more acceptable conclusions. When more and more researches come to light, there might become more people interested. It would be very valuable for MBI School to apply the method in education and to evaluate this method and the activities afterwards. The experiences with the method should be reflected by giving feedback on the method This evaluation should lead to a better and specified program which can be adapted to the curriculum of other schools.

For the completeness, the different recommendations named above will be summed up point by point;

- Physical contact and the method applied in education needs to renew its name by using the method in education.
- MBI School staff should use the activities described in part II.
- MBI School staff should evaluate the method and give feedback on it to modify and innovate the method.
- Physical contact must be stimulated to create a situation of solidarity.
- The method should be introduced to share and at the same time circulate the positive effects of physical contact on other schools
- Educators should be offered a workshop to experience the positive effects of touching in daily life activities. They also should be offered information for the apply of the method in education.

## Discussion

In this chapter of the thesis, particular details will be explained and justified. Some of the choices which are made in the research or in the literature research may not be obvious or logical for the reader. Except of those issues, this chapter will be used to take away doubts about specific described situations or parts of the thesis which should not be misunderstood.

### §10.1 General findings

As a result of this research (both the literature study and research) there can be concluded that touching has many positive results. Only one argument against touching can be found. Too much touching can be bad for the thyroid. It can start working faster after too much stimulating which can be dangerous for the health. It will not be likely, especially because touching is not happening frequently enough to cause these kinds of troubles to the health but for the completeness of the thesis it is necessary to describe this problem in case of excessive touching. This effect can be interpreted as a negative effect of touching.

As already discovered in the conclusion; the results of the research which is done on MBI School are not representative enough, as there are based on one single lesson. Only a snapshot will not bring out a conclusion which is reliable enough. The results of the research must be seen as a positive stimulus for other researches. Even though this research can not confirm that students can be helped with the method of physical contact to stimulate their social emotional development, it can be confirmed that students who like cooperation give a very positive response on physical contact. To answer the question or physical contact stimulates the social emotional development more research has to be done where physical contact is applied for over a longer period of time.

There is an important mark which may not be forgotten. Physical contact can be linked to sexual abuse, if the boundaries and the background of the method will not be justified or discussed. Touching can not just be done. An introduction to the theme is required to indicate the bounds where students have to stay in between. More information about this can be found in the introduction of the practical part (part II).

### § 10.2 The research discussed

Except of the notices about the conclusion and thesis as a whole, there are some other findings which have to do with the technical part of the research, the justification and the development of the questionnaire. Choices which are made will be discussed and justified.

The four tasks which are taught to the students in the lesson for the research are assessed in the questionnaire. The students had to indicate how they experienced the tasks varying from tasks about cooperation and teamwork with less physical contact to tasks with more physical contact. The majority of the students have been very positive about the tasks. This does not particularly mean that they like physical contact. It can also say something about the activity itself. On the other side: if the students would not have enjoyed the physical contact, their opinion would not have been so positive (127 students were positive, this is 84, 7%, N= 150, see also § 7.2).

There is some variety in the answering categories of the questionnaire. Most of them have a scale of 4 to 7 answers. Reviewing the questionnaire, this would not have been necessarily. If there would have been 1 scale (of for example 6 answers) it would have been easier for the students to fill in the questionnaire. Also for the processing of data it would have been easier but it haven't had any consequences for the results of the research.

Some students chose more than one answer at question twelve. This had consequences for the processing of data. In the program SPSS, another column is created, to make sure all the answers of the students are involved in the research. Next time, the question has to be formulated better.

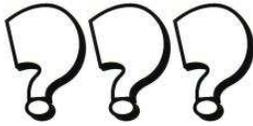
## References

- Apacki, C. (1999) “*Energize*”. Lions-Quest, Amstelveen.
- Beemen, van L. (2001). “ *Ontwikkelingspsychologie* ”. Wolters-Noordhoff, Houten.
- Black or white (w.y.). *Dutch dictionary*, without place (w.pl.), found on World Wide Web on 20<sup>th</sup> of March 2006:  
<http://blackorwhite.nl/dutchdictionaryonline245678/index.php?a=index&d=1>
- Bongaards, B. & Sas, J. (2000). “*Vakbekwaam onderwijzen*”. Wolters- Noordhoff, Groningen.
- Bruggencate, ten K. (1987). “*Woordenboek Nederlands-Engels*”. Wolters-Noordhoff, Groningen.
- Bruijn, P.M.L., de & Tijmenssen, W.L.A. (2005) “*Reader Wetenschappelijk Onderzoek*”. Fontys Sporthogeschool, Tilburg.
- Driesen, L. (1996) “ *Straffen? Een handboek voor ouders en andere opvoeders* “. Garant, w.pl.
- Einden, H. & Pecht, R. (1995) ) “ *De groene spelen* “. Nikko Toshogu Press, (w.pl.).
- Ellis, D. (2003). The overbooked child. *Kids*, februari, p.64-68.
- Encyclopedia of educational technology (2001) *The revised taxonomy* (w.pl.), found on World Wide Web on 12<sup>th</sup> of July 2006:  
<http://coe.sdsu.edu/eet/Articles/bloomrev/index.htm>
- Evers, D. (w.y.) *Massage in de klas*. Trouw , (w.pl.).
- Gardner’s work (2002) *Multiple intelligences and education* (w.pl.), found on World Wide Web on 12<sup>th</sup> of July 2006: <http://www.infed.org/thinkers/gardner.htm>
- Geddes, M. (2001) “ *English Dictionary* “. David Dale House, Scotland
- Internetsite voor en door studenten (w.y.) *Methoden en Technieken* (w.pl.), found on World Wide Web on 24<sup>th</sup> of July 2006:  
[www.studenten.samenvattingen.com/documenten/show/5445200/](http://www.studenten.samenvattingen.com/documenten/show/5445200/)
- Kennisnet (w.y.). *De internetorganisatie voor het onderwijs*, (w.pl.), found on World Wide Web on 5<sup>th</sup> of October 2005: [www.leerlingenzorg.po.kennisnet.nl](http://www.leerlingenzorg.po.kennisnet.nl)
- Kiene, A. (2005). Lekker friemelen voorkomt pesten. *Trouw*, (w.pl.).
- Kok, M. (2005). Aanraking maakt gelukkig en sterk. *Eindhovens Dagblad*, (w.pl.).
- Makins, M. (1993). “ *Pocket English Dictionary* “. Harper Collins, Glasgow.
- Maxwell Hudson, C. (1984) “ *The book of Massage* “. Random House, London.
- Ministry of Education New Zealand (2006) *The educational system*. (w.pl.), found on the World Wide Web on 12<sup>th</sup> July 2006:  
[http://www.minedu.govt.nz/index.cfm?layout=document&documentid=7481&indexid=6671&indexparentid=6663#P32\\_3360](http://www.minedu.govt.nz/index.cfm?layout=document&documentid=7481&indexid=6671&indexparentid=6663#P32_3360)

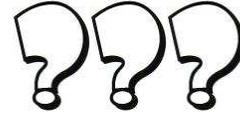
- Murrays Bay Intermediate School (w.y.) *Principals Message* (Auckland), found on World Wide Web on the 16<sup>th</sup> of July 2006: [http://www.mbi.school.nz/about\\_us.htm](http://www.mbi.school.nz/about_us.htm)
- New Zealand Education (w.y.) *Study in New Zealand* (w.pl.), found on the World Wide Web on the 15<sup>th</sup> of July 2006: <http://www.internationaleducationmedia.com/newzealand/>
- New Zealand Immigration (w.y.) *Tertiary Education* (w.pl.), found on World Wide Web on the 16<sup>th</sup> of July 2006: <http://www.nz-immigration.co.nz/education/tertiary.html>
- Oden, E.(2005). Raak me aan. *Psychologie Magazine*. oktober. p.14-19.
- Onderwijsstichting Onderwijs maak je Samen (2005). *Informeren, inspireren en enthousiasmeren* (w.pl.), found on World Wide Web on 5<sup>th</sup> of September 2005: [www.onderwijsmaakjesamen.nl](http://www.onderwijsmaakjesamen.nl)
- Portmann, R., Schneider, E. (2002) “100 ontspannings- en concentratiespelen”. Panta Rhei, (w.pl.).
- Praktijk voor massage (w.y.). *Tactiele stimulering* (w.pl.), found on World Wide Web on 2<sup>nd</sup> of February 2006: [www.praktijk.hendrik.sohosted.com/tactiel.htm](http://www.praktijk.hendrik.sohosted.com/tactiel.htm)
- School of touch, (without year (w.y.)). *Cursus tactiel stimulering*, Venray, found on World Wide Web on 22<sup>nd</sup> of November 2005: [http://www.beroring.se/ts/information\\_nl.pdf](http://www.beroring.se/ts/information_nl.pdf)
- SLO primair onderwijs (w.y.). De sociaal- emotionele ontwikkeling (w.pl.), found on World Wide Web on 24<sup>th</sup> March 2006: <http://www.sociaalemotioneel.nl/deel1/A/A00/>
- Sluijter, M.(w.y.) Aangeraakt worden is gezond. *Uittreksel boek (I)*.(w.pl.).
- Sluijter, M. (2002) “ *Aanraken is een levensbehoefte*”. SWP, Amsterdam.
- Sluijter, M. Aanraken, we kunnen niet zonder. *Uittreksel boek (II)*. (w.pl.).
- SPSS (w.y.). *Statistical Product and Service Solutions* (w.pl.), found on World Wide Web on 20<sup>th</sup> of June 2006: <http://www.spss.com/nl/training/kurser/introspss.htm>
- Stichting Educare (w.y.). *Stichting voor het onderwijs*, (w.pl.), found on World Wide Web on 12<sup>th</sup> of September 2005: [www.educare.nl](http://www.educare.nl)
- Thé, R. (1995) “*Five Minute Massage*” Butler & Tanner, London.
- Tijmensen, W.L.A. (2006) ‘*Reader Statistiek*’ Fontys Sporthogeschool, Tilburg.
- ToBeOne (w.y.). *Praktijk voor gezondheid, welzijn en persoonlijke en spirituele ontwikkeling* (w.pl.), found on the World Wide Web on 6<sup>th</sup> of January 2006: [www.praktijk-tobeeone.nl](http://www.praktijk-tobeeone.nl)
- Trumble, W. & Stevenson, A. (2002). “ *The Oxford English Dictionary*”. Oxford University Press, New York.
- University of Auckland (2004). *The educational system of New Zealand* (Auckland), found on the World Wide Web on the 15<sup>th</sup> of July 2006: <http://www.education.auckland.ac.nz/progs/intcentre/studyenviro/newzealandeducationsystem.asp>
- Van Dale woordenboeken (w.y.) *Online Woordenboek der Nederlandse Taal* (w.pl.), found on World Wide Web on 13<sup>th</sup> of March 2006: [www.vandale.nl](http://www.vandale.nl)

- Vugt, M.C.G. (2002). "Cooperatief leren binnen adaptief onderwijs". HB uitgevers, Baarn.
- Without author (w.a.) (2003) Lichamelijke affectie. *Jongen/ Meisje*, december, p.14-21.
- Wikipedia (w.y.) *The free encyclopedia* (w.pl.), found on World Wide Web on 1<sup>st</sup> of July 2006: [http://en.wikipedia.org/wiki/Likert\\_scale](http://en.wikipedia.org/wiki/Likert_scale)
- Woltjer, G. & Janssens, H. (2000). "Hoe ga je om met kinderen op school?" Wolters-Noordhoff, Houten.

**Appendix I : The questionnaire**



**Questionnaire:**



Because of my research I need some information about how you all experienced the activities you just finished. You don't have to fill in your name. Try to answer the questions honestly. Please read the fill - in instructions carefully before you start. Good luck!

<b><u>Fill- in Example:</u></b>		
<b>1. Gender:</b>	<b>0</b>	<b>0</b>
	<b>Male</b>	<b>Female</b>
<b><u>If you make a mistake:</u></b>		
<b>2. In which year are you?</b>	<b>0</b>	<b>0</b>
	<b>7</b>	<b>8</b>



**General questions:**

**1. Gender**

0                      0  
**Male                      Female**

**2. What age are you?**    0                      0                      0                      0                      0  
   10                      11                      12                      13                      14

**3. In which year are you?**

0                      0  
7                      8

**Question 4, 5, 6, 7, 8 are about the session you just had. Can you tell how you experienced the tasks?**

**4. How did you experience the first task (beginning game with stickers on your back)?**

0                      0                      0                      0                      0  
No answer    not so nice    ok                      nice                      very nice    cool!

**5. How did you experience the second task (drawing on each others back)?**

0                      0                      0                      0                      0  
No answer    Not so nice    ok                      nice                      very nice    cool!

**6. How did you experience the third task (leading true landmines)?**

0                      0                      0                      0                      0  
No answer    not so nice    ok                      nice                      very nice    cool!

**7. How did you experience the fourth task (massage your chosen partner)?**

0                      0                      0                      0                      0  
No answer    Not so nice    ok                      nice                      very nice    cool!



## Appendix II: The answers to the questionnaire

All the answers will be worked out below by number of the question.

### Question 1: Gender

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	missing value	2	1,3	1,3	1,3
	male	71	47,3	47,3	48,7
	female	77	51,3	51,3	100,0
	Total	150	100,0	100,0	

### Question 2: What age are you?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	10	8	5,3	5,3	5,3
	11	111	74,0	74,0	79,3
	12	31	20,7	20,7	100,0
	Total	150	100,0	100,0	

### Questions 3: In which year are you?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	year 7	120	80,0	80,0	80,0
	year 8	30	20,0	20,0	100,0
	Total	150	100,0	100,0	

### Question 4: How did you experience the first task (beginning game with stickers on your back?)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	missing	1	,7	,7	,7
	no answer	3	2,0	2,0	2,7
	ok	19	12,7	12,7	15,3
	nice	24	16,0	16,0	31,3
	very nice	38	25,3	25,3	56,7
	cool	65	43,3	43,3	100,0
	Total	150	100,0	100,0	

**Question 5: How did you experience the second task (drawing on each others back)?**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	missing	1	,7	,7	,7
	not so nice	2	1,3	1,3	2,0
	ok	20	13,3	13,3	15,3
	nice	29	19,3	19,3	34,7
	very nice	31	20,7	20,7	55,3
	cool	67	44,7	44,7	100,0
	Total	150	100,0	100,0	

**Question 6: How did you experience the third task (leading true landmines)?**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	missing	1	,7	,7	,7
	no answer	3	2,0	2,0	2,7
	not so nice	2	1,3	1,3	4,0
	ok	12	8,0	8,0	12,0
	nice	9	6,0	6,0	18,0
	very nice	28	18,7	18,7	36,7
	cool	95	63,3	63,3	100,0
	Total	150	100,0	100,0	

**Question 7: How did you experience the fourth task (massage your chosen partner)?**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	missing	1	,7	,7	,7
	no answer	13	8,7	8,7	9,3
	not so nice	5	3,3	3,3	12,7
	ok	28	18,7	18,7	31,3
	nice	24	16,0	16,0	47,3
	very nice	36	24,0	24,0	71,3
	cool	43	28,7	28,7	100,0
	Total	150	100,0	100,0	

**Question 8: Do you have the feeling that you have a lot of friends?**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	missing	5	3,3	3,3	3,3
	no answer	6	4,0	4,0	7,3
	yes, many	97	64,7	64,7	72,0
	no I don't think so	17	11,3	11,3	83,3
	I don't know	25	16,7	16,7	100,0
	Total	150	100,0	100,0	

**Question 9: Do you ever have the feeling that your lonely?**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	missing	5	3,3	3,3	3,3
	no answer	6	4,0	4,0	7,3
	no never	39	26,0	26,0	33,3
	sometimes	89	59,3	59,3	92,7
	very often	11	7,3	7,3	100,0
	Total	150	100,0	100,0	

**Question 10: Do you have a best friend?**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	missing	6	4,0	4,0	4,0
	no answer	3	2,0	2,0	6,0
	yes	87	58,0	58,0	64,0
	no	24	16,0	16,0	80,0
	I don't know	30	20,0	20,0	100,0
	Total	150	100,0	100,0	

**Question 11: Do you ever get bullied?**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	missing	5	3,3	3,3	3,3
	no answer	17	11,3	11,3	14,7
	yes	24	16,0	16,0	30,7
	no	70	46,7	46,7	77,3
	sometimes	34	22,7	22,7	100,0
	Total	150	100,0	100,0	

**Question 12: How do you react if you get bullied?**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	missing	5	3,3	3,3	3,3
	I never get bullied	36	24,0	24,0	27,3
	I go to my teacher	19	12,7	12,7	40,0
	I ask them to stop	22	14,7	14,7	54,7
	I get mad	14	9,3	9,3	64,0
	I ignore it	31	20,7	20,7	84,7
	other	23	15,3	15,3	100,0
	Total	150	100,0	100,0	

**Question 13: Do you like to cooperate (working together in teams)?**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	missing value	6	4,0	4,0	4,0
	no	2	1,3	1,3	5,3
	yes	68	45,3	45,3	50,7
	depends on who is in my team	59	39,3	39,3	90,0
	I prefer to work on my own	6	4,0	4,0	94,0
	other	9	6,0	6,0	100,0
	Total	150	100,0	100,0	

**Question 14: Do you like being leader of a team?**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	missing	6	4,0	4,0	4,0
	no	19	12,7	12,7	16,7
	yes	37	24,7	24,7	41,3
	depends on the situation	88	58,7	58,7	100,0
	Total	150	100,0	100,0	

**Question 15: Do you easily talk about your feelings with others?**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	missing	6	4,0	4,0	4,0
	no	18	12,0	12,0	16,0
	not really	33	22,0	22,0	38,0
	only if I have to	34	22,7	22,7	60,7
	I don't really mind	34	22,7	22,7	83,3
	no problem for me	19	12,7	12,7	96,0
	no answer	6	4,0	4,0	100,0
	Total	150	100,0	100,0	

**Question 16: Who do you usually talk to about your feelings?**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	missing	5	3,3	3,3	3,3
	I don't talk about my feelings	23	15,3	15,3	18,7
	friends	49	32,7	32,7	51,3
	boyfriend/girlfriend	2	1,3	1,3	52,7
	my parents	39	26,0	26,0	78,7
	family	15	10,0	10,0	88,7
	other	10	6,7	6,7	95,3
	no answer	7	4,7	4,7	100,0
	Total	150	100,0	100,0	

**Question 17: Can you be proud of yourself after doing something good?**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	missing	6	4,0	4,0	4,0
	no	2	1,3	1,3	5,3
	yes	95	63,3	63,3	68,7
	sometimes	46	30,7	30,7	99,3
	no answer	1	,7	,7	100,0
	Total	150	100,0	100,0	

**Question 18: Do you mind if there is physical contact for example in the PE session?**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid missing	5	3,3	3,3	3,3
I don't like it	5	3,3	3,3	6,7
sometimes	20	13,3	13,3	20,0
not really	25	16,7	16,7	36,7
depends on who it is	45	30,0	30,0	66,7
no, I don't mind	48	32,0	32,0	98,7
no answer	2	1,3	1,3	100,0
Total	150	100,0	100,0	

**Question 19: Do you like it when you receive a massage like you did during the session?**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid missing	6	4,0	4,0	4,0
no	13	8,7	8,7	12,7
depends on who's massaging	53	35,3	35,3	48,0
yes, it's nice	59	39,3	39,3	87,3
no answer	19	12,7	12,7	100,0
Total	150	100,0	100,0	

**Question 20: Do you like to give a massage like we did during the session?**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid missing	5	3,3	3,3	3,3
no	17	11,3	11,3	14,7
depends on who I have to massage	75	50,0	50,0	64,7
yes, I like doing it	37	24,7	24,7	89,3
no answer	16	10,7	10,7	100,0
Total	150	100,0	100,0	

## Appendix III: The lesson for the research

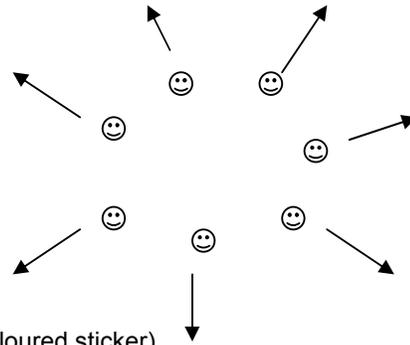
### Task 1 Sticker on your back

#### Gear:

- 6 cones (depends on the number of groups)
- 5 sorts of different stickers

#### Game:

- All the kids are standing in a circle, facing outwards
- Every kid will have a sticker on his/ her back
- Everybody has his/ her eyes closed
- You have to find people of your own team (same coloured sticker)
- You're not allowed to talk or to make sounds



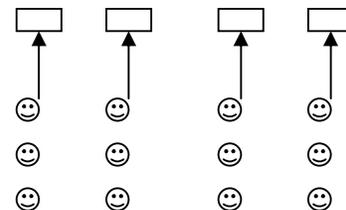
### Task 2 Drawing at back

#### Gear:

- 6 cones (depends on the number of groups)
- 6 pens
- 6 sheets
- 6 cards (with different objects)

#### Game:

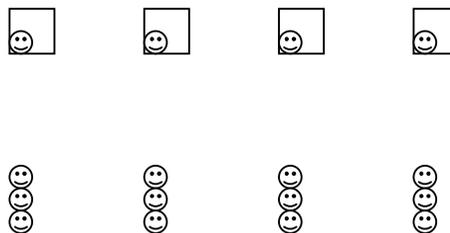
- Line up in equal groups (sitting down)
- The person at the end of the row will find a card behind his/her back.
- As soon as the game starts, that person 'draws' the object which is on the card on the back of the person in front of him.
- As soon as the person at the front knows what the object is, he/ she draws it on a piece of paper
- The first group with the correct drawing wins
- No talking/ whispering/ sounds allowed.



### Task 3 Landmines

#### Gear:

- 6 cones
- Tennis bats
- Balls
- Gloves
- Etc.
- 6 tea towels fault up (to make sure you can't see anything).



#### Game:

- One person per team will be at the end of the field as coach
- One person of the team is blinded and has to try to cross the field of landmines, without touching them.
- The coach has to help the blinded person to reach the other side by using his/her voice (NO screaming).
- If you touch a landmine, you have to start over again.
- Rotation: the blinded person becomes coach; the coach runs around the field and gives the tea towel to the next person. Everyone must have had a go with coaching and crossing the field of landmines.

- The coach is not allowed to be in the field.
- Because all the coaches are yelling at their teammates, the blinded persons really have to listen carefully!

#### **Task 4 Stories on your back**

##### Gear:

- 18 Cones (to show the kids where to go??)
- 15 cards with keywords on it



##### Game:

- The kids work in pairs (which they can choose their selves!)
- They will be sitting behind each other somewhere in the classroom/ on the field.
- The drawer listens carefully to his partner
- The person who's back is in use for the drawing will tell a story, based on the keywords on the card ( or a fantasy story if they would like).
- The drawer will try to draw what his/ her partner is telling about.
- It is not the drawer who is making the story, the drawer follows!
- Swapping after a few minutes (teacher will tell how much time is left).
- If there are kids who don't want to join, then accept their choice (emotional safety!)



##### Rules:

1. The story teller is the boss
2. Only back and neck!!!
3. No rough actions, be careful and respect your partners body!!!
4. Stop is stop!

# PART II

## **Introduction**

In this second part of the thesis, handles will be offered to apply the method of physical contact in education. Different activities are described which will contribute to the social emotional development of the students of MBI School. There must be mentioned, that not every activity or game will per definition contain physical contact. It is not always possible to start with an activity with physical contact, there must be a safe atmosphere for all the students before they start with the activity. Sometimes a teamwork activity needs to precede before there can be worked on an activity with (more) physical contact. Especially an activity which requires cooperation and concentration can be a good base to train social skills which are required for an activity with more physical contact. Prior to the activity, it can be helpful to discuss the subject with the students prior to the task or activity. The practical part will therefore include a sheet where rules can be written on. The activities are divided in different categories to connect the aims of this method with the aims of the subject PE. In this way, the practical part can be easily integrated in the PE curriculum on MBI School. Also other handles will be offered to make it easier to apply the method. In this practical part can be found:

- 1. Start touching, have fun!**
- 2. Rules for touching**
- 3. Activities divided in different categories:**
  - 7 strategy activities
  - 10 activities with physical contact
  - 8 teambuilding activities
- 4. Worksheets**

## **Start touching, have fun! (Conditions for touching)**

On the following pages, many different activities can be found to stimulate the social emotional development of MBI students and to reintegrate touching within daily life. Children will learn and accept the way of touching as a normal phenomenon, which can be an effort for their social skills. Before there can be started with the activities, there are a number of important concerns which need to be reflected. These are worked out below.

- **Indicate bounds**

Before the students start with their activity, make sure that every single student knows which parts of the body can and can't be touched.

- **Rules for touching**

Prior to the tasks, it might be helpful to discuss the subject of physical contact with the students. Create "rules for touching". Let the students think about important things for cooperation, trust, reliability, physical contact, solidarity, etc. Write those "rules" on the sheet of the following page.

- **Let the children choose their own partner**

Often the opinion about physical contact depends on the partner a student has to cooperate with. Let the students choose a partner they trust to capture the emotional safety.

- **Work level-constructive**

Start with no or less physical contact. As soon as everyone has a partner and feels comfortable enough, there can be decided to work with more physical contact. Again: make sure the task and the instruction will be concrete enough. Simplify or adapt the task or activity for those who don't feel comfortable. Never force students to do something they don't want to do. In this case, the (emotional) safety must be captured!

- **When it goes well...**

When the students got used to the tasks, cooperation and the physical contact, they might like it to work with another partner, perhaps somebody of the other gender. Again; make sure the (emotional) safety will be captured!

- **On which moments?**

Use the method of physical contact as a way of relaxation or as a reward after the students have been working on a learning task. Also in the PE lessons the games can be used as a warming-up or cooling down, depending on the character of the activity.

- **Attention!**

Consider that there can always be exceptional cases. Students can have had traumatically experiences. There can also be students who are the victim of sexual abuse. These students might refuse physical contact. Don't force the student(s) to carry out the task, they need safer environment and might need professional help.

## **Enjoy the games!**

## Rules for touching

We touch with these rules:



.....



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# Strategy activities



## Blind Buddies

Learning objective(s): cooperation, reliability

Required gear: None

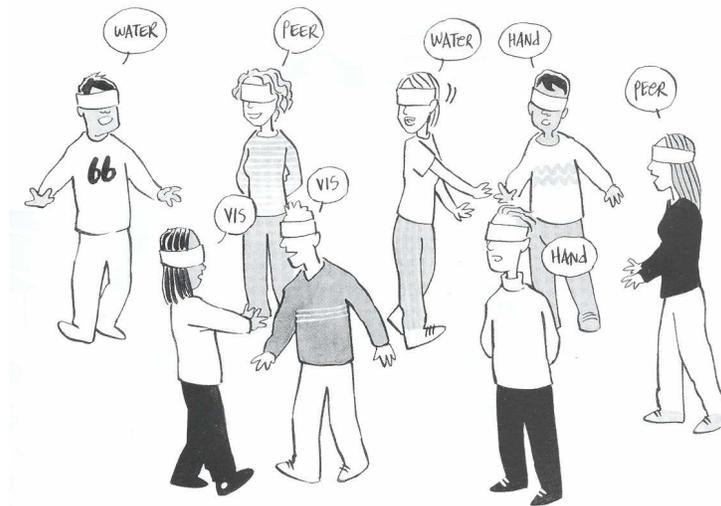
Time: 5 minutes

Contents:

- Again, the students are working in couples
- They are standing somewhere in the classroom/ on the field opposite to each other.
- They have their eyes closed and their arms are straight in front of them, just touching
- They do three steps backwards and turn around three times (still with eyes closed)
- By calling each other's name or the name of an object they have to try to find each other again.

Variation: In stead of calling a name or object you can ask the student to make a specific noise

(Source: Einden & Pecht, 1995, Tielemans, 2005).





## Balloon Transport

Learning objective(s): Cooperation

Required gear: 1 balloon for every couple.

Time: 20 minutes

Contents:

- Indicate a playing area with a start and finish line.
- Let the students choose a partner
- Every couple receives a balloon which must be clasped between the two bodies.
- Every couple is standing behind the start line.
- The students have to bring the balloon to the finish line, without losing it
- The couple who reaches the finish the first wins.
- When a couple loses its balloon, they have to start again behind the start line.
- No hands may be used.

(Source: Tielemans, 2005).



## Balancing!

Learning objective(s): Learn to adapt to movements of others, cooperation, tactile stimulation.

Required gear: None

Time: 15 minutes

Contents:

- The students are working in couples and are standing opposite to each other.
- They have their hands connected, and are standing shoulder width.
- They have to try to get their partner out of balance.
- It is not allowed to move your feet, if you do move your feet, you lose the battle.
- Every battle is worth one point.
- The student with the most points wins.



(Source: Tielemans, 2005).



## Catch me if you can!

Learning objective(s): Creating strategies, self-defense.

Required gear: None

Time: 15 minutes

Contents:

- The students are working in couples and are standing opposite to each other.
- Both of the students have to try to touch the other student's shoulders.
- Every time a student touches the shoulder of his/her partner he receives one point.

**Tip**: You can make the exercise more intense by choosing another part of the body to touch, for example the knees or even the ankles!

Show the students that it is easier to move on the ball of the foot; this will make it easier to turn aside if necessary (dribbling; 'moving like a boxer').



## Pancakes

Learning objective(s): Physical contact, Strategy

Required gear: A soft underground like grass or a mat.

Time: 10 minutes

Contents:

- The students are working in couples.
- One of them is de pancake, the other one is the cook.
- The 'pancake' is laying on his/her belly on the ground, with their arms and legs spread.
- The 'cook' has to try to turn over the pancake.
- The 'pancake' has to try to make his self 'heavy', to prevent that the 'cook' can turn him her over.



## The chicken and the egg

Learning objective(s): Physical contact,

Required gear: a ball for every couple (a basketball, volleyball or football will do), soft underground.

Time: 15 minutes

Contents:

- The students will be working in couples, one of them is the 'farmer' the other is the 'chicken with the egg'.
- 'The chicken' is sitting on elbows and knees, protecting the 'egg' (ball) with their body.
- 'The farmer' has to try to capture the 'egg'.
- 'The farmer' has 3 minutes to capture the 'egg'. If he/she does not succeed, then the 'chicken' gets the point.
- The students swap roles after every try.



## Three legs

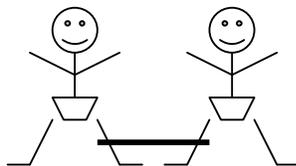
Learning objective(s): Cooperation

Required gear: (strong) strings (1 string for every two students), 4 cones

Time: 10 minutes

Contents:

- Make a big square with 4 cones (50X50meters).
- The students are making pairs.
- They have to tighten a string on one ankle of each of them (if they are standing next to each other, then choose the ankles in the middle).
- Together, they have to try to run one lap round the cones.
- The first pair wins!



# **Activities with physical contact**



## Weather report

Learning objective(s): tactile stimulation, social cognition.

Required gear: Worksheet

Time: 15 minutes

Contents:

- All the students look for a partner. There will be worked in couples
- One of them has the worksheet with all sorts of “weather”.
- The student with the worksheet tells what kind of weather will be expected for which day.
- The other student is sitting behind the weather expert
- The weather expert is predicting the weather
- The other student is “drawing” the weather on the back of the weather expert.
- If the weather of the whole week is predicted, students are changing role.

(Source: Sluijter, 2002; Tielemans, 2005).



## Face fitness

Learning objective(s): expression, social cognition

Required gear: Worksheet 2

Time: 15 minutes

Contents:

- The students will be working in couples
- You have to stay fit, that’s why people sport, but what about your face?
- One of the students has the cards of worksheet 2. Different emotions can be found on these cards.
- He or she will be performing the emotion
- The other student must try to guess which emotion is preformed by his/her partner.
- After all the cards are done, the students can swap.



## Soft feathers

Learning objective(s): tactile stimulation, reliability.

Required gear: One feather for each couple

Time: 15 minutes

Contents:

- There will be worked in couples
- Every couples searches for a place in the classroom or on the field.
- One of the students is lying on the field with the eyes closed, while the other student is using the feather on the face and arms to 'touch' his or her partner
- After a few minutes the students can swap.
- This activity can done while the teacher is reading a story or can be combined with music.



## Drawing relay

Learning objective(s): Tactile stimulation, cooperation

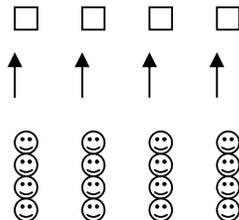
Required gear: Worksheet 3, 4 or 5 pens and pieces of paper and cones to indicate the boundaries.

Time: 15 minutes

Contents:

- There are 4 or 5 teams (depending on the number of students. There must be at least 4 students in a team).
- Every team is lined up, all the team next to each other.
- The last person (the person at the back of the group) has a card with an object on it.
- He or she has to 'draw' this object with his/her finger on the back of the person in front of him.
- The next person does the same, as soon as the 'drawing' reaches the front person, he or she has to draw this object on a piece of paper.
- The team which draws the nicest object on the paper is the winning team.
- Talking or whispering is NOT allowed!

(Source: Sluijter, 2002).





## Greetings!

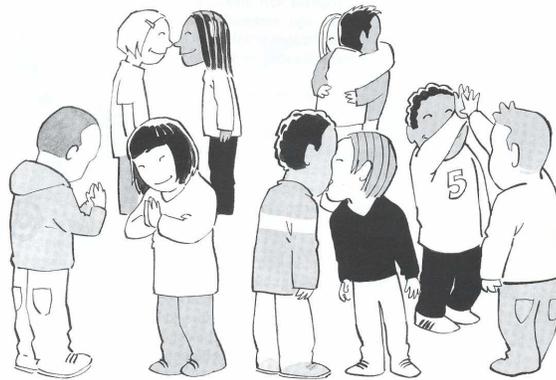
Learning objective(s): Learn to thank others, learn about solidarity

Required gear: None

Time: 5 minutes

Contents:

- The students are working on a theme where physical contact, cooperation and solidarity are the key- words.
- With couples they are going to create a greeting or a way to express the respect they have for another students.
- The students can be given some time and space to use their creativity.
- At the end of the session, every couple shows their way of greeting.
- These greetings will be used after every activity where cooperation or physical contact is important.



(Source: Tielemans 2005, Sluijter, 2002).



## Tickling words!

Learning objective(s): tactile stimulation

Required gear: all kind of gear which can be used to massage like a ball, a feather, beads on a string, something which is really soft, objects with relief, etc., worksheet 4.

Time: 15 minutes

Contents:

- The students will be working in couples.
- One of the students has cards with 'tickling words' on it
- The student with the card lays them in front of him upside down.
- The student can choose a card with the 'tickling word' on it.
- The partner will try to carry out the action.
- They can swap when all the cards are done.
- The students are using one 'massage tool', there are free to take another one to discover differences

**Tip:** You can use PE gear if suitable. You can also let the students create their own 'massage tool'.



## On hands and feet

Learning objective(s): Physical contact, cooperation,

Required gear: None

Time: 10 minutes

Contents:

- Make teams of circa 5 students.
- The teams are lined up next to each other behind the start line.
- Every team has to reach the finish line (about 20 meters away).
- The teachers tells how many hands and feet are allowed to use (for example; they are allowed to use 8 hands and 4 feet).
- The students have to cooperate to reach the finish.
- The first team wins.
- You can make it more difficult by let them use only hands, more hands than feet or less feet than there are students.
- Don't help the students to much, let them discuss about the options they have to stimulate their creativity.



## Evaluation without words

Learning objective(s): tactile stimulation, cooperation

Required gear: None

Time: 15 minutes

Contents:

- Sometimes, after finishing an activity it can be valuable to evaluate afterwards
- Discussing the activity can be an option, it is also possible to create a way to express it without talking.
- Divide the class in little groups of circa 6 students.
- Every group is going to create a 'groups hug'. Let the students free to use their creativity, it doesn't have to be an ordinary 'hug', it can be everything.
- After 10 minutes of brainstorming, the groups have to show their 'groups hug' to the rest of the students.



(Source: Tielemans, 2005)



## Drawing stories

Learning objective(s): Stimulation of the fantasy, tactile stimulation.

Required gear: Worksheet 5 (tip: photocopy the sheet twice, student might need a new card).

Time: 15 minutes

Contents:

- The students will be working in pairs (which they can choose them selves!)
- They will be sitting behind each other somewhere in the classroom/ on the field.
- The drawer listens carefully to his partner
- The person who's back is in use for the drawing will tell a story, based on the keywords on the card (or a fantasy story if they would like).
- The drawer will try to draw where his/ her partner is telling about.
- It is not the drawer who is making the story, the drawer follows!
- The students swap after a few minutes and go and get a new card.
- If there are kids who don't want to join, then accept their choice (emotional safety!)





## Relaxation

Learning objective(s): Concentration, Self awareness

Required gear: None

Time: 10 minutes

Contents:

- Let all the students find their own place in the gym.
- Ask them to lay down and to close their eyes.
- Let them breath in slowly and tell them what is happening with their body (every part of the body is totally relaxed)
- Ask them to hold their breath for a few seconds and let them breath out again.
- Repeat this a few times (let them hold their breath a little longer, focus on abdominal respiration, hand on belly).
- Let the students lay down for a while before you ask them to stand up carefully.
- Let the students stretch their body (bend forwards, touch you toes, lift your arms, make a circle with you head, etc.)

**Attention!** This can be hard for kids who are physical active, try to capture the calmness. When you take the activity seriously, the kids will.

# **Teambuilding activities**



## Feel the rhythm!

Learning objective(s): Cooperation, creativity, concentration

Required gear: None

Time: 10 minutes

Contents:

- The students are sitting in a circle
- One of them start with clapping a rithm ( 4 claps)
- The student sitting next to him/her (decide which side you go round) repeats the last 2 claps, and add two new claps.
- So the person who is on turn needs to repeat the last two 'old' claps en creates two new.
- The students have to concentrate very well to remember the right claps (this can be fast, slower, on the lab, on the legs, on the cheeks and so on).



## The pyramid

Learning objective(s): Physical contact, cooperation, reliability

Required gear: Worksheet 6 (a safe underground like grass or sand)

Time: 20 minutes

Contents:

- Divide the class in groups of circa 8 students.
- Every group has to create a pyramid with their bodies.
- Worksheet 6 will help them to choose a way to build the pyramid.
- The students have to help each other to build a safe pyramid.
- All the students have to be a part of the pyramid.
- They have to show the pyramid to the teacher.

**Attention:** Always capture the safety to prevent dangerous situations. Make the students aware of the need of helpers

**Tip:** Take a picture of all the pyramids and hang it up in the classroom!



## Landmines!

Learning objective(s): Cooperation, coaching

Required gear: 6 cones, 6 hoops, tennis bats, big balls, gloves, etc. All kind of gear which is not dangerous to stand on.

Time: 20 minutes

Contents:

- Divide the class in five teams (about six students per team)
- One person per team will be at the end of the field as coach (standing in a hoop).
- One person of the team starts to cross the field with landmines, walking backwards, eyes closed!
- The coach who is at the end of the field had to assist his teammate to cross the field without touching the landmines. By calling his name and the direction he or she has to go. The coach has to stay in the hoop.
- It is not allowed to touch the landmines.
- If the student touches one of the landmines, he or she has to start over again.

**Rotation:** the 'blind' person who just crossed the field becomes coach; the coach runs around the field and as soon as he/she reaches the rest of his team, a new student can start. Everyone must have had a go with coaching and crossing the field of landmines.

Tijd: 20'





## Sticker teams

Learning objective(s): Cooperation

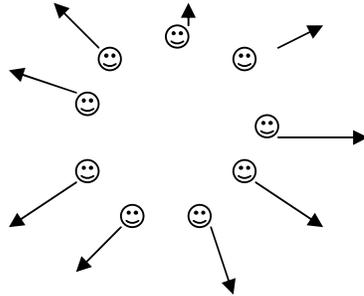
Required gear: 4 or 5 different sorts of stickers (at least 10 of every colour).

Time: 10 minutes

Contents:

- All the students are standing in a circle, facing outwards.
- Everybody has his/ her eyes closed.
- The teacher puts a sticker on the back of every student.
- The students are not allowed to look at their own back.
- The students have to find people of their own team (same colour sticker).
- The students are not allowed to talk or to make sounds.
- If they found their team, they put up their hand.

Attention: It might take a while before the students understand that they have to help somebody else first, before they will find their own team. Let them figure out this them selves.



## The bulldog

Learning objective(s): Physical contact, strategy

Required gear: 3 bands

Time: 10 minutes

Contents:

- There are 3 tickers with a band on, this are the bulldogs.
- The other students are all standing behind a line.
- If the bulldogs start the game, all the students have to try to cross the field and reach the other line which is opposite to the start, about 40 meters further away.
- A bulldog can catch a student when he/she is able to lift the caught student of the ground.
- A caught student becomes a bulldog.
- The game stops when all the students are caught.



## Rolling, rolling, rolling

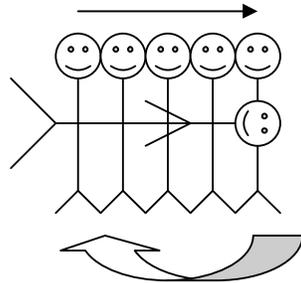
Learning objective(s): Cooperation, physical contact.

Required gear: None (if possible on grass).

Time: 10 minutes

Contents:

- The class is divided in teams of at least 6 students.
- Five students are lying on the ground next to each other.
- The last student of each team is lying transverse on top of the other students.
- The groups student starts rolling and while they rolling, the students in top moves as well.
- The group has to bring the person on top to the finish. The students who are 'carrying the student on top have to swap every time to prevent that the student on top touches the ground.
- The person on top may not touch the ground/grass; otherwise the whole group has to start over again.
- The first team wins.





## The alphabet

Learning objective(s): Cooperation

Required gear: None

Time: 10 minutes

Contents:

- Divide the class in teams of 5-6 students
- You call out a letter of the alphabet
- The students have to create this letter with their bodies on the ground.
- Try this with a few letters
- If it goes well, ask the students to try to create a three dimensional letter.

(Source; Einden & Pecht, 1995).

**A H Y G**



## Cross the river!

Learning objective(s): Cooperation, tactile stimulation

Required gear: about 30 different items where the students can stand on with one feet like a batter or a piece of wood, etc.

Time: 15 minutes

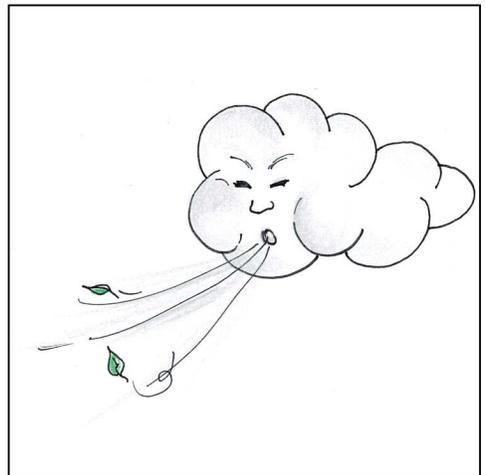
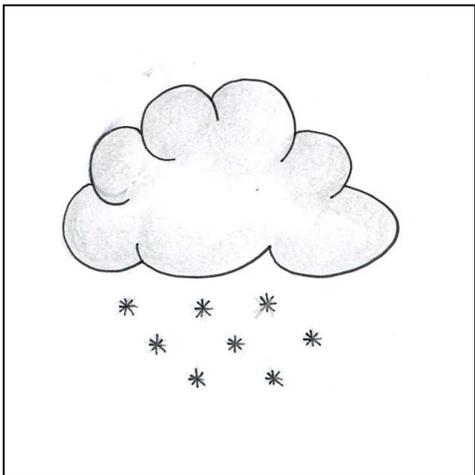
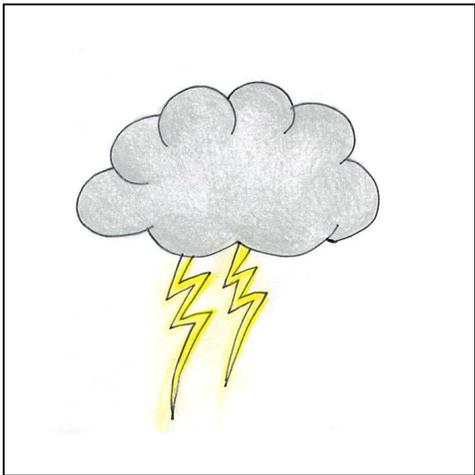
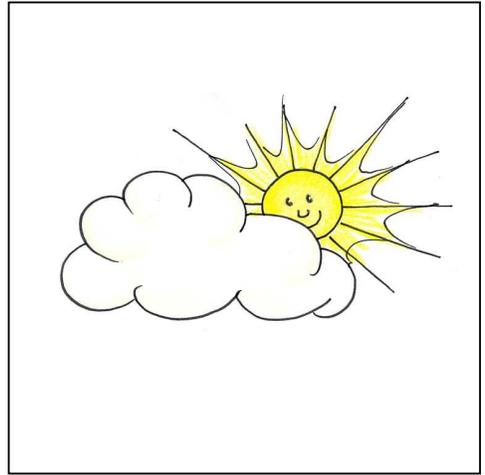
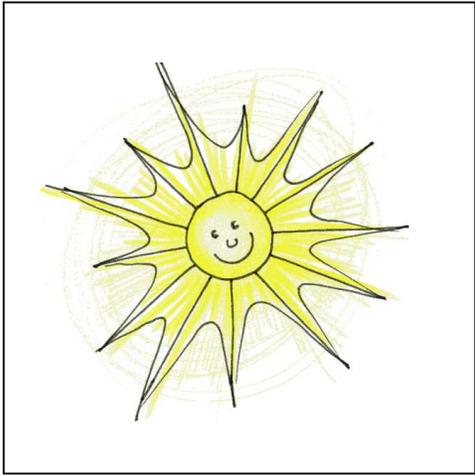
Contents:

- Divide the class in 4 or 5 teams (depending on the number of kids, there need to be at least 4 students per team).
- Indicate a start and a finish line
- Every team is lined-up, standing behind the start line.
- Every team needs to cross the 'river' without falling in the water.
- There are as many 'stones' as there are students in the group minus one (so 5 students means 4 stones).
- The group had to cooperate very well to reach the other side of the river.
- The first team wins
- When a team or a team member falls in the water the whole team has to start over again.



## Worksheet 1: Weather report

<b>MONDAY</b>	
<b>TUESDAY</b>	
<b>WEDNESDAY</b>	
<b>THURSDAY</b>	
<b>FRIDAY</b>	
<b>SATURDAY</b>	
<b>SUNDAY</b>	





**HAPPY**

**ANGRY**

**SCARED**

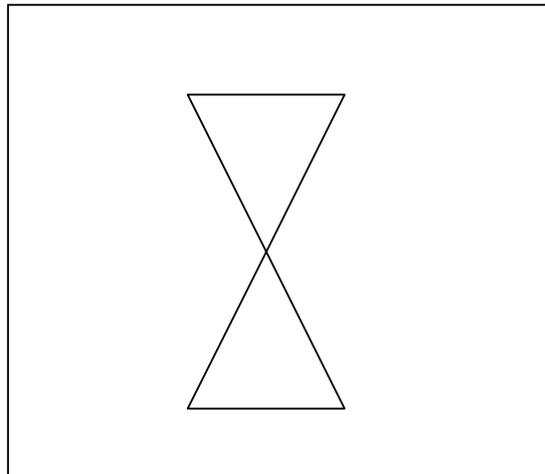
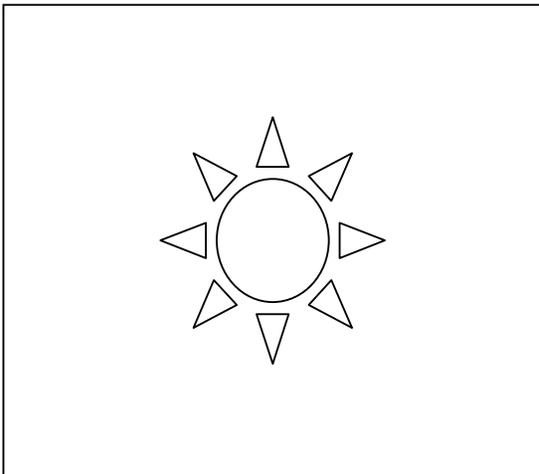
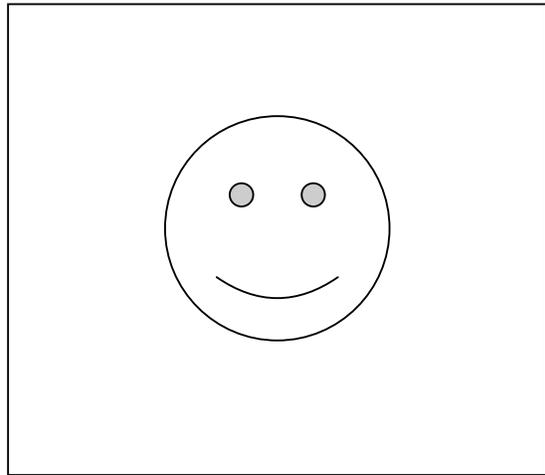
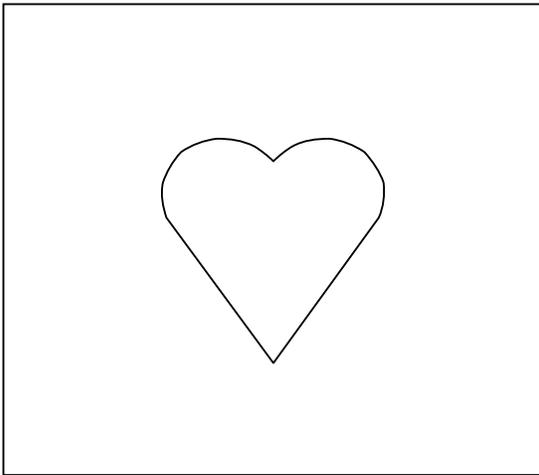
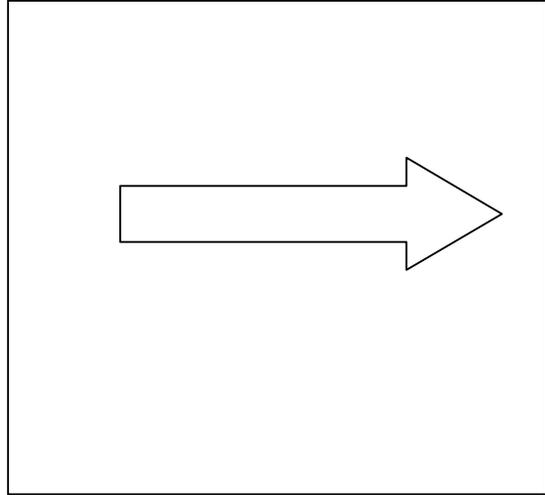
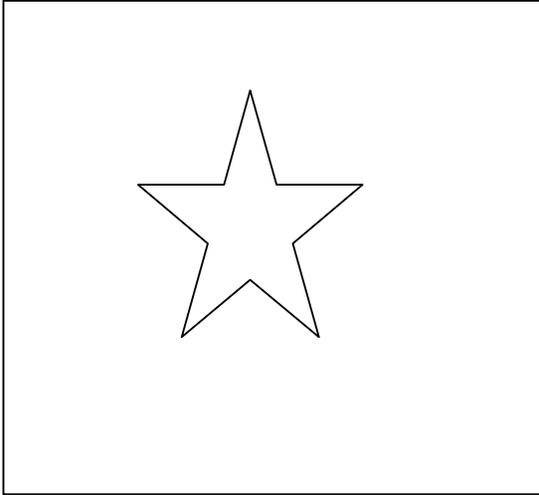
**SURPRISED**

**FRIGHTENED**

**SAD**



**Worksheet 3 Drawing relay**





Worksheet 4

'Tickling words'

**ROLLING**

**TICKLE**

**DRUMMING**

**KNEADING**

**SQUEEZE**

**RUBBING**



## Worksheet 5

## Drawing stories

### Card 1

#### Subject: Surfing!

- Waves
- Big surfboard
- Water
- Weather
- Friends, being together

### Card 2

#### Subject: Holiday

- Trip
- Transport (how do you go?)
- Weather
- Activities
- Friends

### Card 3:

#### Subject: Dreams

- Sleeping
- Dreams
- What happens?
- Who is with you?
- Do you remember you dream?

### Card 4

#### Subject: Mountain biking

- In the forest? Where?
- Hills
- Heavy exercise
- Tired legs
- Speed
- Tricks?

### Card 5

#### Subject: School

- Activities
- Friends
- Subjects
- Interval
- PE session (softball)

### Card 6

#### Subject: School camp

- Bus trip
- Destination
- Beach activities
- Swimming
- Duties, cleaning
- Sleeping in dorms
- The last night

**Card 7**

**Subject: Adventure in the Forest**

- Big forest
- You got lost
- Which season is it?
- Hiking
- Pick nick
- Hills
- With friends, family?

**Card 8**

**Subject: Pets**

- Do you have pets?
- How many do you have?
- Which animals do you like?
- Do you play with them?
- What are their names?
- Which animal do you like best?

**Card 9:**

**Subject: in the jungle**

- Which animals are living there?
- You get lost?
- You have a guide?
- Hunting for food, what do you eat?
- Who is with you?

**Card 10**

**Subject: living in the space**

- What do you take with you?
- Astronaut
- Rocket
- Floating
- Contact with earth?
- Where are you going?

**Card 11**

**Subject: Future**

- How will it look like?
- Do you still have to go to school?
- How would you like it to be?
- What would be different from now?
- Do you like it? Why, or why not?

**Card 12**

**Subject: Flying**

- In airplane? Or what else?
- In the air
- What do you see?
- Why do you like flying?
- Have you been flying before?

**Card 13**

**Subject: Skiing**

- **Lots of snow**
- **Snowboarding/ skiing**
- **Apartment**
- **Adventures**
- **Ski lifts**
- **Mountains**
- **Temperature**

**Card 14**

**Subject: Cooking**

- **What do you like?**
- **What would you make?**
- **How do you have to prepare it?**
- **Who do you make it for?**
- **What do you need for to make it?**
- **Do you eat it your self?**

**Card 15**

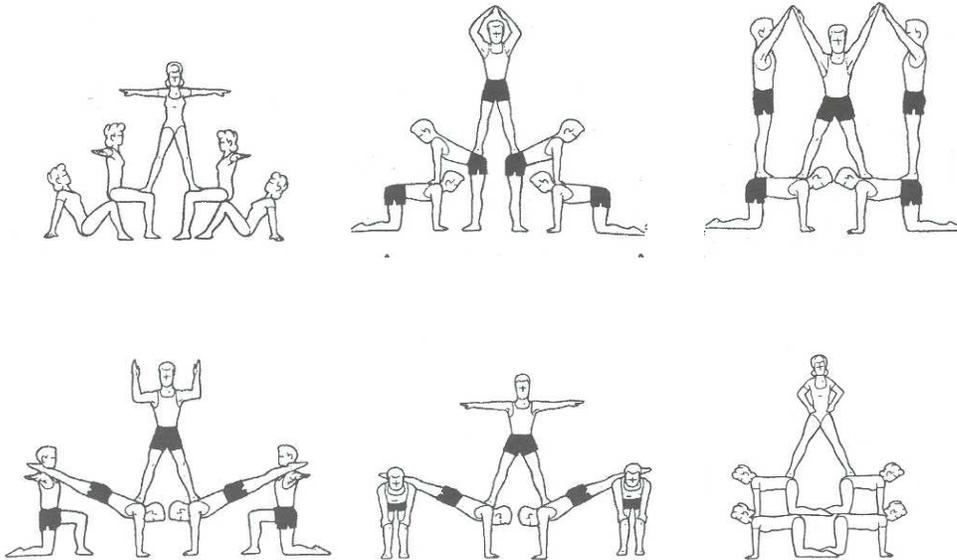
**Subject: Beach**

- **What do you do?**
- **Who is there?**
- **Is there something happening?**
- **Are there lifeguards?**
- **What are they doing?**
- **What do you see in the sea?**
- **Is there fish and shells?**
- **Who is with you?**



**Worksheet 6    The pyramid**

**5 Persons:**



**6 Persons:**

