

# **The Transition of Undocumented Students to Foundation Based Education on Sint Maarten**

Bottlenecks Concerning the Transition of Students in the Ages of Seven to Nine Years from the  
Perspective of Teachers, Parents, Students and Student Care Coordinators



## **Master thesis**

Utrecht University Faculty of Social Sciences

Master: Education, Socialization and Youth Policies

Specialization: Education, Youth, International Cooperation and Aid

Students: Dianne Geerds (3449084)

Cobie de With (3136868)

Supervisors: Dr. R. van 't Rood, Utrecht University

Drs. A. Dekker, DERPI

Date: 19<sup>th</sup> of June 2011

# **The Transition of Undocumented Students to Foundation Based Education on Sint Maarten**

Bottlenecks Concerning the Transition of Students in the Ages of Seven to Nine years from the Perspective of Teachers, Parents, Students and Student Care Coordinators

D. A. Geerds and J. N. J. de With

## **Abstract**

The aim of the current study was to identify bottlenecks arising as a consequence of the transition of undocumented students in the ages of seven to nine years to Foundation Based Education (FBE) on Sint Maarten. Seven schools participated in the research with a total amount of 210 students, of which 62 were undocumented. Also 23 teachers, 71 parents and eleven student care coordinators were partakers in this research. The study made use of eight quantitative and three qualitative methods to determine bottlenecks on the level of academic and social skills, home environment, parental involvement, teacher-student interaction and interaction between peers. Except for home environment and parental involvement, no significant differences were found between documented and undocumented students. However, the academic level of participating students appeared to be low and teachers reported a large partition between students on the areas of social and academic skills, which could be an explanation for the absence of significant differences between documented and undocumented students. No differences in home environment or parental involvement were mentioned by teachers, however the outcomes of the parents questionnaire indicated that undocumented students have poorer home situations and experienced more difficulties with their family. Parents of undocumented students also reported more often to help teachers with school activities. The unannounced entering of new students during the school year seems to be difficult for teachers. A transition and testing period to list the needs of new students could be a solution for this problem.

Keywords: Sint Maarten, undocumented students, skills, home environment, interaction

## **Acknowledgements**

It is a pleasure to thank those who contributed in different ways to this thesis. In the first place we would like to thank Dr. Rogier van 't Rood, who arranged the contacts with the Department of Educational Research, Policy and Innovation (DERPI) on Sint Maarten. As our supervisor in the Netherlands he gave us the opportunity to learn through trial and error, although we could always rely on his support. We also owe our gratitude to Drs. Angela Dekker who facilitated our internship and was our supervisor on Sint Maarten. She made us feel welcome on Sint Maarten and in the team of DERPI, gave clear feedback and was always willing to help. Besides we would like to thank Ms Lourens who always gave motivating and encouraging feedback on our progress and Tamara Hughes who was our walking encyclopaedia at DERPI and on Sint Maarten; we enjoyed sitting in the same cubicle. Furthermore we would like to thank all our other colleagues at DERPI. It is impossible to mention them all separately but we are truly grateful for all the encouraging words and the answers to our questions and especially for receiving the opportunity to be a part of the team. These acknowledgements would not be complete if we did not mention the school board members, who were interested in our research and gave us the chance to improve our instruments using their knowledge about their students. Furthermore we would like to thank all participants of the research, teachers, student care coordinators, parents and students, without whom this research would not have been possible. Last but not least we would like to thank our family and friends for their unconditional and encouraging support.

## TABLE OF CONTENTS

<b>1. INTRODUCTION .....</b>	<b>6</b>
1.1 BACKGROUND OF THE RESEARCH .....	6
1.1.1. <i>Sint Maarten.</i> .....	6
1.1.2. <i>Statistics of registered and unregistered inhabitants living on Sint Maarten.</i> .....	6
1.1.3. <i>Documented and undocumented children on Sint Maarten.</i> .....	7
1.2 COMPULSORY EDUCATION ON SINT MAARTEN .....	8
1.2.1 <i>Compulsory education.</i> .....	8
1.2.2. <i>Schools for undocumented students.</i> .....	9
1.2.3. <i>Managing the problems concerning non-regulated schools.</i> .....	10
1.2.4 <i>Implementing compulsory education for all children</i> .....	11
<b>2. THEORETICAL FRAMEWORK.....</b>	<b>12</b>
2.1 THEORETICAL MODELS .....	13
2.1.2 <i>Social Ecological Systems Theory.</i> .....	13
2.1.2 <i>Developmental Niche.</i> .....	14
2.2 TWO SETTINGS OF THE RESEARCH.....	14
2.2.1 <i>Home setting.</i> .....	15
2.2.1.1 <i>The student and his or her academic and social-emotional skills.</i> .....	15
2.2.1.2 <i>Home environment and parental involvement.</i> .....	16
2.2.2 <i>School setting.</i> .....	16
2.2.2.1 <i>Teachers' perception and interaction.</i> .....	17
2.2.2.2 <i>Peer relationships and interaction.</i> .....	17
2.3 RESEARCH QUESTIONS .....	18
<b>3. METHODS.....</b>	<b>18</b>
3.1 DESIGN .....	18
3.2 PARTICIPANTS .....	19
3.3 INSTRUMENTS.....	20
3.3.1 <i>Mathematical test.</i> .....	22
3.3.2 <i>Informal reading assessment.</i> .....	23
3.3.3 <i>Social skills: self-report (MESSY).</i> .....	23
3.3.4 <i>Focus group discussions with teachers.</i> .....	24
3.3.5 <i>Teachers questionnaire.</i> .....	25
3.3.5.1 <i>Teachers questionnaire part one: general questionnaire.</i> .....	25
3.3.5.2 <i>Teachers questionnaire part two: questionnaire concerning four students.</i> .....	26
3.3.6 <i>Parents questionnaire.</i> .....	27
3.3.7 <i>Student care coordinators: interview and questionnaire.</i> .....	29
3.3.8 <i>Students questionnaire.</i> .....	29
3.3.9 <i>Network analysis.</i> .....	31
3.3.10 <i>Classroom observation.</i> .....	32
3.3.11 <i>Peer interaction observation</i> .....	33
<b>4. RESULTS.....</b>	<b>35</b>
4.1 DATA ANALYSIS .....	35
4.2 HOME SETTING.....	36
4.2.1 <i>The student and his or her academic and social-emotional skills.</i> .....	36
4.2.1.1 <i>Academic skills.</i> .....	36
4.2.1.1.1 <i>Singapore Math Test 1B.</i> .....	36
4.2.1.1.2 <i>Unofficial reading assessment.</i> .....	37
4.2.1.1.3 <i>Differences in Math and reading scores between schools.</i> .....	38
4.2.1.1.4 <i>Focus group discussions with teachers</i> .....	39
4.2.1.1.5 <i>Teachers questionnaire part one: general questionnaire.</i> .....	40
4.2.1.1.6 <i>Teachers questionnaire part two: questionnaire concerning four students.</i> .....	41
4.2.1.1.7 <i>Student care coordinators questionnaire.</i> .....	41

4.2.1.1.8 Parents questionnaire.....	43
4.2.1.3 <i>Social-emotional skills</i> .....	43
4.2.1.3.1 Self report (MESSY).....	43
4.2.1.3.2 Focus group discussions with teachers.....	44
4.2.1.3.2 Teachers questionnaire part two: questionnaire concerning four students.....	45
4.2.1.3.3 Parents questionnaire.....	45
4.2.1.3.4 Student care coordinators questionnaire.....	46
4.2.2 <i>Home environment and parental involvement</i> .....	46
4.2.2.1 <i>Home environment</i> .....	46
4.2.2.1.1 Focus group discussions with teachers.....	46
4.2.2.1.2 Teachers questionnaire part two: questionnaire concerning four students.....	47
4.2.2.1.3 Parents questionnaire.....	48
4.2.2.2 <i>Parental involvement</i> .....	50
4.2.2.2.1 Focus group discussions with teachers.....	50
4.2.2.2.2 Teachers questionnaire part two: questionnaire concerning four students.....	51
4.2.2.2.3 Parents questionnaire.....	51
4.3 SCHOOL SETTING.....	54
4.3.1. <i>Perception of teachers and student care coordinators on the transition of undocumented students</i> .....	54
4.3.1.1 Focus group discussions.....	54
4.3.1.2 Teachers questionnaire part one: general questionnaire.....	55
4.3.1.3 Student care coordinators questionnaire.....	57
4.3.2 <i>Interaction between teachers and students</i> .....	59
4.3.2.1 Teachers questionnaire part one: general questionnaire.....	59
4.3.2.2 Students questionnaire.....	60
4.3.2.3 Classroom observation.....	61
4.3.3 <i>Peer relationships and interaction</i> .....	61
4.3.3.1 Focus group discussions with teachers.....	61
4.3.3.2 Teachers questionnaire part one: general questionnaire.....	62
4.3.3.3 Teachers questionnaire part two: questionnaire concerning four students.....	62
4.3.3.4 Student care coordinators questionnaire.....	63
4.3.3.5 Students questionnaire.....	63
4.3.3.6 Network analysis.....	64
4.3.3.7 Peer interaction observation.....	65
<b>5. CONCLUSION AND DISCUSSION.....</b>	<b>67</b>
5.1 CONCLUSION AND DISCUSSION - DIVIDED BY TYPE OF SETTING.....	67
5.1.1 <i>Home setting</i> .....	67
5.1.1.1 <i>Academic and social-emotional skills of students</i> .....	67
5.1.1.2 <i>Home environment and parental involvement</i> .....	68
5.1.2 <i>School setting</i> .....	70
5.1.2.1 <i>The perspective of teachers and student care coordinators on the transition of undocumented students</i> .....	70
5.1.2.2 <i>Interaction between teachers and students</i> .....	71
5.1.2.3 <i>Interaction between peers</i> .....	72
5.2 LIMITATIONS OF THE RESEARCH.....	73
<b>6. REFERENCES.....</b>	<b>74</b>
<b>7. APPENDIXES..... FOUT! BLADWIJZER NIET GEDEFINIEERD.</b>	
APPENDIX 1: SINGAPORE MATH TEST 1B.....	<b>FOUT! BLADWIJZER NIET GEDEFINIEERD.</b>
APPENDIX 2: MATSON EVALUATION OF SOCIAL SKILLS WITH YOUNGSTERS (MESSY) ....	<b>FOUT! BLADWIJZER NIET GEDEFINIEERD.</b>
APPENDIX 3A: TEACHERS QUESTIONNAIRE PART 1: GENERAL QUESTIONNAIRE.....	<b>FOUT! BLADWIJZER NIET GEDEFINIEERD.</b>
APPENDIX 3B: TEACHERS' QUESTIONNAIRE PART 2.....	<b>FOUT! BLADWIJZER NIET GEDEFINIEERD.</b>
APPENDIX 4: PARENTS QUESTIONNAIRE.....	<b>FOUT! BLADWIJZER NIET GEDEFINIEERD.</b>
APPENDIX 5: STUDENTS CARE COORDINATORS QUESTIONNAIRE.....	<b>FOUT! BLADWIJZER NIET GEDEFINIEERD.</b>
APPENDIX 6: STUDENTS QUESTIONNAIRE.....	<b>FOUT! BLADWIJZER NIET GEDEFINIEERD.</b>
APPENDIX 7: PEER INTERACTION OBSERVATION SCHEDULE.....	<b>FOUT! BLADWIJZER NIET GEDEFINIEERD.</b>

## **1. Introduction**

### **1.1 Background of the research**

#### **1.1.1. Sint Maarten.**

Sint Maarten is the Dutch part of an island located in the northern group of the Leeward Islands and situated in the Caribbean Sea. It lies east of the United States Virgin Islands. Although the island was first discovered by Christopher Columbus in 1493, it was divided in a Dutch and a French part in 1648. Nowadays the French territory is the biggest part of the island and is called Saint Martin. The French territory is part of the European Union. The Dutch part is part of the Kingdom of the Netherlands, but not part of the European Union. There is no real border between the two sides, only signs and monuments are referring to the border. The current study is focusing on the Dutch part.

In the 18<sup>th</sup> and 19<sup>th</sup> centuries there was a large slave colony based on the production of cotton, tobacco and sugar. On the Dutch part of the island this slavery lasted until 1863. Sint Maarten became part of the Kingdom of the Netherlands in 1954 as one of the Netherlands Antilles. During the 1950s the tourism industry expanded drastically. The current economy of Sint Maarten is still centred on tourism. Four-fifths of the labour force is working in this sector.

The common languages on Sint Maarten are English, Spanish, Haitian Creole, Dutch, Papiamentu and French (DERPI 2010). In 2000 a referendum took place and citizens voted to become a self-governing country within the Kingdom of the Netherlands. This change became effective on the 10<sup>th</sup> of October 2010. Since this date the island has full autonomy in internal affairs. The Dutch Government is still responsible for defence and foreign affairs (CIA, The World Factbook, 2010).

#### **1.1.2. Statistics of registered and unregistered inhabitants living on Sint Maarten.**

Sint Maarten has a geographical area of 34 square kilometres and a population of 37,429 registered residents in 2008. In the same year there was an immigration rate of 1,763 and an emigration rate of 1,230, a net migration of 533. The major sending countries for registered immigration on Sint Maarten were the Netherlands, the Dominican Republic, Guadeloupe, India and Guyana (CBS Netherlands Antilles, 2010). During the past three decades, Sint Maarten has

received a large wave of immigrants coming to the island because of economic reasons. The immigration force did not maintain the income and registration of these immigrants properly in the past, consequently there are many persons residing on the island who do not have a legal immigration status (DERPI, 2008).

To get an insight in the number of unregistered persons on the island, the government recently decided to adopt a new policy. This policy is called the Brook's Tower Accord and is comparable with the "General Pardon" in the Netherlands (DERPI, 2010). The Brook's Tower Accord is a policy implemented on November the 3<sup>rd</sup>, 2009. The purpose of this accord was to register undocumented persons who can proof they were living on the island for five or more successive years. Persons who could not provide such proof were asked to leave the island within a week. Those who were allowed to stay received a one-year residence permit. About 3,800 persons obtained this permission, nevertheless unofficial estimates say that there are approximately 20,000 undocumented persons, which is more than half of the registered habitants living on the island (DERPI, 2010).

Currently the economy of Sint Maarten depends for an important part on the labour of undocumented persons. These persons often work in the construction and hospitality sectors. Too few documented people of Sint Maarten are available to fulfil these jobs, consequently no strict rules are in use to force the undocumented people to leave. This could change in the future, depending on the economic status of Sint Maarten (DERPI, 2010).

### **1.1.3. Documented and undocumented children on Sint Maarten.**

An amount of 8,754 registered residents of Sint Maarten are children from zero to fourteen years old. This is 24 percent of the total population (Central Bureau of Statistics, Netherlands Antilles (CBS), 2010).

There are over 850 undocumented children between the ages of four to twelve years old on Sint Maarten. Before May 2010, approximately 370 of them attended non-regulated primary schools, about 250 of them had a place on subsidised or Public Schools and between 160 and 200 undocumented students were attending a subsidised secondary school. Some undocumented children did not go to school at all, however the number of children that did not attend school is unknown. The number of undocumented children differs over the years, depending on

development in economy, labour market policy, bureaucracy, income, rules for family reunion, enforcement, free education and immigration policy (DERPI, 2010).

A study executed at the end of 2009 indicated large differences between undocumented children on the level of cultural and family background (DERPI, 2009a). Most undocumented students come from surrounding countries, like Jamaica, the Dominican Republic, Guyana, and Haiti. More than half (62%) of the undocumented children had English as their native language. About half of the children lived with both their parents and one third is from in a single parent household and 12 % lives with other relatives (DERPI, 2009a). Half of the parents earned less than US\$ 1,000 a month and only four percent earned more than US\$ 2,000. One third of the children had special educational needs, mostly on the level of language (mostly reading) and mathematics. Only 14% of these children started school at kindergarten. One third started at the first grade (the usual age for this grade is four to five) and more than half of the children started school at a later age. No differences between documented and undocumented students were found in work attitude, social abilities or school motivation (DERPI, 2009a). However most undocumented students have an average level of education, which is below the level one would expect based on their age. When they started attending secondary school their entry level was not sufficient, nevertheless according to the research, they tend to improve quickly (DERPI, 2009a).

The following section will give an overview of the educational system on Sint Maarten and the position of undocumented children within this system.

## **1.2 Compulsory Education on Sint Maarten**

### **1.2.1 Compulsory education.**

In 1991 the federal legislation on compulsory education came in to force on the Netherlands Antilles for all children in the ages of six to 16 years (DERPI 2010). However the implementation on Sint Maarten was put on hold because of natural disasters caused by hurricanes in 1995. They were allowed an extension until the 1<sup>st</sup> of August 1996 (DERPI, 2006; DERPI, 2010). From 2007 on, the law on compulsory education has been extended for the ages of four to eighteen years (DERPI 2010). The right of education was also mentioned in two international treaties: the Treaty on Social, Economic and Cultural Rights (Office of the United Nations High Commissioner for Human Rights, 1966) and The Convention on the Rights of the Child (Office of the United Nations High Commissioner for Human Rights, 1989). Both treaties



refer to the right of free and accessible education for all children and were signed by the Netherlands Antilles.

On Sint Maarten there were problems maintaining these treaties due to the great number of immigrants and their undocumented children. Most regulated schools did not accept undocumented children to their schools, because the government did not finance for the education of these children and because the school demanded proof of residency on the island as a condition for entering their schools. As they were not registered, nobody knew exactly how many undocumented children there were (DERPI, 2010). Although there was compulsory education from 1996 on, in practice it was still not completely implemented by 2005. Therefore a workgroup on compulsory education has been set up by July 2005 (DERPI, 2006).

### **1.2.2. Schools for undocumented students.**

In the years in which Sint Maarten did not provide education for undocumented children, people who were concerned about these children set up schools. These schools are called non-regulated because they do not comply with the laws used for the regulated and subsidized primary schools, called Foundation Based Education (FBE) schools. The number of non-regulated schools differs over time. Most non-regulated schools are temporary. In 2006 the number of non-regulated schools was 11, while in 2010 the number of these schools was seven (DERPI, 2006; DERPI, 2010).

There are several problems with non-regulated schools. Most of the non-regulated schools are operating out of homes or in buildings that are unsuitable for schooling. The majority of the teachers at these schools are not qualified for Foundation Based Education (FBE) and many teachers do not have legal residency on the island. Though the majority has indicated through questionnaires that they had an educational training, this could not be verified and was questioned as the experience and teaching skills of these teachers vary in quality and content. Most of these teachers use a traditional, non-cooperative style of teaching with little or no differentiation. A large amount of them has a foreign nationality and only 60 % spoke English as their native language. Research has shown that the quality of education in non-regulated schools in general is low (DERPI, 2010).

Non-regulated schools do not fall under the Guidance of the Inspectorate of Education, hence these schools are not inspected, consequently the government cannot ensure and enforce

that the proper curriculum is being taught and that suitable teaching material is available. Most of these schools do not use books, but students use copies of books or have to copy text from the blackboards. They also do not have computers for the students (DERPI, 2010). There is a monthly tuition fee, which ranges from \$60 per month to an excess of \$350 per month per child. Most parents of undocumented students can hardly afford these fees (DERPI, 2009b). Non-regulated schools have a budget of only one third of the regulated schools because they do not receive subsidy. Therefore the net income for these schools is low. A further decrease will likely mean the end for most non-regulated schools (DERPI, 2010).

### **1.2.3. Managing the problems concerning non-regulated schools.**

The workgroup on compulsory education identified three options for managing the problems with non-regulated schools. The first option was to enforce strict immigration controls to get rid of illegal persons and their children. However this was very difficult to manage with immigration. Businesses claimed that illegal workers are filling a need, because they are the only ones willing to do the “dirty” work. So if strict immigration control would be executed they may have to cope with a serious labour shortage. This could adversely affect the economy of Sint Maarten. Another issue was that immigration was a federal responsibility of the Netherlands Antilles. Sint Maarten did not seem to be able to get a grip on immigration. Therefore this option was not feasible (DERPI, 2006).

The second option identified by the workgroup was to allow undocumented students into existing FBE schools. However the amount of space was not sufficient to place all undocumented students. Even if there was space, undocumented students mostly did not perform at the educational levels that correspond with their age. They would probably need remedial services that go beyond what these schools were able to provide in (DERPI, 2006).

The third option was to allow the illegal schools to continue operating under certain conditions. This option was seen as the most realistic by that time. Nonetheless, this option is problematic as these schools are operating illegally, so the Government would be setting a bad precedence by officially allowing them to operate (DERPI, 2006).

The workgroup on Compulsory Education has recommended implementing the third option using strict conditions about quality and evaluating this. In addition the workgroup recommended to start integrating undocumented students into the FBE schools on a small scale,

starting with a pilot in which the group of four and five years old, who were attending non-regulated schools would be allowed in regulated schools. Another recommendation was to enforce immigration policy more strictly and regularly (DERPI, 2006). After this recommendation it was up to the policymakers to continue the work concerning compulsory education.

#### **1.2.4 Implementing compulsory education for all children.**

On the 10<sup>th</sup> of October 2010 the country Sint Maarten came into being. From then on the island of Sint Maarten had the responsibility for immigrants and their undocumented children. Sint Maarten intends to come to full compulsory education for the interest of all children, also the undocumented, and to comply with international legislation. The Department of Educational Research Planning and Innovation (DERPI) has made an implementation plan (May 2010) to execute compulsory education, which includes the right of free education for all children, both documented and undocumented. This plan is based on the recommendations from the former workgroup on compulsory education (DERPI, 2006). As mentioned before the quality of non-regulated schools is low, so decided was to give these schools the option either to meet with the standards of FBE or to close.

More places are made available on FBE schools in order to transfer students from non-regulated schools, which do not comply with the FBE standards to these schools.

The intention of the implementation plan is: “Have sufficient and appropriate places for all children from 4 to 18 years at Primary (FBE) and Secondary education on Sint Maarten” (DERPI, 2010). Sufficient refers here to the case that all children should have the opportunity to visit public or subsidized schools, which are regulated by the law. Appropriate refers to the educational facilities and qualification of teachers as well as to complying with Federal legislation on education (DERPI, 2010).

Decided is to register and place all undocumented children gradually at regulated schools. Therefore it is important to make schools adequate to manage the inflow of students. More classrooms have to be built and more teachers are needed. The intention is to qualify teachers from non-regulated schools to FBE teachers so that they can teach on subsidized and regulated FBE schools and the capacity of these schools increases (DERPI, 2010). Also special needs programs are required. Students who do not have English as their native language need

additional training. Due to the fact that every year new immigrants are entering Sint Maarten, it is important to structurally implement a program based on English as Second Language (ESL) for these students. The younger the undocumented students are when they attend regulated schools, the fewer problems are expected and the demand for special needs programs will be lower. Therefore the youngest undocumented students, those in the ages of four to nine years, will be migrated first to the FBE schools, starting with students from four to seven years and consecutive the students in the ages of seven to nine years. The older students, those in the ages of nine to twelve years, will finish their primary education on a non-regulated school and go to a regulated secondary school. At the time of this study students from four to nine years were migrated to regulated schools (DERPI, 2010). One regulated school has started with only undocumented students. The name of this school is Charles Leopold Bell Primary School (DERPI, 2010).

In order to enforce compulsory education, a Truancy Section with three truancy officers will be established at the Department of Education. Their task is to make sure that the law of compulsory education is maintained, so they are also responsible for the registration and placement of all undocumented students on regulated schools (DERPI, 2010).

## **2. Theoretical Framework**

Because the undocumented students in the ages of seven to nine years are relocated to FBE schools, some problems could occur. Undocumented students changed schools and may have different teachers and different classmates now. Given that there are differences in teaching style, used methods, level as well as in facilities on the different schools, the undocumented students, who were used to the patterns of non-regulated schools, will have to cope with different teaching methods and a different level when attending FBE schools (DERPI, 2010). They will need to adjust to different customs and habits and sometimes even to different languages, as some of them do not have English as their native language and used to have teachers who also did not have English as their mother tongue (DERPI, 2010). The transition will be even more severe for the undocumented students who never went to school before. They have not learned how to behave at school and they might not have proper knowledge of school subjects. Another problem with undocumented students is that many of them come from a family with financial and social problems, due to their illegal status (DERPI, 2010).

## **2.1 Theoretical Models**

In order to investigate the bottlenecks concerning the implementation of compulsory education for undocumented students, two different, but related models will be used to examine on what areas bottlenecks could occur. The ecosystem of Bronfenbrenner (1977) and the developmental niche formulated by Super and Harkness (1986) are combined to form the theoretical foundation of this study.

### **2.1.2 Social Ecological Systems Theory.**

In the *Social Ecological Systems Theory* described by Bronfenbrenner (1977), four different levels clarify how a child and its environment influence each other when this child grows and develops. These levels are: micro system, meso system, exo system, and macro system. The micro system represents relations within the direct environment in which a child lives. This includes all immediate relationships they have and organizations they interact with, like their family or caregivers and their school or daycare. The more encouraging and nurturing these relationships and places are, the better chances the child will have to grow and develop. The meso system is about different micro systems interacting and working together (Bronfenbrenner, 1977). For instance if a parent has an active role in the school or other activities of the child, it will encourage the child's development (Driessen, Smit, & Slegers, 2005). The exo system is a system that affects the child indirectly. An example could be the work situation of the child's parents, which determines the family income and consequently the neighborhood of the child's family. The macro system is the legal system and habits and customs of the place the child lives in. This system does not refer to the specific context affecting the life of a particular child, but determines the structures and activities occurring at the concrete level (Bronfenbrenner, 1977).

An example of a macro system, specific for the situation on Sint Maarten, would be the implementation of undocumented students on FBE schools. The government of Sint Maarten intends to come to full compulsory education for the interest of all students, also the undocumented, and to comply with international legislation (DERPI, 2010). This decision affects the lives and micro systems of all documented and undocumented students on Sint Maarten, as some of them attend different schools now and others will follow later. By investigating the

subject of the research within its social ecological system the validity of the research is assumed to increase.

### **2.1.2 Developmental Niche.**

The social ecological system is focussing on the physical and social aspects in the lives of developing children. The cultural dimension of parenting is only involved on the level of the macro system. Children were mostly looked at in a mono cultural setting, which means that only one cultural background was taken in account (Bronfenbrenner, 1977). However children of immigrants are often confronted with bicultural settings; their country of origin and the country where they currently live (Eldering, 2006). In order to take the bicultural setting of the undocumented students in account, the current study will also find its theoretical base in the *Developmental Niche* (Super & Harkness, 1986). This model is built on three systems: a) the physical and social settings of a child's life, b) cultural determined customs and habits of raising and caring for children and c) the parental ethno theories: specific cultural determined thinking models. These three systems together form the context in which a child grows up. These can differ between various cultures. The developmental niche can be used in the setting of a family, but also when looking at other micro systems in which the children participate such as school (Eldering, 2006). Cultural differences between micro systems in which children participate can be brought to light with this theory. This could help to identify bottlenecks of the implementation of compulsory education on Sint Maarten.

## **2.2 Two Settings of the Research**

This study will investigate the educational setting of undocumented students on the level of two micro systems: the home setting and the school setting of the student. The interaction between these micro systems is also taken into account in the by measuring communication between teachers and parents and the way parents get the opportunity to be involved and are involved. This interaction represents the meso system. The exo system is integrated in the study by investigating the background of students and their parents. A change in the macro system (the implementation of compulsory education for documented and undocumented students living on Sint Maarten) was the reason for this research.

### **2.2.1 Home setting.**

The home setting is subdivided in a part about the child and his or her own level of academic and social-emotional skills. The other part of the home setting will be about the parent's cultural ethno theories, the family background, parental involvement in school activities and the physical home situation.

Educational attainment is a very important indicator for health, social capital and well-being (Riala, 2003). Poor education is a critical determinant for many undesirable outcomes such as poor occupational achievements, psychopathology, unemployment and financial insecurity. Risk factors for poor educational outcomes include low maternal education, a large family, low social class, poverty, residential mobility and psychiatric morbidity (Riala, 2003). Research also shows that poverty and poor educational outcomes are related (Raffo, 2009).

#### ***2.2.1.1 The student and his or her academic and social-emotional skills.***

One of the outcomes of good education is the academic and social-emotional performance of students (Whipple, Evans, Barry & Maxwell, 2010). School results and standardized assessment instruments can point out if a student performs within an average range compared to his or her peers. Differences in performance between documented and undocumented students could indicate a problem in the level of education or the level of learning capacity of the students. Nevertheless, other factors besides good education and intelligence can determine the school results and social performance of a student. The exposure of students to chronic risk factors like adverse social and physical settings contribute to negative physical, social-emotional and cognitive outcomes during childhood and life as an adult. Social instability, poverty and a poor quality of the environment of the life of a student contribute to low school results and achievement deficits (Whipple et al., 2010). Rutter (1983) investigated the impact of cumulative risk factors and concluded that high exposure to more than just one risk factor has a multiplying negative effect on peoples' lives. The exposure to cumulative risk factors is considered to have a significant impact on achievement outcomes, cognitive development and mental and physical health (Ackerman & Brown, 2003; Gutman, Sameroff, & Cole, 2003; Sameroff, Bartko, Baldwin, Baldwin, & Seifer, 1998). These risk factors exist on the individual level as well as on the contextual level. There are also protective factors that promote positive school results and prevent negative outcomes. These protective factors can lay in individual

characteristics, like resilience or in contextual characteristics (Nash & Bowen, 2002). The contextual protective factors can be separated in family affective characteristics and external support network characteristics and become clear only when risk factors occur (Bogenschneider, 1998).

Thus, although school results can play a role in determining students' abilities and differences between particular groups of students, this cannot be investigated in an isolated situation. Also risk and protective factors that may play a role in the outcome of these school results should be investigated. Therefore, the academic and social-emotional skills of students from different schools on Sint Maarten are investigated next to outcomes of questionnaires about the home environment and parental involvement.

#### ***2.2.1.2 Home environment and parental involvement.***

Research has shown a strong correlation between family background and school performance and education level in adulthood (Riala, 2003). Different studies show that parental participation and parental involvement have a very important influence on positive school performance (Driessen et al., 2005; Izzo, Weissberg, Kasproff & Fendrich, 1999). In particular the last mentioned research, which took place under 11.000 children of originally Dutch parents and children of immigrants living in the Netherlands, showed evidence for parental influence on child's performance on mathematics and language. Most undocumented parents on Sint Maarten have low paid jobs in hospitality and construction and only ten percent of them earn more than US\$ 2.000, - per month. Of the undocumented students, 50 percent have a family gross income of less than \$1.000, - per month. Consequently a great amount of the undocumented parents and children are living in poverty (DERPI, 2010b).

#### **2.2.2 School setting.**

The school setting consists of the teachers' perception and interaction with students as well as interaction between documented and undocumented students. When groups with different customs and habits come together, which is the case for students at primary schools on Sint Maarten, several ways exist in which they can associate with each other. Berry (1997) describes four strategies: *assimilation*, if one group totally adjusts to another; *segregation*, when a group wants to keep its own habits and does not wish to interact with other groups; *marginalization*, if



a group has little interest or possibility in maintaining own customs and also feels no need to interact with another group, and *integration*, when a group wants to maintain its own customs and habits and also searches for interaction with the other group (Berry 1997).

#### ***2.2.2.1 Teachers' perception and interaction.***

Assimilation would probably be the most convenient strategy for teachers as they then are able to equalize the students, although it could cause a disadvantage for undocumented students. Ogbu (1987) has found three reasons why immigrant students often have problems with adaptation, which is needed for assimilation. First, most teachers and administrators in school have lower expectations of immigrant students in comparison to native students. Secondly, immigrant students are often looked at as being educationally handicapped. Lastly, school staff usually fails in understanding and respecting the ways in which minority students have learned to behave. This often results in conflicts that hinder students' learning and adjustment (Ogbu, 1987).

#### ***2.2.2.2 Peer relationships and interaction.***

Although there were some undocumented students who went to regulated schools, mostly documented and undocumented students went to different schools. Consequently, there was a certain level of segregation between both groups (DERPI, 2010). After the transition the groups will have to interact with each other. Research has shown that young students already have a preference for their own group, without disliking other groups (Cameron, Alarez, Ruble & Fuligni, 2001). Significant levels of in-group favoritism were reached among 4- and 5- year- old students (Brewer, 1999). Therefore it is likely that the students of Sint Maarten, after the transition, at first will prefer their own group to interact with. They could be anxious to mix with another group. However, this is not desirable as Cambra and Silvestre (2003) found in their research on inclusive schools, that the experience of segregation in the early school years can be a direct threat for the social development of students. They may have problems with developing social skills and positive self-concepts. However social participation, which was defined as: "the presence of positive social contact/interaction between them and their classmates; acceptance of them by their classmates; social relationships/friendships between them and their classmates", is considered to contribute to students' social wellbeing (Koster, Timmerman, Nakken, Pijl, & Van

Houten, 2009). Consequently a strategy with integration and social participation is recommended for the new students, in which students as well as teachers need to adapt to each other.

### **2.3 Research questions**

The current study investigates the educational situation of undocumented students in the ages of seven to nine years on Sint Maarten. The research is supposed to give an insight on bottlenecks concerning the transition of these students to regulated schools, focusing on two micro systems, explicitly home and school. The main question for the research will be: “What bottlenecks do occur in the educational situation of the group of seven to nine years old undocumented students on Sint Maarten after the transition to FBE schools?” For this reason two important micro systems, respectively the home setting and the school setting, will be investigated. The home setting includes the level of social and academic skills of students as well as their home environment and the level of parental involvement, whereas the school setting consists of the perception of teachers and school personnel on the transition of undocumented students and interaction between teacher and students as well as interaction and relationships between peers. For both settings documented and undocumented students will be compared with each other.

## **3. Methods**

### **3.1 Design**

The objective of the investigation was to examine which bottlenecks occur in the educational situation of the group of seven to nine year old undocumented students on Sint Maarten. This group is recently relocated to FBE schools. Some of them came from non-regulated schools and some did not attend any school before. To set up a research design, two related models were used, namely: the *Ecological Systems Theory* (Bronfenbrenner, 1977) and the *Developmental Niche* (Super & Harkness, 1986). Decided is to focus on two important micro systems, the home setting and the school setting. The home setting was split up in student; focusing on social and academic skills, and parents. The school setting was divided in peers and teacher; both focusing on relationships and interaction.

For this reason a mixed design, existing out of eight quantitative and three qualitative methods is used. Quantitative methods used were questionnaires and assessments, whereas the qualitative methods were focus group discussions, observations and an interview.

### **3.2 Participants**

All seventeen primary FBE schools on Sint Maarten were approached for participation in the research. Eventually, only schools that had undocumented students in the mentioned age group were included in the research. The participating schools belonged to three different school boards. The Seventh Day Adventist School board and the Hillside Christian School board each participated with one school. The school board of Public Schools participated with five schools, explicitly: Charles Leopold Bell School, Dr. Martin Luther King Jr. School, Leonard Conner School, Marie Genevieve de Weever School and Ruby Labega School. In each school a second grade (cycle one, year four) class was selected. There was a total amount of 139 students in the selected classes. Of this group, 31 students were undocumented. Also a first grade (cycle one, year three) class participated with 22 students, of which five undocumented, because the second grade (cycle one, year four) class in that school had only one undocumented student whereas the first grade (cycle one, year three) had five. The students in this class took only part in the students questionnaire and network analysis.

Teachers filled in Questionnaires about their work in general and about two documented and two undocumented students in their class. These questionnaires were filled in for 49 students. The total amount of students the researchers collected data from was 210. Of this group, 62 were undocumented. On the reference date (1st of April, 2011) the age of the participating students ranged from six years and four months to eleven years and four months. The average age was eight years and three months. In statistical terms, this is called a *mean* (M). It is also interesting to know the variation in age. For this matter the *standard deviation* (SD) was used. This measurement shows in what degree the mean represents the outcomes (Field, 2005). A high standard deviation indicates that data is spread out over a large range of values while a low standard deviation shows that data tends to be near the average. The standard deviation for the age of students was 10 months. The period of time the students were in their present schools is ranged from one day to five years and seven months. The average was two years and six months with a standard deviation of 18 months. There were 16 different nationalities among the

participating students. The nationality of 179 students was known. Most students (43%) were Dutch, 14% were Dominican (Dominican Republic), 11% were Haitian, 10% were Guyanese. Other nationalities were Jamaican (7,3%), French (3,4%), Colombian (2,2%), Vincentian (2,2%), British (1,7%), Dominican (Dominica) (1,7%) , Chinese (1,1%), United States American (1,1%), Nevisian (0,6%), Filipino (0,6%), Grenadian (0,6%) and Saint Lucian (0,6%).

Not only students were participating in this study. Also 28 teachers took part in the research, 26 of them participated in one of the focus group discussions and fifteen filled in the teachers questionnaire. One of the teachers was male while the other 27 were female. Of the teachers who filled in the teachers questionnaire the age ranges between 25 and 64 ( $M = 38.92$ ,  $SD = 12.28$ ). These teachers had at least fifteen students in their class and at most 28 ( $M = 21.93$ ,  $SD = 3.97$ ). Also eleven student care coordinators took part in the research. An interview was taken with one of them and based on this interview a student care coordinators questionnaire was conducted and filled in by all of them. Students in the selected classes were asked to give a questionnaire to their parents. A group of 74 parents filled in the questionnaire of which 17 were parents of undocumented students.

### **3.3 Instruments**

Eleven different instruments were used for this study. For investigating students' social and academic skills three assessments were used: Singapore Math Test 1B, an unofficial reading assessment, and the "Matson Evaluation of Social Skills with Youngsters" (MESSY). Also the teachers and parents questionnaires, using so called Likert Items and Likert Scales were used to get an insight in skills of students.

The Likert Item is an ordered, one-dimensional scale (Likert, 1932). Respondents have to choose one option that corresponds with their opinion in answer to an, in most cases, assertion. Each option, in this case ranging from one to five, is associated with a label, ranging from "strongly disagree" (1), "disagree" (2), "neither disagree, nor agree" (3), "agree" (4) to "strongly agree" (5) or from "never" (1) to "always" (5). A long ongoing debate is whether Likert Items can be statistical interpreted on an ordinal or an interval level (Carifio, 2008). An ordinal level means that the response categories have a rank order, but the distance between values of each option cannot be presumed to be equal. An interval status means that response categories have a rank order and the distances between values of each option are presumed to be

equal (Field, 2005). Consequently, the assumption whether Likert Items can be interpreted on an ordinal or interval level has statistical consequences. Mean and standard deviation cannot be used when the answering options are not equally divided (Field, 2005). To avoid statistical misinterpretation, in this study the outcomes of Likert Items and scales are used as an interval level when responses were divided equally and consequently could be compared to the *normal distribution*. The normal distribution is a probability distribution which is symmetrical and represented by a bell-shaped curve (Field, 2005). Means and standard deviations (as explained in paragraph 3.2) were used in these cases. When outcomes were divided in another way, the results were explained in a different way, using percentages next to mean and standard deviation.

In some cases, the scores of different but comparable assertions were combined. These combined scores form a total score on a category. The scores can only be combined to a category score if the assertions or questions which form this category are consistent. The assertions or questions are consistent when they are logically related to each other. This can be tested with a statistical test called Cronbach's alpha. The outcome of the Cronbach's alpha always lays between minus infinite and one. The higher the Cronbach's alpha score, the higher the internal consistency (Field, 2005). However, there is no uniform agreement about which Cronbach's alpha score is considered to indicate which degree of internal consistency. Scores of  $\alpha=.60$  or  $\alpha=.70$  and higher are generally seen as consistent (Field, 2005). For this study, assumed is that scores of a Cronbach's alpha lower than  $\alpha=.60$  are considered "low", scores higher and equal to a value of  $\alpha=.60$  are considered to be medium and scores of a Cronbach's alpha higher than  $\alpha=.80$  are considered high.

To examine the home environment and parental involvement, the following methods were used: teachers questionnaire, focus group discussions, parents questionnaire and student care coordinators questionnaire (questionnaires were also using Likert scales). Interaction and relations between documented and undocumented students was examined by: the teachers questionnaire, students questionnaire, network analysis, focus group discussions, student care coordinators questionnaire, and observations during playtime; whereas interaction between teachers and students was investigated by a teachers questionnaire, students questionnaire, focus group discussions and observations in the classroom. These methods will be explained in the next paragraphs.

### **3.3.1 Mathematical test.**

Because there is no standardized mathematics assessment instrument for all primary schools in use on Sint Maarten, the Singapore Math Test 1B was used. This is a placement test, used to indicate if students have the mathematical skills according to the level and grade they attend. It was based on a mathematics method used in Singapore since 1981 and in parts in the United States of America since 1982. Since this primary mathematics method first was developed by the Curriculum Development Institute of Singapore (CDIS) it was adjusted several times due to the mathematical needs in society. At first, the researchers chose the Singapore Math Test 2B. After executing a pilot in two classes and conversations with several teachers and principals, the researchers discovered that the mathematical themes and questions of the Singapore Math Test 2B were too difficult for the participating students. The Singapore Math Test 2B is an end test for the second grade. Some items were not yet taught in the used mathematical methods. The researchers decided to use a test on a lower level, the Singapore Math Test 1B which is an end test for the first grade. The two pilot classes were visited again and the students also did the Singapore Math Test 1B. The content of the Singapore Math Test 1B should be roughly known by second grade (cycle one, year four) students on Sint Maarten because it examines all subjects and skills that usually are taught in first grade (cycle one, year three). Both principals and teachers of second grade (cycle one, year four) students on Sint Maarten agreed that the subjects of the questions were commonly known by these students. The content of the test was varying from subjects such as multiplying, seeking patterns, grouping, logical word problems, subtractions and additions, time, to fractures and money problems. The test contained 18 questions. For each right answer a certain amount of points could be earned, varying from two to six points. In total, students could earn 100 points.

The test was proctored by the daily teacher of the students. He or she first read the questions of each page aloud. Some words were not commonly known by the students. In these cases the teachers were allowed to explain these words in order to avoid wrong answers due to language barriers.

The test was made by all students in the selected classes, except for those who were supposed to have exceptional low mathematical skills or lower learning abilities. This exclusion concerned four students. One of them was an undocumented student who just had arrived on

Hillside Christian School and could not speak or read English yet. Three of them were students at Ruby Labega School who could not read or write. None of them was undocumented..

### **3.3.2 Informal reading assessment.**

Because there is no standardized reading assessment instrument for all primary schools in use on Sint Maarten, this part of the research is based on the outcome of an unofficial reading assessment. Public Schools use Running Records (Clay, 2002) to scale the reading level of their students. A running record is a method used to assess a student's reading performance. Specifically for this purpose selected "benchmark books" are read aloud by a student, while the teacher fills in a special running record form to keep track of the faults a student makes during the reading. The faults students made in his or her reading determines on which reading area the student needs extra support. The outcome of a running record test is a certain reading level the student has reached so far, and an analysis of the areas in which the student needs extra reading support (Clay, 2002). The existing results of the Public Schools were not comparable to other participating schools because students were tested at different moments during the school year and different leveling systems were in use at the different Public Schools. To compare all students, an unofficial reading assessment took place. The purpose of this unofficial reading assessment was only to determine the reading level of the participating students. The books of reading a-z level "AA" to "M" were used, which are special benchmark books, used and approved for Running Records. The assessment was done individually by one of the researchers. All students started at level "B". When the student could read two pages of the text in a smooth way without faults, the researcher passed over the rest of the book and introduced a book of a higher level to the student. Slow reading (the student needed more than one minute per page) or more than four faults in one page resulted in reading a lower level. After the assessment, the measured level was converted into points from one (AA) to fifteen (Above M). All students who did the assessment received a sticker as a reward.

### **3.3.3 Social skills: self-report (MESSY).**

Because there is no standardized instrument to measure social-emotional skills for all primary schools in use on Sint Maarten, this part of the research is based on the outcome of the "Matson Evaluation of Social Skills with Youngsters (MESSY)" (Matson, Rotatori&Helsel,

1983). The MESSY is one of the most widely used self-report scales to measure social skills and has been evaluated and adapted for more than 10 different countries such as Australia, China, Spain, Brazil and the United States of America (Teodoro, K  ppler, Rodrigues, De Freitas & Haase, 2005; Matson, Neal, Fodstad, Hess, Mahan & Rivet, 2010). Results of a recent study in the U.S. indicated a strong internal consistency with an alpha coefficient of .93 for the group of six to nine years-olds and a strong convergent and divergent validity (Matson et al., 2010). These two types of validity together form the construct validity. The construct validity indicates to what extent the results of a questionnaire are indeed an indication of the concept the research is trying to measure. In this case, the MESSY is made to measure positive social skills and negative social skills. The strong construct validity indicates that the results of the test really say something about the positive and negative social skills of a tested student. The strong convergent and divergent validity indicate that the results of the Messy are comparable with the outcomes of different tests which attempt to measure the same concept, which is in this case positive and negative social skills (Matson et al., 2010).

Students rated their own social skills with 31 statements shown as five-points Likert items ranging from one (never) to five (always). Of the 31 statements, sixteen questions were formulating positive social behavior and fifteen questions were statements about negative social behavior. For the positive formulated social statements, the students could gain a score between 16 and 80. For the negative formulated social statements, the students could gain a score between 15 and 75. An example of a positive formulated social statement: "I cheer up a friend who is sad". An example of a negative formulated statement: "I threaten other kids or act like a bully". All statements were read aloud by researcher and class, and unknown words or complicated questions were explained by the researcher using role plays.

### **3.3.4 Focus group discussions with teachers.**

Three focus group discussions were held with teachers from participating schools. There was one focus group discussion for each school board. The first focus group discussion was at Hillside Christian School. Five participants attended. The second focus group discussion was arranged for the Public Schools and held on the Dr. Martin Luther King Jr. School with 18 participants. They came from five different schools, specifically: Charles Leopold Bell School, Dr. Martin Luther King School, Leonard Conner School, Marie Genevieve de Weever School



and Ruby Labega School. The third focus group discussion at the Seventh Day Adventist School had four participants. Both focus group discussions on Hillside Christian School and Seventh Day Adventist School took about half an hour whereas the focus group discussion with the Public Schools took one and a half hour. The focus group discussions were lead by two researchers.

In the focus group discussions teachers were asked to give their opinion on several topics. Topics were: (a) Teachers' experience of the transition of undocumented students to their classes, including problems they met and solutions the teachers had found for themselves. (b) Teachers' perception of undocumented students in comparison to documented students. This included differences between students in age and academic and social skills, communication between teachers and students and interaction between undocumented students and their documented peers. (c) Parental involvement. This included general involvement, the opportunity parents had to be involved, improvement of parental involvement and differences in parental involvement between parents of undocumented and parents of documented students. The final topic was about (d) Solutions. Teachers were asked to think of solutions for the problems mentioned in the topics above, including solutions made by teachers, parents, school and the government.

### **3.3.5 Teachers questionnaire.**

The teachers questionnaire was divided in two parts. The first part was a general questionnaire about their experiences with the transition and their view on undocumented students and the teaching job in general, whereas the second part focused on four randomly selected students in the teachers' own class; two documented and two undocumented. The first part consisted of closed and open questions, whereas the second part contained only closed questions.

#### ***3.3.5.1 Teachers questionnaire part one: general questionnaire.***

In order to get an insight in the perception of teachers on the incoming undocumented students and differences between documented and undocumented students, a questionnaire for teachers was designed by the researchers. The questionnaire contained 45 questions, divided in 32 statements shown as five-points Likert items with options one ("strongly disagree") to five

(“strongly agree”), four open questions and nine questions about standard information such as sex and age. Four of the 32 statements were combined to form the category “Peer interaction in general according to teacher”.

Scores can only be combined to a category score if the assertions or questions which form this category are consistent. The assertions or questions are consistent when they are logically related to each other. This can be tested with a statistical test called Cronbach’s alpha as explained in paragraph 3.3. In this case, the category “Peer interaction in general according to teacher” has a medium internal consistency of  $\alpha=.79$ . This means that the four questions which are used to form the category are strongly related to each other.

The other 28 statements were used separately and were centered around issues as a) the teachers’ opinion about the transfer of undocumented students to their schools; b) differences between documented and undocumented students; c) interaction between teachers and students and between students and their peers and d) parental involvement. The last two issues also made a differentiation between documented and undocumented students. Respectively examples for used statements about the issues indicated above are a) “I was well informed about the transfer of the undocumented students to my class”; b) “Most documented students do better at school than undocumented students”; c) “All children play together in my class” and d) “The parents of the children in my class are involved in what is happening in the school”

A pilot study was organized to increase the reliability and validity of the questionnaire. Teachers who attended the first focus group discussion were asked to read the questionnaire critically and propose additions if necessary. Some questions were adapted in order to avoid misinterpretations.

### ***3.3.5.2 Teachers questionnaire part two: questionnaire concerning four students.***

In order to get an insight in the difference between documented and undocumented students according to the teacher, a questionnaire for teachers was designed by the researchers. The teachers were requested to fill in 36 questions about two documented and two undocumented students in their class. The questionnaire was divided in 24 statements shown as five-points Likert items with options one (“strongly disagree”) to five (“strongly agree”), five questions with specified answering options and nine questions about standard information such as sex and age. Of the 24 statements using a Likert item, three items formed the category

“academic skills according to teacher” ( $\alpha=.78$ , which is considered a medium internal consistency, as explained in paragraph 3.3), with statements as: “I think this child needs extra help at school”. Ten items formed the category “social skills according to teacher” ( $\alpha=.88$ , which is considered a high internal consistency, as explained in paragraph 3.3), with statements as: “This child threatens other people or acts like a bully”. Five of the ten statements were based on the MESSY. Four items formed the category “peer interaction according to teacher” ( $\alpha=.69$ , which is considered a medium internal consistency, as explained in paragraph 3.3) with statements as: “This child is accepted by his/her classmates”. Three items formed the category “parental involvement according to teacher” ( $\alpha=.85$ , which is considered a high internal consistency, as explained in paragraph 3.3) with statements as: “The parents of this child are willing to assist with school activities”. Two items of the questions with specified answering options formed the category “students background according to teacher” ( $\alpha=.83$ , which is a high internal consistency, as explained in paragraph 3.3) with statements as: “As seen from my perspective, the upbringing of this child is:”. The remaining questions were used separate or the researches decided not to use them because these questions were considered not to be relevant to answer the research question.

### **3.3.6 Parents questionnaire.**

To get an insight in differences between documented and undocumented students concerning their home situation and in parental involvement from the perspective of the parents, a questionnaire for parents was designed by the researchers. This questionnaire contained an introduction with a simple explanation about the research and the guarantee that information would be used strictly confidentially. Names and other information were only used for the research and destroyed immediately after. The questionnaire existed of 44 items divided in eighteen statements shown as five-points Likert items with options one (strongly disagree) to five (strongly agree), thirteen questions with specified answering options, four open questions and nine questions about standard information such as sex and age.

One question in the parents questionnaire focussed on the social abilities of students. This question: “My child has social problems”, could be answered with “yes” or “no”. Another question focused on possible learning or behavioral disabilities of students, indicated by their parents. This question: “My child has a disability that affects his/her school learning progress:”

could be answered with different answers which were: a) Autism (or something in the area of autism); b) ADHD or ADD; c) Dyslexia (a seriously big problem with the alphabet, reading, writing, etc); d) Dyscalculia (a seriously big problem with numbers, counting, math, etc); e) Visual impairments; f) Problems with hearing; g) Stuttering or other speaking problems; h) I think there is something wrong, but I do not know what it can be; i) Something else, namely:...; j) No disability. With exception of answer “j”, all of these answers could indicate a social problem as a consequence of the learning or behavioral disability.

Seven questions in the parents questionnaire focused on the home environment according to parents, covering issues as income, number of brother and sisters and standard of living. Two examples of used questions: “When I look at the way I raise my children, I would consider this raising:” with the options “warm, supportive, listening, good rules/I am really tolerant/I am strict, rules are important/I do not have the time to look after my child. He or she will find out by him or herself what is right or wrong” and “I work hard to make ends meet, sometimes my children are alone for a while because of this.”

Two categories could be formed: “Satisfaction level about the teacher and the school” ( $\alpha=.84$ , which is considered a high internal consistency, as explained in paragraph 3.3) was formed with five statements such as “I trust the teacher of my child”. The category “Parental perspective on level of ability of the child” ( $\alpha=.62$ , which is considered a medium internal consistency, as explained in paragraph 3.3) was formed with two statements such as “I think my child will accomplish a lot of things because he/she has high learning abilities”.

The items “There is a PTA (Parent Teacher Association) or a PTF (Parent Teacher Foundation) on the school of my child” and “The information about how to attend the PTA is clear for me” were used to indicate the opportunities the school gave parents to be involved. Questions such as “The teacher invites me on a regular basis to talk about my child” were used to indicate the opportunities the teacher created for the parents to be involved.

A part of the remaining questions was used separately, the other part was considered to be not relevant for answering the research question. Questionnaires were available in English and Spanish, the most common languages on Sint Maarten. The questionnaires were handed out to the students with the notification that it was very important to ask their parents to fill in the questionnaire and to take it back to school. They were promised to receive a sticker if they managed to bring the questionnaire back to school, filled in by their parents or caretakers. The

questionnaires were distributed in an envelope without the name of the parents or the student. A pilot study was done with four colleagues at the Division of Educational Research, Policy and Innovations (DERPI) who were parents of children living on Sint Maarten. After some adjustments, the questionnaire was used for the research.

### **3.3.7 Student care coordinators: interview and questionnaire.**

An interview was held with a student care coordinator of one of the Public Schools. Because of privacy reasons this school will not be mentioned. The interview was done by two researchers to increase reliability. During the interview notes were made as well as an audio record. Topics for the interview were: (1) bottlenecks concerning the transition of undocumented students to the school, (2) parental involvement and ways to reach parents, (3) other possible improvements concerning undocumented students.

The interview was only used to create a questionnaire for student care coordinators. Topics of this questionnaire were equal to the topics of the interview. The outcomes of the interview were used to generate items. Closed questions were formulated in statements using a five-point Likert item. Fourteen closed statements were formulated. An example of a statement is: “Students should be tested before entering a class in order to find out their level and to investigate in what class they belong”. Next to the closed statements the questionnaire existed of five open questions. The response was processed qualitatively. An example of an open question is: “What problems do you as a student care coordinator meet concerning the transfer of undocumented students to your school?”.

### **3.3.8 Students questionnaire.**

To investigate students’ perception of the relation with their teacher and their peers, a questionnaire for students was created. Nine statements were constructed using the “What is Happening in This Class” (WIHIC) questionnaire (Fraser, 1998). The original questionnaire existed out of 80 statements using a five-point Likert frequency scale (as was explained in section 3.3). Decided was to make a short version of this questionnaire because the participants were not used to fill in questionnaires. Statements were simplified to make the test more comprehensible. For example the original question: “members of this class are my friends” was changed in: “my classmates are my friends”. While the original question: “the teacher takes a

personal interest in me” was changed in: “The teacher is interested in me”. All statements were read aloud by the teacher or by one of the researchers and difficult terms were explained. Whereas the original WIHIC made use of a five-point Likert frequency scale, a scale with smileys was created for this questionnaire. There were five smileys indicating how the student felt about the statement. These smileys are shown in figure 1.

Figure 1

Smileys used for the students questionnaire



The meaning of the smileys was explained to the students before they started the questionnaire. The first smiley indicated that they were always happy about the statement and was coded with five on the scale of one to five. The second indicated that they were often happy about the statement. This smiley was coded with four. The third smiley indicated that they felt indifferent about the statement, sometimes happy and sometimes sad, this smiley was coded with three. The fourth smiley indicated sadness concerning the statement, and was coded with two, whereas the last smiley indicated that they felt very sad about the statement. This smiley was coded with the lowest score: one. Before the actual research started the questionnaire had been criticized by two educationalists, five teachers, one school principal and the chairman of a school board. A pilot was done in one class to make sure students understood the statements. The results of the pilots indicated that students understood the questionnaire. Therefore, the results of these students were included in the actual research.

No consistent category could be made out of the four items concerning peers, hence decided is to use all items separately. Five items were used to create a category named “interaction with teacher”. One of these items was reversed, namely: “The teacher likes other students more than me”. This category was not internal consistent at first,  $\alpha = .37$ . This indicates that not all items measure the same as was explained in paragraph 3.3. However removing the reversed item increased the internal consistency to medium with a Cronbach’s alpha of .62 (which is considered as a medium internal consistency, as explained in paragraph 3.3). So for

this reason the remaining three items can be used in one category. The reversed item will not be used in this research.

### 3.3.9 Network analysis.

To examine the position of undocumented students in mixed classes, all students were asked to nominate three students that they liked most (LM) and three students in their class they liked least (LL) (Coie, Dodge & Coppotelli, 1982; Wasserman & Faust, 1994). Based on the number of positive (LM) and negative (LL) nominations a nomination chart is made of each class and a social status has been calculated for all students. The calculation has been done with a program developed by Walsh (2011) and was based on the method developed by Coie and colleagues (1982). The program used Z-scores of positive and negative nominations to calculate a social status for each student (Walsh, 2011). The calculation is presented in figure 2.

Figure 2

Calculation of z-scores

$$\frac{\text{Child's score LM-mean}}{\text{Standard deviation}} = \text{LM z-score} \qquad \frac{\text{Child's score LL-mean}}{\text{Standard deviation}} = \text{LL z-score}$$

Using the z-scores (zLM and zLL) two factors were calculated: Social preference (SP) and social impact (SI) displayed in figure 3 (Peery, 1979; Coie et al., 1982).

Figure 3

Calculation of social preference and social impact

$$\text{SP} = \text{zLM} - \text{zLL} \qquad \text{SI} = \text{zLM} + \text{zLL}$$

For Social Preference students will get a positive score if zLM is greater than zLL and a negative score if zLL is greater than zLM. An average social preference is indicated by scores close to zero. Social impact indicates whether students are nominated positive or negative. Using these calculations a social status is added to a combination of scores. Students could either get a “popular”, a “controversial”, a “neglected”, a “rejected” or an “average” status (Coie et al., 1982). The status “popular” was given when a student received high liking and low disliking

scores. When a student got high liking and high disliking scores a “controversial” status was given. A “neglected” status was given when a student received low liking and low disliking scores, while low liking and high disliking scores indicated a “rejected” status. Students got an “average” status when having average liking and disliking scores. To be able to compare students of different classes, the scores for social preference (SP) and social impact (SI) as well as the z-scores for liked most (zLM) and liked least (zLL) were used for determining a student’s status. A student was indicated as popular when SP was greater than 1.0, zLM greater than 0.0 and zLL was less than 0.0. A controversial status was given to students with SI greater than 1.0, zLM and zLL greater than 0.0. When SI was less than -1.0 and both factors zLM and zLL were equal to 0.0 the student’s social status was indicated neglected. A rejected status was set for students with SP less than -1.0, zLM less than 0.0 and zLL greater than 0.0. All students who did not fit in above mentioned categories received an average status. Seven classes were included in this method. Six were second grade (cycle one, year four) classes and one was a first grade (cycle one, year three) class. In total 159 students were participating, 86 boys and 73 girls, 26 of the students were undocumented, 16 boys and 10 girls.

### **3.3.10 Classroom observation.**

To investigate teacher-student interaction during lessons, open observations were held in eight different classes. At first the observers decided to use a structured observation schedule in which the observers could score observed behavior. This schedule was based on the INTERSECT observation system (Interactions for Sex Equity in Classroom Teaching) developed by Sadker, Sadker and Bauchner (1984) and used in various studies (Smith, 1991; Duffy, Warren & Walsh, 2001). The original instrument was made to measure differences in teachers’ interaction with boys and girls. Since this study investigated differences in teachers’ interaction with diverse groups of students, specifically documented and undocumented students, the method was believed to work. Using the observation schedule the observation was supposed to take 30 minutes.

As a pilot, two observations took place in two of the selected classes. Two observers filled in the observation schedule. This did not seem to be a reliable observation method because only ten minutes could be observed in the first pilot class, due to the fact that the students had to work for themselves after these ten minutes. It was possible to observe 30 minutes in the second



class, but there were large differences in classroom interactions. Interaction between the teacher and the whole class, interaction between the teacher and a small group of students while the other students worked for themselves and teachers' interaction with individual students were observed. Due to the relatively small amount of undocumented students in most classes, it seemed to be impossible to do reliable and comparable observations using a schedule. Therefore an open observation was preferred. The two pilot observations were not used for the analysis. One of the pilot classes was visited one more time to do the open observation. It was not possible to also visit the other class again. Seven open observations have been done, six were done in classes with documented and undocumented students and one was done at the Charles Leopold Bell School which had only undocumented students. This class was used as a control group. The amount of students in the mixed classes varied between 19 and 23 whereas the observed undocumented class had fifteen students. The observations took between 15 and 30 minutes and were done by two observers at the same time. During the observations the lessons were also audio recorded. After the observations the notes of the researchers were compared and in case there was an inconsistency the recording was used to verify the notes. The teachers knew that they were observed although they did not know the aim of the observations. The students of the class were not told that they were observed, but they saw the observers making notes while visiting their classes. During the observations the observers focused on the sections of the INTERSECT (Sadker et al., 1984). These were (a) initiator: teacher or student; (b) receiver: student, whole class, group, or teacher; (c) legal status of students involved, whether documented or undocumented (d) method: hand up, move toward, call out, or private; (e) evaluative type: praise, acceptance, remediation, and criticism; and (f) evaluative content: intellectual, conduct, appearance, and other.

### **3.3.11 Peer interaction observation.**

Peer interaction was measured by observations of undocumented students. For this reason the researchers chose to use the structured interaction schedule as used by Howes and Wu (1990). In their research about peer interaction they examined if students from different ethnic groups were interacting with each other. In the study of Howes and Wu (1990) students were observed for 20 seconds during free play. After this, the following student on the list was

observed. This was repeated eighteen times during six weeks. None of the students was the subject of observation more than once a day.

In this study the main concern was the social position of undocumented students in their (new) classes. The number of undocumented students in each class varied, ranging between one and eight. Therefore, the chance for a random student to interact with a documented student is much higher than the chance to interact with an undocumented student. Therefore no fair comparison could be made observing documented students and register their interaction with the undocumented students. Decided is to only observe undocumented students (from the selected classes) and find out how they are playing and interacting with documented and undocumented students. In order to make this research attainable, undocumented students were observed during three minutes. The types of interaction as well as the interaction partners observed were registered every twenty seconds. Consequently there were ten registration moments. The categories in the schedule were equal to these used by Howes and Wu (1990): the child is alone; the child interacts with a teacher; the child is attempting to enter a playgroup; the child is engaged in ongoing positive interaction with peers, playing and talking, and the child is engaged in conflict with peers either verbal or physical. The three last categories were divided into documented, undocumented and mixed peers. Also the total amount of positive and negative interaction as well as the total number of attempts to play was used. This distribution was not used at Charles Leopold Bell School, since this school had only undocumented students. At this school four students of the selected class were randomly chosen for the observation. To ensure reliability all observations were done by two observers. Both researchers filled in the same scheme and afterwards the schemes were compared to verify the scores. The observed students did not know that they were observed, although they could see the observers making notes while being in the schoolyard. Intended was to observe all students twice on different days with at least one week in between. Twelve undocumented students were observed twice. The scores on each category were calculated by adding the scores of the first observation to the scores of the second observation. Thus the scores on each category could vary between zero and twenty. These scores were processed quantitatively. Furthermore there were nine undocumented students who were only observed once, as they were absent when the second observation took place. For these students the scores on each category varied between zero and ten.

## 4. Results

### 4.1 Data Analysis

After the data was collected it was analyzed. All closed items in questionnaires were analyzed using the Statistical Package for Social Sciences (SPSS), version 16.0. In the student care coordinators questionnaire, the peer interaction observation and the first part of the teachers questionnaire, means and standard deviations were used to indicate the average level of agreement. In case there was a notable partition, frequencies or percentages per option (1-5) were reported as well. The mathematics test, unofficial reading assessment, MESSY, parents questionnaire, students questionnaire and the second part of the teachers questionnaire were analyzed using Independent-samples T Tests. This test assesses whether the means of two groups are statistically different or not (Field, 2005).

When testing whether there is a difference in distribution in categories, a Chi Square test can be used. This test compares the theoretical (expected) distribution to the observed (real) distribution (Field, 2005). A Chi Square test was used to analyze the distribution of social statuses in the section about network analysis and three questions of the parents questionnaire. The distribution of documented students was compared to the distribution of undocumented students.

Tests were run with a .05 or a .10 alpha level. This indicates the probability of rejecting the null hypothesis when in fact it was true (Field, 2005). In this study all test had as null hypothesis that the compared groups were the same on the research variable. The used level was reported in the results section with the symbol  $p$ . The higher the  $p$  the higher the change that differences are caused by coincidence.

Data from focus group discussions, classroom observations and the responses on open questions of parents, teachers and student care coordinators questionnaire were coded and afterwards reported.

## 4.2 Home Setting

### 4.2.1 The student and his or her academic and social-emotional skills.

#### 4.2.1.1 Academic skills.

##### 4.2.1.1.1 Singapore Math Test 1B.

The 139 participants of the Mathematical test scored in a range between four and 94 points. No significant differences were found between documented and undocumented students  $t(137)=0.327, p>.05$ , displayed in table 1. The outcome of an alpha value ( $p$ ) above .05 indicates that differences are not significant, as explained in paragraph 4.1.

Table 1

Descriptive statistics for mathematical test, divided by legal status

	documented students		undocumented students		$t$	Range
	$N$	$M (SD)$	$N$	$M (SD)$		
Math score	108	43.61 (19.22)	31	42.35 (17.62)	0.327	0.00-100.00

Analysis: Table 1 shows the average outcome (Mean) of documented ( $M=43.61$ ) and undocumented ( $M=42.35$ ) students. No significant differences were found using an Independent-samples T Test. This means that the difference in outcome is likely to be based on coincidence instead of a real difference between documented and undocumented students in Mathematical skills. Based on this outcome we can conclude that there is no difference in Mathematical performance between documented and undocumented students. Notable is the level of students in general. This is lower than could be expected, based on the fact that teachers and principals agreed that the content should be known by second grade students because the subjects were all treated in first grade. Principals and teachers agreed that an average score of 80 should be possible.

Contradicting to this outcome, a significant difference was found between documented and undocumented students in the period they attended the present school on the reference date as shown in table 2.

Table 2

Descriptive statistics for months in school, divided by legal status

	documented students		undocumented students		<i>t</i>	Range
	<i>N</i>	<i>M (SD)</i>	<i>N</i>	<i>M (SD)</i>		
Months in school	108	37.81 (16.63)	31	18.61 (15.80)	5.89*	0.00- ∞

\* $p < .05$ 

Analysis: on the basis of this table we can conclude that documented students attended the present school significant longer (with a mean of 37.81 months) than undocumented students (with a mean of 18.61 months). Also a significant positive correlation,  $r = .18$ ,  $p < .05$  has been found between the period in months the student is attending the present school and the math score. The longer a student attends the present school, the higher the outcomes of the Singapore Math test 1B. These two findings together indicate that a significant difference between documented and undocumented students in the outcome of the math test could be expected. However, this significant difference was not found, as showed in table 1. A cause of these contradicting findings may lay in the small research group or the large differences in math outcome between students in the same group.

#### 4.2.1.1.2 Unofficial reading assessment.

The 138 participants of the unofficial reading assessment scored in a range between one and 15 points. No significant differences were found between documented and undocumented students  $t(136) = 0.806$ ,  $p > .05$ , displayed in table 3. The outcome of an alpha value ( $p$ ) above .05 indicates that differences are not significant, as explained in paragraph 4.1.

Table 3

Descriptive statistics for score unofficial reading assessment, divided by legal status.

	documented students		undocumented students		<i>t</i>	Range
	<i>N</i>	<i>M (SD)</i>	<i>N</i>	<i>M (SD)</i>		
Score unofficial reading assessment	105	6.80 (4.13)	33	6.15 (3.70)	0.806	0.00-15.00

Analysis: The table shows no significant difference between documented ( $M = 6.80$ ) and undocumented ( $M = 6.15$ ) students. This means that the reading level of the documented and undocumented participants can be assumed to be equal. Notable is the level of students in

general. This is lower than could be expected, based on the fact that teachers and principals agreed that the level should be around 8 which correspond with level “G” in Reading a-z (Reading A-Z, 2011).

4.2.1.1.3 Differences in Math and reading scores between schools.

The Hillside Christian School scored significantly higher than the other schools both on mathematics and reading skills,  $t(137)=-5.603, p<.05$ , and  $t(136)=-2.299, p<.05$ , as shown in table 4. The outcome of an alpha value ( $p$ ) lower than .05 indicates that differences are significant, as explained in paragraph 4.1.

Table 4

Descriptive statistics for score Singapore Math Test 1B and unofficial reading assessment, divided by Hillside Christian Schools and other schools.

	Students at Hillside Christian School		Students at other schools		<i>t</i>	Range
	<i>N</i>	<i>M (SD)</i>	<i>N</i>	<i>M (SD)</i>		
score Singapore Math Test 1B	22	62.00 (18.52)	117	39.82 (16.75)	-5.603*	0.00-100.00
Unofficial reading assessment	21	8.48 (4.61)	117	6.32 (3.84)	-2.299*	0.00-15.00

\* $p<.05$

Analysis: The scores showed in the table indicate that the mathematic and reading skills at the Hillside Christian School were higher than the skills of students at the other participating schools. The average score of students at Hillside Christian School for mathematics is 62.00 whereas the average score of students who are attending other schools is 39.82. The average score of students at Hillside Christian School for reading is 8.48 whereas the average score of students who are attending other schools is 6.32. The high standard deviation (in the table displayed as *SD*) indicates that the differences between students are very large. A reason why the Hillside Christian School did score significantly higher than the other schools may lay in areas such as used methods, teaching skills or Remedial Teaching programs. Another explanation could be that teachers at Christian Hillside School might be better equipped to deal with students with special needs.

However after removing the results of students at Hillside Christian School, no significant differences were found between documented and undocumented students on mathematics score,  $t(115)=0.000, p>.05$  and reading score,  $t(115)=-.466, p>.05$ . There are found no significant differences in mathematics score and reading level between documented and undocumented students at Hillside Christian School and other participating schools.

#### *4.2.1.1.4 Focus group discussions with teachers*

Some answers during the focus group discussions with teachers concerned the issue of possible differences between documented and undocumented students on the academic level. Statements during the focus group discussion for Public Schools which indicated some differences were: “Some students come in with little to no knowledge and poor skills”, “Undocumented students have a limited knowledge of English”, “Some undocumented students are achieving low or have poor handwriting”, “Some undocumented can not read and have no or limited pre-reading skills.”, “Most undocumented students can count and do some math’s but just simple adding and subtraction below the average level”. Other answers were more nuanced: “My perception between documented and undocumented varies. It depends on the individual child. There are undocumented students that do well and documented students who do not well and vice versa.” and “Academic, there is not much of a difference, their performance is just as low as the other students”. Some teachers indicate that they do not meet problems because “By the time they came to this class they came from lower classes in this school”.

During the focus group discussion on Hillside Christian School teachers were asked about differences between documented and undocumented students mentioned was: “I meet no problems and did not even notice that the student was undocumented”, “I see no differences” and “It depends on the fact if the child did attend another school before or not”, “Some children need some catching up and get extra help in classroom.”

Teachers on the Seventh Day Adventist School indicated: “Language is a problem. Children that come to school without speaking English need remedial help. Most of the time, another student can translate for the students that does not speak English.”.

#### *4.2.1.1.5 Teachers questionnaire part one: general questionnaire.*

Two statements in this questionnaire were about the difference between documented and undocumented students on the level of academic abilities. The statement “There is a difference in performance between documented and undocumented students” could be answered with a score between 1 (“strongly disagree”) and 5 (“strongly agree”). The teachers (N=13) answered the first statement with a mean of 2.54 and a standard deviation of 1.33.

The teachers (N=13) answered the statement “Most documented students do better at school than undocumented students” with a mean of 2.69 and a standard deviation of 1.31.

Three of the used statements concerned the skills of students and the knowledge of the teachers in how to deal with possible differences. A relevant statement was: “I had a training in strategies for ‘English as a second language (ESL)’”. The other item was: “I had an official training in strategies for ‘English as a second language’ (ESL)”. Six of the fifteen participating did not answer this question. Three answered with “yes” five chose the option “no” and one answered “I had a training but I do not know whether it was official or not”. Another relevant statement was: “I get frustrated because the differences between the student’s learning levels are too large”. Two teachers did not fill in this question, eight of the fifteen teachers answered with “strongly agree” (5) or “agree” (4), four teachers chose “neither disagree, nor agree” (3) and one teacher answered “strongly disagree” (1) (M = 3.54, SD = 0.97). A statement concerning possible language barriers was: “There are too much students who do not speak English as their first language in my classroom”. One teacher did not fill in this question, ten teachers answered “strongly disagree” (1) or “disagree” (2), three teachers answered with “agree” (3) and one teacher chose “neither agree, nor disagree” (4). (M = 2.29, SD = 1.07).

A question about the possibility of a transition period was: “It would have been better if there was a transition program for undocumented students”. Most teachers answered this question with “agree” (4) or “strongly agree” (5) (M = 4.64, SD = 0.74).

A more general statement about undocumented students was: “Problems I face in my work as a teacher concerning the undocumented students are:”. One teacher mentioned learning disabilities, three teachers mentioned an academically low level and one teacher mentioned a language barrier.



4.2.1.1.6 *Teachers questionnaire part two: questionnaire concerning four students.*

In the category “academic skills according to teacher”, students’ scored within a range between three and 15. No significant differences were found between documented and undocumented students,  $t(39) = -0.385, p > .05$ , displayed in table 5.

Table 5

Descriptive statistics for “academic skills according to teacher”, divided by legal status.

	documented students		undocumented students		<i>t</i>	Range
	<i>N</i>	<i>M (SD)</i>	<i>N</i>	<i>M (SD)</i>		
Academic skills according to teacher	21	10.48 (2.32)	20	10.85 (3.76)	0.358	3.00-15.00

Analysis: the table shows that documented students score an average (*M*) of 10.48 whereas undocumented students score with an average of 10.85. The high alpha level (above .05) indicates that there is no significant difference between the two groups. Teachers do not think there is a difference in academic skills between documented and undocumented students.

4.2.1.1.7 *Student care coordinators questionnaire.*

Several statements were formulated to investigate the perspective of student care coordinators regarding to academic differences between documented and undocumented students and the transition of undocumented students to FBE schools. The statements and their accompanying scores are shown in table 6.

Table 6

Descriptive statistics of student care coordinators questionnaire

	<i>N</i>	<i>M (SD)</i>	Range
I expect problems with the transfer of undocumented students in the ages from 10 –12 years from unofficial schools to my school.	10	4.10 (0.74)	1.00-5.00
Students should be tested before entering a class in order to find out their level and to investigate in what class they belong.	10	4.80 (0.42)	1.00-5.00
It would be good if there was something like a transitional year for new students in order to find out their level and make them ready to enter my school.	10	3.60 (1.58)	1.00-5.00

Analysis: the results of table 6 indicate that student care coordinators: a) Expect problems with the transition of undocumented students in the ages from 10-12 years from unofficial schools to their school. The average outcome of this statement was 4.10 in a range between one and five. This means that student care coordinators generally agree or strongly agree with the statement. b) Think that students should be tested before entering a class. In a possible range of one to five, the average score was 4.80. This means that student care coordinators generally chose the option “strongly agree” (5) with the statement. c) Think it would be good if there was something like a transitional year for new students. In a possible range of one to five, the average score was 3.60. This means that a small majority of student care coordinators agrees with this statement.

The open questions in the questionnaire for student care coordinators also resulted in some statements about the academic level of documented and undocumented students: “There is lack of a transitional school for students with a language barrier”, “Their academic level does not correspond to their age and placement in class, so they often need additional help from the teacher and student care coordinator”, “Lots of learning problems” and two student care coordinators mentioned a language barrier. Four student care coordinators mentioned the absence of a report card. They noted that if undocumented students did take a report card with them, it does not give a true picture of the academic level of the student. This is corresponding with the outcome of the statement about testing of new incoming students as shown in table 6. Because most undocumented students do not have reliable information about their skills and abilities, student care coordinators agree that testing is an important factor when dealing with incoming undocumented students.

One open question asked the student care coordinators about their expectations for the future, when older groups of undocumented students are expected to enter the FBE schools. Answers on this question were: “I expect a drop in the literacy rates”, “I am concerned about the level of understanding and ability of the student to cope with the instructions” and “Some students have had little or no schooling. In which grade should the school put this child?” These outcomes also correspond with the outcomes as shown in table 6. Student care coordinators expect problems with undocumented students in the future and they expect these problems to lie in the area of literacy, understanding and growing age or ability differences between students. Student care coordinators do not know where to place incoming students with no or little

schooling experience. Their consideration was that placing those students in the corresponding age group will ask a lot of the teacher because in that case the teacher has to deal with growing differences in academic skills. But when an older student is placed in a lower grade with corresponding academic challenges, the student could suffer psychologically because of a different level of age and (psychological and physical) development between this student and his or her classmates.

#### *4.2.1.1.8 Parents questionnaire*

In the category “parental perspective on level of ability child”, students could score within a range of two as a theoretical minimum score and 10 as a theoretical maximum score. The students scored within a range of four and 10 with a mean of 8.12 and a standard deviation of 1.32 ( $N=67$ ). No significant differences were found between documented and undocumented students  $t(65)=0.152, p>.05$ . The high alpha level (above .05) indicates that possible differences are expected to be based on coincidence as explained in paragraph 4.1. Parents of undocumented students have the same perspective on the level of abilities of their children as parents of documented students have. The high average score of 8.12 indicates that most parents have a positive view on the abilities of their children.

#### *4.2.1.3 Social-emotional skills.*

##### **4.2.1.3.1 Self report (MESSY).**

Students could score within the theoretical range of 16 and 80 for positive statements. The students scored within a range of 20 and 79 with a mean of 46.88 and a standard deviation of 13.47. For the negative statements, the students could score within the theoretical range of 15 and 75. The students scored within a range of 15 and 71 with a mean of 29.42 and a standard deviation of 9.40. No significant differences were found between documented and undocumented students  $t(134)=-0.696, p>.05$ , for the positive score on MESSY. Also no significant differences were found between documented and undocumented students  $t(134)=0.489, p>.05$ , for the negative score on MESSY, displayed in table 7.

Table 7

Descriptive statistics for MESSY positive score and MESSY negative score divided by legal status.

	documented students		undocumented students		<i>t</i>	Range
	<i>N</i>	<i>M (SD)</i>	<i>N</i>	<i>M (SD)</i>		
MESSY positive score	108	46.47 (12.86)	28	48.46 (15.73)	-0.696	16.00-80.00
MESSY negative score	108	29.62 (9.53)	28	28.64 (9.02)	0.489	15.00-75.00

Analysis: there is no significant difference found between documented and undocumented students in social-emotional skills. The alpha level is above .05.

#### 4.2.1.3.2 Focus group discussions with teachers.

Some answers during the focus group discussions with teachers, concerned differences between documented and undocumented students on the social-emotional level. Statements during the focus group discussion for Public Schools which indicated some differences were: “Some students come in streetwise. Their focus is on survival skills, and they show less concentration”. Teachers indicate that some undocumented students have social issues by saying: “They find it difficult to adjust to a classroom setting and want to play a lot”. Some teachers even experience undocumented students with psychological problems and disturbed behaviors like very aggressive and sudden outbursts. They also see students with low social skills who find it difficult to follow rules. A teacher said: “Some cannot follow rules because at home they can do what they want”. Next to this cause, teachers blame the various changes in for example language, country and culture an undocumented student can experience in a short time. “School can be a complete new setting for the student. All the changes can result in social issues such as integration anxiety”. Some teachers also note that they are worried about the transition of older students to secondary education. They mention that some undocumented students are left with serious emotional damage. Other teachers say they do not experience social issues with undocumented students. They do not see a difference between documented and undocumented students. This corresponds with the outcome of the MESSY as shown in table 7, as there is found no significant difference between documented and undocumented students in social-emotional skills using the self-report method MESSY.

Teachers at the Hillside Christian School and the Seventh Day Adventist School did not mention differences between documented and undocumented students on the social-emotional level.

Although the outcome of the MESSY and most focus group discussions with teachers do not indicate there are differences between documented and undocumented students on the area of social-emotional skills, the few statements of teachers during the focus group discussions on the Public Schools have to be taken seriously. Most of these statements indicate that the difference in upbringing environment and the lack of educational experience of undocumented students cause the differences between documented and undocumented students on the area of social-emotional skills.

#### *4.2.1.3.2 Teachers questionnaire part two: questionnaire concerning four students.*

In the category “social skills according to teacher”, students could earn a score in the theoretical range between 10 and 50, the higher the score the better the social skills. The students (N=37) scored within a range of 20 and 50 with a mean of 38.56 and a standard deviation of 7.73. No significant differences was found between documented and undocumented students  $t(35).075, p>.05$ . Differences between documented and undocumented students are based on coincidence as explained in paragraph 4.1. This outcome corresponds for the largest part with the outcome of the MESSY and the focus group discussions with teachers with exception of some statements during the focus group discussions of the Public Schools.

#### *4.2.1.3.3 Parents questionnaire.*

Most (91%) of the participating parents (N=55) answered “no” on the question “My child has social problems”. Five parents (9%) indicated “yes” as answer for this question. Nineteen of the parents (26%) who filled in the questionnaire, did not answer this question. Of the parents (N=68) who answered the question, “My child has a disability that affects his/her school learning progress”, 56 (82%) did answer “No disability”. Five (7%) parents answered “I think there is something wrong, but I do not know what it can be”. Both Autism and Dyscalculia were mentioned once (2%) and problems with hearing was mentioned twice (3%) Three parents choose the option “Something else”, but did not mention what was wrong. Six parents (8%) did not answer this question. No significant differences were found between documented and

undocumented students according to parents  $\chi^2(5, N=68)=2.781, p>.05$ . The high value of alpha (above .05) indicates that differences between documented and undocumented students are based on coincidence as explained in paragraph 4.1. This outcome corresponds with the outcomes of the MESSY, the focus group discussions with teachers and the teachers questionnaire part two.

#### *4.2.1.3.4 Student care coordinators questionnaire.*

The open questions in the questionnaire for student care coordinators resulted in some statements about the social-emotional level of documented and undocumented students: “Lots of behavioural and learning problems” were mentioned. Another student care coordinator wrote: “There is an absence of a special education school for behavioral problems. Currently there is only one school for Special Education while there are diverse types of learning challenges. Not all learning challenges can be treated at that school.”. Student care coordinators also indicate that there is a lack of specialists to care for students and their specific needs. They see a problem occurring when new undocumented students enter the school during the year: “When students are admitted into the school between January and June, they sometimes experience integration anxiety and frustration, especially if they have emotional, learning, or social challenges”. These statements display the concerns student care coordinators have about undocumented students. Even if there are no differences in social-emotional skills, the undocumented students should be treated with care and their history and moment of attending the new school should be planned carefully according to student care coordinators. They also indicate a lack of specialists to take care of students with special needs. It is possible that some social-emotional problems are overlooked by teachers who are not trained on that area. Possible integration anxiety and frustration can be misinterpreted and without a good treatment become larger social-emotional problems. Student care coordinators are warning for this possibility when the amount of specialists will not increase in the future.

### **4.2.2 Home environment and parental involvement.**

#### *4.2.2.1 Home environment.*

##### *4.2.2.1.1 Focus group discussions with teachers.*

Some statements during the focus group discussion with teachers of the Public Schools concerned the home environment of undocumented students: “Some parents aren’t able to help

because of a language problem or illiteracy”, “Going to FBE schools can be a financial relief for parents of undocumented students. Some cannot afford an undocumented school, for which they need to pay a school fee”, “Some parents work on two jobs”, “Teachers try to get contact with parents about problems and offer solutions. Not all parents use this opportunity”, “Parents sometimes do not have time to help their child”, “Some parents are illiterate and cannot help. This not always has to do with the legal status”.

Teachers at the Hillside Christian School did not mention differences between documented and undocumented students concerning their home environment. Teachers at the Seventh Day Adventist School mentioned: “Children are often not the priority of parents who choose to come to the island to work. The children have to adjust to the parental program and parents decide that working is more important than raising the children.”, “Local people have a wider family circle. The family can take care of the children while the parents are working”, “The differences between non-local and local (foreign/non foreign) are larger than the differences between documented and undocumented: Foreign parents often do not get support at home from family and do not have the time to support the children because they have to work”.

4.2.2.1.2 *Teachers questionnaire part two: questionnaire concerning four students.*

For the category “students background according to teacher”, students could score within a theoretical range of 2 and 9. The students (N=38) scored between 2 and 9 with a mean of 6.87 and a standard deviation of 1.95. No significant differences were found between documented and undocumented students  $t(36)=.126, p>.05$ , displayed in table 8.

Table 8  
Descriptive statistics for “students background according to teachers”, divided by legal status.

	documented students		undocumented students		<i>t</i>	Range
	<i>N</i>	<i>M (SD)</i>	<i>N</i>	<i>M (SD)</i>		
Students background according to teacher	21	6.90 (1.79)	17	6.82 (2.19)	0.126	2.00-9.00

Analysis: The differences between documented and undocumented students are likely to be based on coincidence as explained in paragraph 4.1. The table shows that teachers think that the background of documented and undocumented students is about the same. The outcome of the

parents questionnaire will show if parents also do not indicate that there is a difference in background between documented and undocumented students.

#### *4.2.2.1.3 Parents questionnaire*

The outcomes of the seven questions about home environment according to parents are displayed in table 9.

No significant differences were found between undocumented and documented students on the items: “When I look at the way I raise my children, I would consider this raising:”,  $t(66) = -0.666$ ,  $p > .05$ , “Our family background is:”,  $t(68) = 0.620$ ,  $p > .05$ , “I work hard to make ends meet. Sometimes my children are alone for a while because of this”,  $t(65) = -0.580$ ,  $p > .05$ , “I make some time for me and my children every day to play with them or talk with them”,  $t(69) = -0.481$ ,  $p > .05$ .

Significant differences between the background of documented and undocumented students were found for the items: “My child has: (number of brothers and sisters)”,  $t(71) = 1.883$ ,  $p < .05$ . Undocumented students in the research group had significant fewer brothers and/or sisters (an average of 1.59) than documented students (with an average of 2.59). “Our family income (in dollars per month):”,  $t(61) = 1.474$ ,  $p < .10$ , Parents of undocumented students had significant lower incomes (an average of 850 U.S. Dollar, while parents of documented students earn an average of 1145 U.S. Dollar) and “My family and my child have experienced some really difficult times”,  $t(64) = 2.370$ ,  $p < .05$ , and had experienced significantly more difficult times. Parents of undocumented students score a 4.00 in a range between one and five on the statement while parents of documented students score an average of 3.02.



Table 9

Descriptive statistics for home environment according to parents, divided by legal status

	documented students		undocumented students		<i>t</i>	Range
	<i>N</i>	<i>M (SD)</i>	<i>N</i>	<i>M (SD)</i>		
My child has: (number of brothers and sisters)	56	2.59 (2.07)	17	1.59 (1.28)	1.883*	0.00- ∞
When I look at the way I raise my children, I would consider this raising:	51	1.57 (.88)	17	1.41 (.71)	-0.666	1.00-4.00
Our family income (in dollars per month):	48	1145.83 (736.28)	15	850.00 (430.95)	1.474**	250-2750
Our family background is:	54	3.37 (1.07)	16	3.19 (.91)	0.620	1.00-5.00
I work hard to make ends meet. Sometimes my children are alone for a while because of this	52	3.06 (1.43)	15	2.80 (1.78)	-.580	1.00-5.00
I make some time for me and my children every day to play with them or talk with them	55	4.27 (.73)	16	4.38 (.81)	-.481	1.00-5.00
My family and my child have experienced some really difficult times	51	3.02 (1.39)	15	4.00 (1.46)	2.370*	1.00-5.00

\* $p < .05$ \*\* $p < .10$ 

Analysis: on the basis of this table we can conclude that on some of items, the home environment of undocumented students significantly differs from their documented peers on some areas. A lower income, less brothers and sisters and more often experiences of difficult times are these found areas. This outcome is contradicting with the outcome of the teachers questionnaire. Teachers did not indicate a difference in the background of documented and undocumented students. A possible explanation for this contradiction could lie in a lack of communication between teachers and parents.

#### ***4.2.2.2 Parental involvement***

##### *4.2.2.2.1 Focus group discussions with teachers*

Some statements during the focus group discussions with teachers of the Public Schools concerned the parental involvement of undocumented parents. An example: “Our experiences at school, homework etcetera are fairly ok. Most parents are involved. Some parents cannot assist due to a language barrier or illiteracy. Some parents are very involved, while others are too busy with their jobs”. Teachers at Public Schools mentioned that students with involved parents in most cases do very well at school. They did not see a difference between documented and undocumented, although undocumented parents sometimes had more jobs to fulfill. Teachers experience that parents of undocumented students often were very grateful that their child is allowed at a FBE school.

Teachers at the Hillside Christian School said: “Always the same parents are involved, but this problem is taking place on every school. The motivation has to come from parents themselves”. Teachers mention that parents are not really helping with school activities, due to the fact they have more than one job. About the PTA a teacher said: “There is a PTA-board with a parent as the head, but this has to be evolved. They now do things like fund raising. Another task could be providing a reading program for parents. Parents helped in remedial teaching and reading in the past. Now they try to get it running again”. All teachers said they keep encouraging parents to be involved.

At the Seventh Day Adventist School, teachers indicate: “Some of the undocumented parents have a lot of interest in the education and are always active in school activities. Especially parents from South America”. Apart from this experience, teachers see no difference in parental involvement between documented and undocumented parents. They do mention that parents have language barriers sometimes and that communication with these parents is very difficult. All information is only provided in English. One teacher said: “Communication with parents (letters, school reports) takes place in English. Efforts to translate this kind of communication are needed. Translation of workshops for parents can be planned in the future”. Overall, Teachers at Seventh Day Adventist School are slightly positive: “The school asks parents to come to the open house days or to help at a beach day. Parents can help the teacher by fundraising or on a sports day. It can be improved, but it is pretty good right now. Some parents are always there no matter what.”

4.2.2.2.2 *Teachers questionnaire part two: questionnaire concerning four students.*

The theoretical minimum of the category “parental involvement according to teacher” is three whereas the theoretical maximum is fifteen. The students ( $N=41$ ) scored within a range of four and fifteen with a mean of 9.49 and a standard deviation of 3.49. No significant differences were found between documented and undocumented students  $t(39)=.244$ ,  $p>.05$ , displayed in table 10. This means that differences between documented and undocumented students are based on coincidence as explained in paragraph 4.1.

Table 10

Descriptive statistics for “parental involvement according to teacher”, divided by legal status.

	documented students		undocumented students		<i>t</i>	Range
	<i>N</i>	<i>M (SD)</i>	<i>N</i>	<i>M (SD)</i>		
Parental involvement according to teacher	21	9.62 (3.65)	20	9.35 (3.41)	0.244	3.00-15.00

Analysis: on the basis of this table we can conclude that there is no significant difference found in the way teachers think that parents of documented and parents of undocumented students are involved in class and school activities.

4.2.2.2.3 *Parents questionnaire.*

For the category “satisfaction level about teacher and school”, the theoretical minimum was five and the theoretical maximum was 25. The parents of the students scored within a range of sixteen and 25 with a mean of 21.47 and a standard deviation of 2.67. No significant differences were found between documented and undocumented students  $t(62)=-1.537$ ,  $p>.05$ , displayed in table 11.

Table 11

Descriptive statistics for “satisfaction level about the teacher and the school”, divided by legal status.

	documented students		undocumented students		<i>t</i>	Range
	<i>N</i>	<i>M (SD)</i>	<i>N</i>	<i>M (SD)</i>		
Satisfaction level about the teacher and the school	50	21.20 (2.76)	14	22.42 (2.14)	-1.537	5.00-25.00

Analysis: on the basis of the results in table 11, we can conclude that both groups of parents score quite high which means that they are in general satisfied about the teacher and the school. There are no significant differences found between parents of documented and parents of undocumented students in their satisfaction about the teacher and the school and differences between these groups are based on coincidence as explained in paragraph 4.1.

The outcomes of three questions relating to parental involvement according to parents are displayed in table 12. No significant differences between undocumented and documented students were found on the items: “I do not think that it is important to be involved in school activities. Since this is the task of a teacher”,  $t(64)=-.710, p>.05$ , “I would like to be involved in class activities”,  $t(64)=-1.579, p>.05$  and “If my child gets homework, I would help my child with this homework to my best abilities”,  $t(68)=.613, p>.05$ . The high alpha levels (above .05) indicate that differences are based on coincidence as explained in paragraph 4.1.

Table 12

Descriptive statistics for parental involvement according to parents, divided by legal status

	documented students		undocumented students		<i>t</i>	Range
	<i>N</i>	<i>M (SD)</i>	<i>N</i>	<i>M (SD)</i>		
I do not think that it is important to be involved in school activities. Since this is the task of a teacher	51	2.24 (1.39)	15	1.93 (1.62)	-0.710	1.00-5.00
I would like to be involved in class activities	52	3.58 (.89)	14	4.00 (.88)	-1.579	1.00-5.00
If my child gets homework, I would help my child with this homework to my best abilities	55	4.49 (.60)	15	4.60 (.63)	-0.613	1.00-5.00

Analysis: The scores shown in this table indicate that both parents of documented and parents of undocumented students generally disagree with the statement “I do not think that it is important to be involved in school activities. Since this is the task of a teacher”. The outcome of this statement shows that parents think it is important to be involved in school activities. This

outcome is further emphasized by the outcome of the statement “I would like to be involved in class activities” because on the average of parents answer this statement with “agree” (4). Most parents indicate that if their child gets homework, they help their child to their best abilities. No significant differences were found between parents of documented and parents of undocumented students.

Parents of undocumented students responded significantly more often with the answer “yes” on the item “I help the teacher/school with school activities”,  $\chi^2 (1, N = 72) = 3.700, p < .10$ . A large percentage (65%) of the parents of undocumented students answered this statement with “yes” whereas 38% of the parents of documented students answered this statement with “yes”. This outcome does not correspond with the outcome of the category “parental involvement according to teacher”. No differences between documented and undocumented parents were found in this category. A possible explanation for this discrepancy could lie in positive discrimination. Teachers might not want to point out a difference between documented and undocumented parents and therefore possibly do not notice that parents of undocumented students are involved in school activities more often.

Parents were asked two questions about the opportunities the school gives them to be involved. The statement “There is a PTA (Parent Teacher Association) or a PTF (Parent Teacher Foundation) on the school of my child.” was answered by only 56 parents. Of this group, 70% filled in this statement with “yes”, 8% answered “No” and 22% the parents answered “I do not know”. The statement “The information about how to attend the PTA is clear for me” was answered by 60 parents. Thirty nine parents, 65% said “yes” in answer to this statement. Twenty one parents, 35%, said “no”. The frequency of answering “yes” or “no” did not differ by legal status,  $\chi^2 (2, N = 65) = 2.140, p > .05$ . The high alpha level (above .05) indicates that differences between documented and undocumented students are based on coincidence as explained in paragraph 4.1. However no significant differences were found between documented and undocumented parents, the outcome of these statements indicate that the information about PTA’s can be improved because not all parents state that there is a PTA and not all parents indicate that the information about the PTA is clear to them.

### **4.3 School setting**

#### **4.3.1. Perception of teachers and student care coordinators on the transition of undocumented students.**

##### ***4.3.1.1 Focus group discussions***

A large problem mentioned in all focus group discussions is that students come in at all points of the year and if there is space left, a school has to welcome them. A teacher described this as follows: “If students are placed during the year, we have to start all over again”. A teacher mentioned that school can be a complete new setting for a child. Some students cannot follow rules, because they never learned this at home. In two of the focus group discussions was also mentioned that some students come in “streetwise”. They were used to focus on survival skills and they have less concentration. A limited knowledge of English was mentioned during one focus group discussion, however in all focus group discussions teachers expected this to become a larger problem when compulsory education will be enforced for the group of students in the ages of 10 to 12. Therefore teachers stated that students that are coming in should be screened. They also mentioned that it would be good if students just come in at previously determined dates. This could be once, twice or three times during a school year. A solution mentioned for students that come in before these dates was that they could go to a kind of transitional class in which they can be tested and prepared before entering the class. Some teachers did not experience many problems, because by the time the undocumented students came in their class they came from lower classes in the same school.

In two focus group discussions there was mentioned that no provisions were made before implementing compulsory education. Teachers stated that they did not receive sufficient information before the students came in and that they had no time to support the individual child. They felt no truly listening ear and did not get assistance in handling these new students. Teachers reported to have worries about the transfer to secondary education. However during the focus group discussion with the Hillside Christian School teachers declared to be well informed about the transition. All teachers agreed with one teacher saying: “We are happy to receive the students”. This could be an indication that teachers at Hillside Christian School are better equipped to deal with students with special needs.

#### 4.3.1.2 Teachers questionnaire part one: general questionnaire.

The teachers questionnaire consisted of four items concerning the transition of undocumented students to their classes. The first item was about the satisfaction of teachers with the information they received concerning the transition of undocumented students to their class. This item could be rated in a scale from one to five Teachers rated the information they received regarding to the transition low ( $M= 2.30$ ,  $SD = 1.32$ ). Since Hillside teachers indicated to be well informed during the focus group discussion, this group of teachers was compared to the rest of the teachers. The results are presented in table 13.

Table 13

Hillside teachers compared to other teachers in satisfaction on received information.

"I was well informed concerning the transition of undocumented students to my class"				
	Hillside teachers		other teachers	
	<i>N</i>	%	<i>N</i>	%
strongly disagree	1	20%	3	37.5%
disagree	3	60%	2	25%
neither agree, nor disagree	0	0%	1	12.5%
agree	1	20%	1	12.5%
strongly agree	0	0%	1	12.5%

Analysis: on the basis of this table we can conclude that most teachers on Hillside school (80%) and on other schools (62.5%) indicated to be dissatisfied with the information they received concerning the transition of undocumented student to their schools. However at Hillside Christian School most teachers (60%) chose for “disagree” (2) whereas on other schools most teachers (37.5%) indicated “strongly disagree” (1).

No significant differences in average scores were found between Hillside Christian School and other schools when comparing the means,  $t(11)=.224$ ,  $p>.05$ , presented in table 14.

Table 14

## Descriptive statistics for information about transition

	Hillside teachers		Other teachers		<i>t</i>	Range
	<i>N</i>	<i>M (SD)</i>	<i>N</i>	<i>M (SD)</i>		
I was well informed about the transition	5	2.20 (1.10)	8	2.38 (1.51)	.224	1.00-5.00

Analysis: on the basis of the scores in this table we can conclude that teachers of Hillside Christian School as well as teachers of other school indicated to be not sufficiently informed about the transition of undocumented students to their school. No significant difference was found between the two groups.

Teachers were also asked to rate some items relating to the new situation. Most teachers disagreed with the item: “I think it would have been better for undocumented students to stay at the former schools”, 29 % chose for “strongly disagree” (1) and 14% indicated “disagree” (2). A large part (43%) chose for the option “neither agree, nor disagree” (3), none of the teachers indicated “agree” (4) and “strongly agree” (5) was indicated by 14%. The average was 2.57 with a standard deviation of 1.34. This could indicate that teachers have different opinions about this item. It seems that most teachers do not know whether to agree or to disagree. Most teachers disagreed with the statement “It was good for my school to receive new undocumented students”, 23 % chose for “strongly disagree” (1) and another 23% indicated “disagree” (2). The option “neither agree, nor disagree” (3) was selected by 38% and the options “agree” (4) and “strongly agree” (5) were both indicated by 8%. The average was 2.54 with a standard deviation of 1.20. The percentages show that a large amount of the teachers reported that it was not good for their schools to receive the undocumented students. However none of the teachers agreed (option 4 and 5) with the statement: “the atmosphere in my class was better before the transfer of undocumented students to my class”, 38.5% indicated “strongly disagree” (1) and another 38.5% indicated “disagree” (2). The option “neither agree, nor disagree” (3) was reported by 23%. The average for this item was 1.85 with a standard deviation of 0.80. This indicates that teachers in general reported that the quality of the atmosphere in their class did not decrease due to the entrance of the undocumented students.



To investigate whether teachers had the knowledge to manage the new group of undocumented students in their classes, two items were set. Most of the teachers (54%) choose the option “neither agree, nor disagree” (3) for the item: “I have the knowledge to handle problems by myself that occurred due to the transfer”. “Disagree” (2) was indicated by two teachers (15 %) and “strongly disagree” (1) by one teacher (8%). However one teacher (8%) choose for “strongly agree” (5) and two (15%) pointed “agree” (4). The average was 3.00 with a standard deviation of 1.00. This indicates that the knowledge teachers have concerning handling problems could be improved. The other item was: “I had an official training in strategies for ‘English as a second language’ (ESL)”. Only nine teachers (56%) did respond to this item. Only three of them indicated “yes” and five choose for “no” one reported: “I had a training but I do not know whether it was official or not”. So we can conclude that just a small number of the teachers indicated that they had a training, thus this could be a point of attention. Most of the teachers (79%) rated the statement “It would have been better if there was something like a transitional class for undocumented students before they enter my class”, with “strongly agree” (5). The minimum given rank was three (“neither agree, nor disagree”), whereas the minimum possible rank was one (“strongly disagree”). The average rank for this item was 4.64 with a standard deviation of 0.74. This indicates a clear need for a transitional class.

#### ***4.3.1.3 Student care coordinators questionnaire.***

Student care coordinators were asked what problems they experienced concerning the transition of undocumented students. Eleven participants filled in the questionnaire. One of the open questions was: “What problems do you meet as a student care coordinator concerning the transition of undocumented students to your school?”. Four of the student care coordinators mentioned that there was no previous report card of the child or the existing report card did not give a true picture of the student and his or her level. Sometimes important basic information was missing. Two student care coordinators mentioned a language barrier, and learning and behavioral problems were mentioned by one coordinator.

Consequently student care coordinators were asked to rate the item “I expect problems with the transition of undocumented students in the ages from 10 to 12 year from unofficial schools to my school”. The score range was between one and five. None of the student care coordinators chose for the options “never” (1) or “seldom” (2). Consequently all student care

coordinators indicated to expect at least “sometimes” (3) problems with the transition of undocumented students in the ages from 10 to 12 years old. The higher the score, the higher the expectation of problems. The average score was 4.10 with a standard deviation of 0.74. To investigate what problems were expected an open question was included in the questionnaire, asking: “Do you expect any problems to happen for the transfer of students in the ages of 10-12 to your school in the future, if yes: what problems?” Response to this question was given by seven student care coordinators. Two of them reported to expect an increase of the problems that they experience already with the undocumented students. Other problems mentioned were: problems regarding the level of understanding and ability of the student to cope with instructions and language problems mentioned by three teachers, behavioral problems stated by one teacher and the question: “In which grade should the school put students who had little or no schooling?” queried by one teacher.

One of the items was about the knowledge of the student care coordinators to support teachers in handling problems that occur due to the transition of undocumented students to their classes. The minimum rating was one while the maximum was five. The student care coordinators (N=11) reported to have at least “sometimes” (minimum was 3) sufficient knowledge. Two participants (18%) indicated to have “sometimes” (3) sufficient knowledge, whereas eight student care coordinators (73%) reported to have “often” (4) sufficient knowledge. Only one student care coordinator (9%) stated to “always” have sufficient knowledge. The average score was 3.91 with a standard deviation of 0.54. This indicates that student care coordinators in general believe that they have the knowledge to help teachers.

Student care coordinators (N=10) were requested to indicate the need of an examination for students to determine their level and the corresponding class. The minimum score was one whereas the maximum was five. A high score referred to a high need. The minimum indicated score was four (agree) and 80 % of the student care coordinators ranked this item with the highest possible score, five. A clear need for a testing system was indicated (M =4.80, SD = 0.42). Most student care coordinators agreed with the statement “It would have been better if there was something like a transitional class for undocumented students”, 40% chose for “strongly agree” (5) and 20% indicated “agree” (4). Two student care coordinators (20%) did report “neither agree, nor disagree” (3) and another two student care coordinators (20%) indicated “strongly disagree” (1) The average ranking was 3.60 with a standard deviation of

1.58, thus according to most student care coordinators, a transitional class could be an improvement for the incoming students as well as for the receiving teachers and classes.

### **4.3.2 Interaction between teachers and students.**

#### ***4.3.2.1 Teachers questionnaire part one: general questionnaire.***

Two items in the teachers questionnaire were given to examine how they rate their own positive interaction with students in general. The maximum possible score was five whereas the minimum was one. A high agreement ( $M=4.73$ ,  $SD=0.46$ ) was reported for the statement “If a student does not understand what I am saying I explain it again”. Also a high agreement ( $M=4.36$ ,  $SD=0.84$ ) was indicated for the statement: “I give positive feedback to students in my class”.

Besides some items were set to find out how teachers think they adapt to the new undocumented students. Most teachers did agree with the statement: “The new undocumented students should adjust to the customs and habits in my class”, three teachers (23%) chose for “strongly agree” (5) and seven teachers (54%) indicated “agree” (4). Two teachers (15%) chose the option “neither agree, nor disagree” (3) and just one of the teachers (8%) chose for “disagree” (2). None of them indicated the option “strongly disagree” (1). The average was 3.92 with a standard deviation of 0.86, so that would indicate that teachers generally have the opinion that students should adjust to their customs and habits. However, the scores on the item “I have made some adjustments in my class in order to approach the needs of the undocumented students” were various, none of the teachers chose for “strongly agree” (5), five teachers (38.5%) chose for “agree” (4) although another five teachers (38.5%) disagreed: Two teachers (16%) chose for “strongly disagree” (1) and three (23%) for “disagree” (2). The last three teachers (23%) chose for the option “neither agree, nor disagree” (3). The average was 2.85 with a standard deviation of 1.14. Both items indicate low adjustment of teachers to students. However teachers reported the new undocumented students to adjust easily to the existing customs and habits in their classes ( $M=4.08$ ,  $SD=0.64$ ).

Two items concerned the understanding of the undocumented students by teachers. Most teachers disagreed on the item: “I do not understand the undocumented students because of a cultural difference”, four teachers (31%) chose for “strongly disagree” (1), 38% indicated “disagree” (2). The option “neither agree, nor disagree” (3) was reported by three teachers

(23%), none of the teachers chose for “agree” (4), and just one teacher indicated “strongly agree” (5). The average was 2.15 with a standard deviation of 1.14. Also most teachers disagreed on the item: “I do not understand the undocumented students because of a difference in language”, three teachers (19%) indicated “strongly disagree” (1) and six teachers (46%) chose for “disagree” (4). The options “neither agree, nor disagree” (3) and “agree” (4) were both indicated by 15.5% and none of the teachers chose for the option “strongly agree” (5). The average score was 2.23 with a standard deviation of 1.01. On the basis of this we can conclude that teachers in general reported to have sufficient understanding of undocumented students on cultural and linguistic matters. However some teachers indicated to not, or not always understand their undocumented students, so this could be a point of improvement.

#### 4.3.2.2 Students questionnaire.

Students were asked to rate some statements about their teachers. Statements were “The teacher is interested in me”, “The teacher helps me when I need help”, “I ask the teacher questions” and “I get the same help from the teacher as other students do”. The category “interaction with teacher” was made out of these questions and the maximum score was 20 whereas the minimum was four. No significant differences were found between documented and undocumented students  $t(164)=-0.375, p>.05$ , displayed in table 15.

Table 15

Descriptive statistics for interaction with teacher, divided by legal status

	documented students		undocumented students		<i>t</i>	Range
	<i>N</i>	<i>M (SD)</i>	<i>N</i>	<i>M (SD)</i>		
Interaction with teacher	122	16.57 (3.13)	44	16.77 (3.18)	-0.375	4.00-20.00

Analysis: on the basis of these scores we can conclude that documented students as well as undocumented students indicated positive interaction with their teachers. No significant differences were found between both groups.

#### ***4.3.2.3 Classroom observation.***

During the classroom observations the observers focused on interaction between students and teachers. In all classes documented and undocumented students were seated in a mixed way. In one class an undocumented student did not wear a uniform. In all classes a lesson started with classical instruction. In four of the classes the students were sitting on the floor during the instruction. In all cases the teacher quizzed the students about the subject. In three of the classes the teacher asked a question and gave individual students the opportunity to answer, by calling their name or because the student raised his or her hand or calls out to the teacher. Both documented and undocumented students did get turns. In the other four classes all students that knew the answer were reacting at the same time. The teachers mostly reacted by repeating the answer or, in case of a wrong answer, giving the right answer. When an individual student gave a right answer all teachers answered with praise. In case the answer of an individual student was wrong teachers gave the student another try by helping or they gave a turn to another student. No differences were observed in reaction to documented and undocumented students.

#### **4.3.3 Peer relationships and interaction.**

##### ***4.3.3.1 Focus group discussions with teachers.***

In all focus group discussions teachers agreed that documented and undocumented students played together and that there was no difference in interaction based on legal status. Language problems were mentioned in all focus group discussions. In the Public Schools focus group discussion was mentioned that students who do not speak English stick together. Participants mentioned that they were afraid for segregation in higher classes between Spanish and English speaking students, as a consequence of the expected transition of undocumented students from nine to twelve years next year. In contrast, during the focus group discussion with the Seventh Day Adventist School was said that although language can be a problem, students find their way to deal with that problem. All teachers reported that students who speak English and another language translate for students who do not speak English. A teacher said: "Some of the foreign students do not speak English. When another student translates, their English improves and they pick up the language very quickly". Teachers in all focus group discussions agreed that there were cultural differences between students but they all say that these differences do not essentially have to do with a documented or undocumented status.

**4.3.3.2 Teachers questionnaire part one: general questionnaire.**

The general part of the teachers questionnaire consisted of four items about peer relationships between undocumented and documented students: “All children play together in my class”, “The ‘new’ undocumented children are playing together with the other ones”, “The undocumented children feel at home in my class” and “The undocumented children play separate from other children in my class”. These items were combined in one category named “peer interaction in general according to teacher”. The fourth item was reversed for this reason. Although the theoretical score range was between four and twenty, none of the teachers reported a score lower than sixteen. Peer interaction in general was rated positively by teachers (M= 18.55, SD = 1.57).

**4.3.3.3 Teachers questionnaire part two: questionnaire concerning four students.**

The category “peer relationships and interaction according to teacher” was made combining the following items: “This child is accepted by his/her classmates”, “Other students like this student”, “Other students bully this child” and “This child sticks with its own cultural group”. The last two items were reversed. No differences were found between documented and undocumented students  $t(39)=-.676, p>.05$ , presented in table 16.

Table 16

Descriptive statistics for peer interaction according to teacher, divided by legal status

	documented students		undocumented students		<i>t</i>	Range
	<i>N</i>	<i>M (SD)</i>	<i>N</i>	<i>M (SD)</i>		
Peer interaction and relations according to teachers	21	16.91 (2.55)	20	17.40 (2.11)	-0.676	4.00-20.00

Analysis: on the basis of these scores we can conclude that both documented students and undocumented students have positive peer relationships according their teachers. No significant differences were found between both groups.

#### 4.3.3.4 Student care coordinators questionnaire.

Student care coordinators who had undocumented students in their school (N= 7) reported that undocumented and documented students often or always play together (M= 4.86, SD= 0.38).

#### 4.3.3.5 Students questionnaire.

Students in the selected classes filled in a questionnaire. There were four items about peer relations. The minimum score on each item was one whereas the maximum was five. No significant differences between undocumented and documented students were found on the items: “my classmates are my friends”,  $t(168)=-0.416$ ,  $p>.05$ , “students in this school are nice to me”,  $t(165)=-1.079$ ,  $p>.05$ , “I like to play with students who are new in my class”,  $t(169)=.682$ ,  $p>.05$ . Documented students reported a significant higher agreement with the item: “my classmates do not like me”,  $t(170)=2.309$ ,  $p<.05$ , displayed in table 17.

Table 17

Descriptive statistics for peer relations, divided by legal status

	documented students		undocumented students		<i>t</i>	Range
	<i>N</i>	<i>M (SD)</i>	<i>N</i>	<i>M (SD)</i>		
a) My classmates are my friends	125	4.44 (1.03)	45	4.51 (.84)	-.416	1.00-5.00
b) Students in this class are nice to me	123	4.10 (1.06)	44	4.30 (1.00)	-1.079	1.00-5.00
c) I like to play with students who are new in my class	127	4.19 (1.19)	44	4.27 (1.11)	.682	1.00-5.00
d) My classmates do not like me	127	2.80 (1.72)	45	2.13 (1.52)	2.309*	1.00-5.00

\* $p<.05$

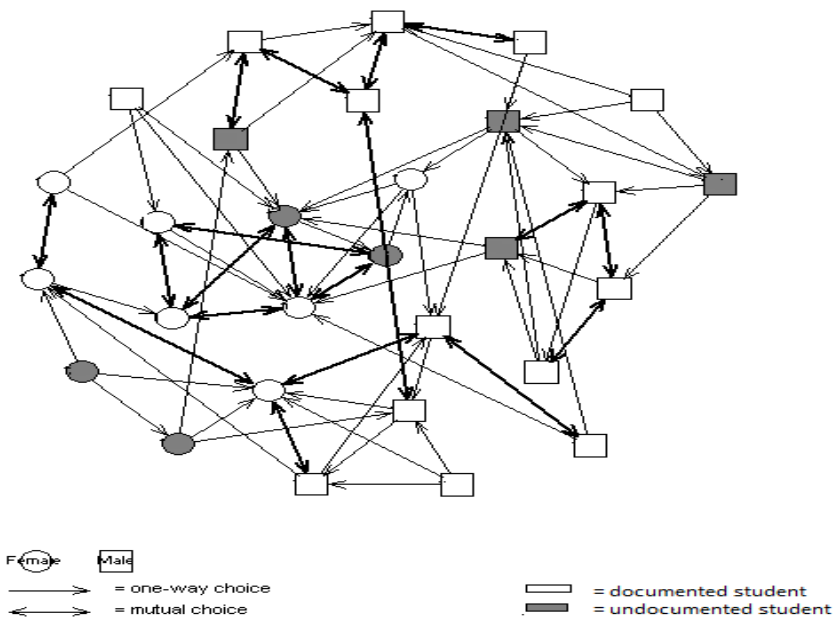
Analysis: on the basis of these scores we can conclude that documented as well as undocumented students indicated high agreements with the items: a, b and c. No significant differences were found between both groups on these items. Students generally disagreed with statement d. This means that they in general indicated that their classmates liked them. However the scores on this item are less positive than the scores on the other items. An explanation could be that students did not understand this item because it was reversed. Undocumented students showed a higher

disagreement, which indicates that they felt less disliked by their classmates compared to documented students.

**4.3.3.6 Network analysis.**

A network analysis was executed for each class. Students were asked to do three positive and three negative nominations. For each class a sociogram was made for positive and negative choices. Documented and undocumented students nominated each other. One of the sociograms of positive choices is displayed in figure 4.

Figure 4  
Example of a sociogram of positive choices from one class



Consequently a social status was given to all students (explanation can be found in 3.3.9). Most of the students had an “average” social status (49%). 22 % received the social status “popular” whereas 19 % was “rejected” in their classes. A “controversial” status was given to 7.5 % and 2.5 % percent was indicated as “neglected”. The distribution of participants over the different social statuses did not differ by legal status,  $\chi^2 (4, N = 159) = 2.571, p > .05$ .



#### 4.3.3.7 Peer interaction observation.

Twelve of the observed students were observed twice. In most schools there are only a few undocumented students, while Charles Leopold Bell School had only undocumented students. To create a reliable view the results of the observed students of the Charles Leopold Bell School are presented separately. Positive interaction was observed most. All students were at least twice engaged in positive interaction with peers. Thus for this variable the minimum score was two, whereas the minimum score on all other total variables was zero. In the mixed classes positive interaction with documented students was the most observed type of behavior. Interaction with the teacher was least observed as the teacher generally was not at the playground during the recess. The means and standard deviations for all types of behavior are presented in table 18 and table 19. The higher the mean, the more that type of behavior was observed.

Table 18

Descriptive statistics for observed behavior of undocumented students on mixed schools

	with documented peers		with undocumented peers		with mixed peers		total		Range
	N	M (SD)	N	M (SD)	N	M (SD)	N	M (SD)	
Child is alone	-	-	-	-	-	-	8	6.00 (3.34)	0.00-20.00
Interaction with teacher	-	-	-	-	-	-	8	0.13 (.35)	0.00-20.00
Attempts to play	8	1.00 (1.60)	8	0.13 (0.35)	8	3.13 (4.49)	8	4.25 (4.56)	0.00-20.00
Positive interaction peers	8	7.25 (6.82)	8	0.38 (1.06)	8	2.63 (2.72)	8	10.25 (5.06)	0.00-20.00
Negative interaction peers	8	0.13 (0.35)	8	0.00 (0.00)	8	0.38 (1.06)	8	.50 (1.07)	0.00-20.00

Table 19

Descriptive statistics for observed behavior of undocumented Charles Leopold Bell students

	<i>N</i>	<i>M (SD)</i>	Range
Child alone	4	2.00 (4.00)	0.00-20.00
Interaction with teacher	4	0.00 (0.00)	0.00-20.00
Attempts to play	4	2.00 (3.37)	0.00-20.00
Positive interaction with peers	4	14.50 (6.66)	0.00-20.00
Negative interaction with peers	4	1.50 (2.38)	0.00-20.00

Seven undocumented students were just once observed because they were absent during the second class visit. No students of Charles Leopold Bell School were among this group. Positive interaction was observed most. All observed students were at least three times engaged in positive interaction with peers. The minimum score was 3. Whereas the minimum score on all other variables was 0. Interaction with the teacher was for this group also the least observed type of behavior. In table 20, the mean and standard deviation for all types of behavior are presented for the seven undocumented students who were observed once. Since these students were only observed once the score ranges from zero to ten. The higher the mean, the more that type of behavior was observed.

Table 20

Descriptive statistics for observed behavior of undocumented students

	with documented peers		with undocumented peers		with mixed peers		total		Range
	<i>N</i>	<i>M (SD)</i>	<i>N</i>	<i>M (SD)</i>	<i>N</i>	<i>M (SD)</i>	<i>N</i>	<i>M (SD)</i>	
Child is alone	-	-	-	-	-	-	7	1.71 (1.25)	0.00-10.00
Interaction with teacher	-	-	-	-	-	-	7	.71 (1.25)	0.00-10.00
Attempts to play	7	1.43(1.81)	7	0.00 (0.00)	7	0.00 (0.00)	7	1.43 (1.81)	0.00-10.00
Positive interaction peers	7	2.86 (3.39)	7	0.43 (1.13)	7	1.86 (2.91)	7	5.14 (2.19)	0.00-10.00
Negative interaction peers	7	0.57 (1.51)	7	0.00 (0.00)	7	0.57 (0.98)	7	1.14 (1.57)	0.00-10.00

## 5. Conclusion and discussion

### 5.1 Conclusion and Discussion - Divided by Type of Setting

#### 5.1.1 Home setting.

##### *5.1.1.1 Academic and social-emotional skills of students.*

Results from the different methods did not show significant differences between documented and undocumented students in academic performance and social-emotional skills. Contradicting to a part of this finding, a significantly positive correlation was found between the outcome of the Singapore Math Test 1B and the length in months students were attending the present school. Undocumented students attended the present school significantly shorter in comparison to documented students. So a difference between undocumented and documented students on math score would be expected, but was not found. A reason for this contradiction could be that the differences between all students are large and the research group was small. Differences between those groups could possibly not be identified due to large partition within groups. Further research with a larger research group could shed a light on the possible difference between documented and undocumented students in mathematical skills.

Overall, the academic results in general (thus including all students – not only the undocumented) are lower than could be expected for students at this age. Teachers reported a problem in the large differences in skills between their students, but these differences do not have to do with their legal status. Nevertheless, the teachers state that a transitional program for undocumented students could be part of a solution because the entering of an undocumented student at an unexpected time of the year can be disturbing for the teacher, classmates and the student itself. It can cause anxiety and frustration for all mentioned groups. A transitional period can be used to test incoming students, allowing student care coordinators to develop a specific program to meet the individual needs of the student.

The outcomes of the Mathematical test and the unofficial reading assessment on the Hillside Christian School are significantly higher than the outcomes on the other schools. However, after removing the results of this school still no differences between documented and undocumented students are found.

The large significant differences in performance between students on different schools should be a subject of concern. The question arises if differences between students in general are inevitable or whether these differences can be addressed. Further research and a solid Student

Tracking System could shed a light on the underlying causes of these differences. The reason why the Hillside Christian School did score significantly higher than the other schools may lay in areas such as used methods, teaching skills or Remedial Teaching programs. Another explanation could be that teachers at Christian Hillside School might be better equipped to deal with students with special needs. However, the real reason did not become clear in this research. Consequently this could be a topic for further research. Other schools can take advantage of the outcome of this research and can adopt measures used on Hillside Christian School to develop the academic skills of their students.

More and older students will enter the regulated schools in the future, both FBE schools and secondary education. Student care coordinators have expressed their concerns about this transition. The current problems are expected to increase because these students are older and consequently have developed larger backlogs in academic and social-emotional skills. Whether teachers have the skills to handle these problems is questionable. Most of the teachers did not get a course about how to handle cases of students with English as their second language, however teachers also indicate that there are not that many students who speak English as their second language and most language barriers solve themselves after a while because students acquire the new language very quickly with some help from translating peers. However, the older a student, the more difficult it in most cases gets for this student to learn another language (Tomasello, 2008). This has to be taken in account when considering the income of older undocumented students. Teachers stated in most cases that they expect the incoming students to adjust to the educational situation. The way the teachers answer questions about learning and behavioral disabilities could indicate that they lack knowledge about these topics; this could be an issue for improvement. Education for teachers regarding the topic how to handle differences between students is recommended.

#### ***5.1.1.2 Home environment and parental involvement.***

Results from the different methods show contradicting outcomes. Teachers did not indicate differences between documented and undocumented students regarding their home situation, whereas outcomes of the parents questionnaire showed some significant differences. Undocumented students have significant fewer brothers and sisters than documented students. Also parents of undocumented students experienced significant more difficult times as a family,

as compared to parents of documented students. The income of documented parents is significantly higher than the income of parents of undocumented students. The question rises if teachers know enough about their students and if parents share their experiences with the teachers of their children. However, the difference in income was also mentioned in the focus group discussions together with other problems parents can encounter, such as illiteracy, or a demanding work situation due to having several jobs. Undocumented parents often have less family to support them in the upbringing of their children. Some teachers question the priority undocumented parents give to their children. Nevertheless parents of undocumented students stated significantly more often that they help the teacher with school activities. This finding corresponds with the assumption some teachers displayed at the focus group discussions: teachers often experience that parents of undocumented students are relieved and thankful that their child is admitted to an FBE school. These parents probably want to show their gratitude by offering their help. Further research can indicate how communication between teachers and parents could be improved. Home visits could possibly be a first step towards reciprocal understanding.

Another contradicting outcome was found between the teachers and the parents questionnaire. Teachers stated there is no difference between documented and undocumented parents in helping with school activities. However, parents of undocumented students state to help significantly more often. A possible explanation for this discrepancy could lie in positive discrimination. Teachers do not want to point out a difference between documented and undocumented parents and therefore possibly do not notice that parents of undocumented students are involved in school activities more often. Further research could shed a light on the cause of this different point of view between teachers and parents.

The information about how to be involved in school activities, such as attending a PTA was often not clear for parents. Teachers admitted that the PTA can be improved and evolved. Translation of important information in more languages than just English could be a solution to involve more parents. Workshops and language courses also could make a difference for parents with language barriers and communication problems. Some parents are illiterate. Regrettably, illiterate parents could not be reached with this research due to the design. Adult basic education (non-formal) for these parents could probably improve not only their involvement, but also the support they give to their school going children (resulting in improved school performances), the

knowledge they transfer to their children, and eventually the economic empowerment of these children as they develop to adulthood and gain a place in the society of Sint Maarten. Giving an insight in the situation of illiterate undocumented parents is a recommendation for further research. It is recommended therefore, to look for ways to establish a non-formal adult education system on Sint Maarten.

### **5.1.2 School setting.**

#### ***5.1.2.1 The perspective of teachers and student care coordinators on the transition of undocumented students.***

Teachers reported to lack information about the transition of undocumented students to their classes. In two of the three focus group discussions, teachers mentioned that no provisions were made before this transition took place. However, in the focus group discussion at Hillside Christian School teachers told to be well informed and happy to receive undocumented students. Perhaps teachers at Hillside Christian School could share their experiences which could be a source of information for other schools on how to inform personnel about changes. Further research could focus on how teachers would like to be informed concerning changes in their classes. Interesting is a discrepancy for this school between the focus group discussion and teachers questionnaire: In the teachers questionnaire the item “I was well informed about the transfer of undocumented students to my class” was rated low and no significant difference was found on this item between Hillside Christian School and the other schools. An explanation for this discrepancy could be found in peer pressure during the focus group discussion, because when one teacher tells to be well informed it is easier to agree than to disagree, since disagreement needs to be motivated. Further research can shed a light on the information teachers like to receive before a student enter their class.

Student care coordinators reported that they often receive insufficient information about incoming students. The academic level of the students as well as possible special needs, is often unclear. Until now, teachers expected new students to adjust to the educational situation. This is not considered a problem yet because students appeared to adjust easily. However, when specified needs of a student are clear for a teacher, there is a possibility to consider whether a student needs extra guidance. The transitional period, (as mentioned in paragraph 5.1.1.1) could be used to gather information about a student in order to prepare the teacher for this new entrant.

The student could be prepared for the entrance and, in some cases, new school environment as well. For students who do not speak English as their first language, this transition time can be used to give them a chance to improve their English. Older undocumented students, who are expected to enroll soon, might cause more serious challenges for the school system.

Several items were formulated to investigate whether teachers and student care coordinators have sufficient skills and knowledge to manage challenges with undocumented students. Most teachers did not follow an official training for “English as a second language” (ESL) and a notable amount of them reported to lack sufficient knowledge to manage problems in relation to the transition of undocumented students to their classes. On the other hand student care coordinators indicated that they, in most cases, have sufficient knowledge to support teachers by managing problems in this area. Further research could focus on which skills and what knowledge teachers need and how these skills and knowledge could be obtained.

Supporting teachers in their job is one of the tasks of student care coordinators. They could play an important role in the transition of undocumented students to FBE schools by acting like a guide in educationally challenging situations. In the future, when students of 10 to 12 years old are expected to enter FBE schools, this duty will be likely to increase because the backlog of these students is probably larger than for the younger students.

Further research could focus on bottlenecks after the transition of the group of 10 to 12 year old students as well as on evaluating the recommended interventions after implementation.

#### ***5.1.2.2 Interaction between teachers and students.***

Positive interaction between students and teachers was reported by teachers and students in all different research methods. No differences were found for interaction among documented students and undocumented students. Teachers generally did not make adjustments for new students and they agreed with the statement: “The new undocumented students should adjust to the customs and habits in my class”. However this is not considered to be a large problem since teachers stated that their new students adjust easily. As mentioned earlier, adjustment of new undocumented students might become a greater issue when the undocumented students in the ages of ten to twelve enter the regulated schools. Cultural understanding and understanding by language between teacher and students will be an issue for improvement. As mentioned before in the section “home setting”, undocumented students experienced significantly more difficult

times within their family situation. Teachers may not always be aware of the background of their students. Simple solutions such as home visits could make a difference in cultural understanding. Further research could focus on how the understanding between (undocumented) students and teachers can be improved in a sustainable manner.

### ***5.1.2.3 Interaction between peers.***

Interaction between undocumented and documented students was indicated by all teachers, students and student care coordinators. In all focus group discussions teachers mentioned that there were differences between students in age, culture, behavior and academic skills. However, these differences did not necessarily occur due to legal status. As mentioned before, non-English speaking students sometimes stick together, although in one focus group discussion a teacher reported that students play a role as interpreter.

During the peer interaction observation, in general “positive interaction” was the type of behavior observed most. All students were at least twice engaged in positive interaction whereas the minimum for the other types of behavior was zero. In the mixed classes positive interaction with documented students was the most observed type of behavior. This is considered as an indicator of integration. Also no segregation was found among documented and undocumented students by interpreting the network analyses. A high agreement was found for the items: “my classmates are my friends”, “students in this school are nice to me” and “I like to play with students who are new in my class”. No significant differences were found between documented and undocumented students on these items. Conspicuous were the outcomes for the item: “My classmates do not like me”. On average this item was rated more negatively than the other items in the questionnaire and documented students rated this item significantly higher than undocumented students. This could point out that documented students feel that they are more often disliked by their classmates, or that they might have a lower self-esteem. It could also be an indication of a misunderstanding for this item since this was the only reversed item and the outcome is less positive than the score on the other items. An interesting subject for further research would be how peer relationships differ and develop over time and what influences the attitudes of teachers and parental involvement have on this development.



## 5.2 Limitations of the Research

Finding undocumented students at the mixed FBE schools was difficult. Teachers generally did not know the legal status of a student and school boards were reluctant to give this information, because it might have negative consequences for families if their name and legal status is known by the authorities. However, after the pledge to use the information confidentially, the researchers received the information.

A second limitation was the question which children are considered to be undocumented. The ones who are undocumented now or the ones who were undocumented at the time they entered the present school. Since the purpose of this research was to locate bottlenecks concerning the transition of undocumented students, it was decided to consider students as undocumented who were undocumented by entering the current school, but they might have obtained a legal status meanwhile.

Another limitation can be found in the small, not randomly taken sample, due to the fact that only schools with undocumented students participated. Still the group of undocumented students was relatively small. This could have an unforeseen effect on the results. The differences between students within a group were so large that the differences between groups may have disappeared. This could be a reason why no more than a few significant differences between documented and undocumented students were found.

A statistical limitation concerns the interpretation of Likert Items and Scales. The question arises whether Likert item answers can be interpreted on an ordinal or a nominal level. This has statistical consequences as described in paragraph 3.3. To avoid statistical misinterpretation, the outcomes of Likert Items and scales were used as an interval level when responses were divided equally. Mean and standard deviation (as explained in paragraph 3.2) were used in these cases. When outcomes were divided in another way, the results were explained in a different way, using percentages next to mean and standard deviation.

Also the group of student care coordinator respondents was small. Moreover, all student care coordinators who were at a workshop filled in the questionnaire, so the selection was made by coming to the workshop or not. The selection was not random and the results can thus not be generalized.

Not all teachers who received a questionnaire responded. The small amount of participants could do harm to the representativeness of the outcomes. There are many different

reasons for people to fill in a questionnaire or not. An example in this study could be that only teachers who think negative about the educational situation filled in the questionnaire, because they wanted to receive attention for the problems. On the other hand it could also be that teachers who think negative about the educational situation felt discouraged and did not fill in the questionnaire because they did not have the confidence that their input would be used for improvement.

Also peer pressure has to be taken into account for the focus group discussions, teachers and student care coordinators questionnaire and observations in the classroom. By filling in the questionnaire, student care coordinators knew that they had to hand it in to the researchers and teachers had to write down the name of the school and the grade they taught in. Although it was promised to use the information confidentially respondents could have chosen to give social acceptable answers in order to give their school a more positive appearance. Peer pressure could be even more of a problem for the focus group discussions. The fact that many participating teachers knew each other could have influenced the discussion. During the observation teachers knew that they were observed, this could have influenced their behavior during the lesson.

Not all parents could be reached with the parents questionnaire, because of language barriers and illiteracy. This can provide a distorted picture. Further research can be done to investigate which problems this even more vulnerable group experiences in communication with teachers and other school members.

## 6. References

- Ackerman, B. P., & Brown, E. D. (2006). Income poverty, poverty co-factors, and the adjustments of children in elementary school. *Advances in child development and behavior, 34*, 91-130.  
doi:10.1016/S0065-2407(06)80005-4
- Berry, J. W. (1997) Immigration, acculturation and adaptation, *Applied Psychology, 46*, 5–68. doi:10.1111/j.1464-0597.1997.tb01087.x

Bogenschneider, K., St. Pierre, T., Andrews, D. W., & Erickson, M. F. (1998).

*Building Resiliency and Reducing Risk: What Youth Need from Families and Communities to Succeed.* Wisconsin Family Impact Seminars Briefing Report. University of Wisconsin-Extension, Center for Excellence in Family Studies, School of Human Ecology University of Wisconsin-Madison. Abstract retrieved from:  
<http://www.familyimpactseminars.org>

Brewer, M. B. (1999). The psychology of prejudice: In-group love or out-group hate?

*Journal of Social Issues, 55*(3), 429–444.

Bronfenbrenner, U. (1977). Toward an experimental ecology of human

development. *American Psychologist, 32*, 513-530.

doi:10.1037/0003-066X.32.7.513

Cambra, C., & Silvestre, N. (2003). Students with special educational needs in

the inclusive classroom: Social integration and self-concept. *European Journal of Special Needs Education, 18*,197–208.

doi:10.1080.0885625032000078989

Central Bureau of Statistics, Netherlands Antilles (CBS) (2010). Retrieved on the 10<sup>th</sup> of January 2011 at: <http://www.cbs.an>.

Cameron, J. A., Alvarez, J. M., Ruble, D. N., & Fuligni, A. J. (2001).

Children's lay theories about in-groups and out-groups: reconceptualizing research on prejudice. *Personality and Social Psychology Review, 5*(2), 118–128.

doi:10.1207/S15327957PSPR0502\_3

- Carifio, L., & Perla, R. (2008). Resolving the 50 year debate around using and misusing Likert scales. *Medical Education*, 42, 1150-1152.  
doi:10.1111/j.1365-2923.2008.03172.x
- CIA, The World Factbook. (2010). Retrieved on the 16<sup>th</sup> of November 2010 at:  
<https://www.cia.gov/library/publications/the-world-factbook/geos/sk.html>
- Clay, M. M. (2002). *An Observation Survey of Early Literacy Achievement* (2<sup>nd</sup> ed.).  
Portsmouth, NH: Heinemann.
- Coie, J. D., Dodge, K. A. & Coppotelli, H. (1982). Dimensions of types of social status: A cross-age perspective, *Developmental Psychology*, 18, 557–560.  
doi:10.1037/0012-1649.18.4.557
- Department of Educational Research, Policy and Innovations (DERPI) (2006).  
*History of Compulsory Education*, Sint Maarten.
- Department of Educational Research, Policy and Innovations (DERPI) (2008).  
*Onderwijssamenwerkingsprogramma (2008-2012)*, Sint Maarten.
- Department of Educational Research, Policy and Innovations (DERPI) (2009a).  
*Compulsory Education on Sint Maarten* Sint Maarten.
- Department of Educational Research, Policy and Innovations (DERPI) (2009b).  
*Monthly Progress Report*, Sint Maarten.
- Department of Educational Research, Policy and Innovations (DERPI) (2010).  
*Roadmap on Compulsory Education on Sint Maarten 2010*, Sint Maarten.
- Driessen, G., Smit, F., & Slegers, P. (2005) Parental Involvement and Educational Achievement. *British Educational Research*, 31, 509-532.  
doi:10.1080/01411920500148713

- Duffy, J., Warren, K., Walsh, M.(2001). Classroom interactions: Gender of teacher, gender of student and classroom subject. *Sex Roles* 45, 579–593.  
doi:10.1023/A:1014892408105
- Eldering, L. (2006). *Cultuur en opvoeding: Interculturele pedagogiek vanuit ecologisch perspectief*. Lemniscaat, Rotterdam
- Field, A. (2005). *Discovering statistics using SPSS*. Third edition. SAGE Publications Ltd, London.
- Gutman, L. M., Sameroff, A. J., & Cole, R. (2003). Academic growth curve trajectories from 1st grade to 12th grade: Effects of multiple social risk factors and preschool child factors. *Developmental Psychology*, 39, 777–790.  
doi:10.1037/0012-1649.39.4.777
- Howes, C., & Wu, F. (1990). Peer interactions and friendships in an ethnically diverse school setting. *Child Development*, 61, 537–541.  
doi:10.1111/j.1467-8624.1990.tb02798.x
- Izzo, C. V., Weissberg, R. P., Kaspro, J. W., & Fendrich, M. (1999). A Longitudinal Assessment of Teacher Perceptions of Parent Involvement in Children's Education and School Performance. *American Journal of Community Psychology*, 27(6), 817-839.  
doi:10.1023/A:1022262625984
- Koster, M., Timmerman, M. E., Nakken, H., Pijl, S. J., & Van Houten, E. J. (2009). Evaluating social participation of pupils with special needs in regular primary schools: Examination of a teacher questionnaire. *European Journal of Psychological Assessment*, 25, 213–222. doi:10.1027/1015-5759.25.4.213

- Likert, R. (1932). A technique for the measurement of attitudes. *Journal of Social Psychology*, 5, 228-238.
- Matson, J.L., Rotatori, A. F., & Helsel, W. J. (1983). Development of a rating scale to measure social skills in children: The Matson Evaluation of Social Skills with Youngsters (MESSY). *Behavior Research and Therapy*, 21, 335-340.  
doi:10.1016/0005-7967(83)90001-3
- Matson, J. L., Neal, D., Fodstad, J. C., Hess, J. A., Mahan, S., & Rivet, T. T. (2010). Reliability and Validity of the Matson Evaluation of Social Skills With Youngsters. *Behavior Modification*, 34, 539–558.  
doi:10.1177/0145445510384844
- Nash, J.K., & Bowen, G.L. (2002). Defining and estimating risk and protection: An illustration from the School Success Profile. *Child and Adolescent Social Work Journal*, 19, 247-261. doi:10.1023/A:1015532132061
- Office of the United Nations High Commissioner for Human Rights. (1966). *International Covenant on Civil and Political Rights*. Treaty on social, economic and cultural Rights, article 10.
- Office of the United Nations High Commissioner for Human Rights. (1990). *Convention on the Rights of the Child*, article 28.
- Ogbu, J.U.(1987). Variability in minority school performance: A problem in search of an explanation. *Anthropology and Education Quarterly* 18, 312–334.  
doi:10.1525/aeq.1987.18.4.04x0022v
- Peery, J. (1979). Popular, amiable, isolated, rejected: A reconceptualization of sociometric status in preschool children, *Child Development*, 50(4), 1231–1234.

- Raffo, C., Dyson, A., Gunter, H., Hall, D., Jones, L., Kalambouka, A. (2009).  
Education and poverty: mapping the terrain and making the links to educational policy.  
*International Journal of Inclusive Education*, 13(4), 341–358.  
doi:10.1080/13603110802124462
- Reading A-Z (2011). Books for Reading Assessment, retrieved on the 2nd of February  
2011 at: <http://www.readinga-z.com>.
- Riala, K., Isohanni, I., Jokelainen, J., Jones, P. B., & Isohanni, M. (2003). The  
relationship between childhood family background and educational performance, with  
special reference to single-parent families: A longitudinal study. *Social Psychology of  
Education*, 6, 349-365. doi:10.1023/A:1025608401292
- Rubie-Davies, C. (2007). Classroom interactions: exploring the practices of high-  
and low-expectation teachers. *British Journal of Educational Psychology*,  
77, 289-306. doi:10.1348/000709906X101601
- Rutter, M. (1983). Statistical and personal interactions: Facets and perspectives.  
In D. Magnusson, & V. Allen (Eds.), *Human development: An interactional perspective*.  
295–319. New York, NY: Academic Press.
- Sadker, D., Sadker, M., & Bauchner, J. (1984). *Teacher reactions to classroom  
responses of male and female students*, Washington, DC: National Institute of Education  
(ERIC Document Reproduction Service No. ED245839)
- Sameroff, A. J., Bartko, W. T., Baldwin, A., Baldwin, C., & Seifer, R. (1998).  
Family and social influences on the development of child competence. In M. Lewis & C.  
Feiring (Eds.), *Families, risk, and competence*, 161–186. Mahwah, NJ: Erlbaum.

- Shonkoff, J. P.,(Eds.), *Handbook of early intervention* (pp. 97-116). Cambridge, England: Cambridge University Press.
- Smith, D. (1991). Classroom interaction and gender disparity in secondary vocational instruction. *The Journal of Vocational Education Research*, 16(3), 35-58.
- Super, C.M. &Harkness, S. (1986). The Developmental Niche: A Conceptualization at the Interface of Child and Culture.International, *Journal of Behavioral Development*, 9, 545-569. doi:10.1177/016502548600900409
- Teodoro, M. L. M., K ppler, K. C., Rodrigues, J. de L., Freitas, P. M de., & Haase, V. G. (2005). The Matson Evaluation of Social Skills with Youngsters (MESSY) and its adaptation for Brazilian children and adolescents. *Interamerican Journal of Psychology*, 39(2), 239–246.
- Tomasello, M. (2008). *Origins of Human Communication*. The MIT Press: Cambridge, Massachusetts.
- Walsh (2011), Walsh’s Classroom sociometrics, retrieved on the 20th January of 2011 at :<http://www.classroomsociometrics.com>.
- Wasserman, S. &Faust, K. (1994), *Social Network Analysis*, Cambridge University Press: Cambridge.
- Werner, E. E. (1990). *Protective factors and individual resilience*. In S.J. Meisels & Whipple, S. S., Evans, G. W., Barry, R. L., & Maxwell, L. E., (2010). An ecological perspective on cumulative school and neighborhood risk factors related to achievement, *Journal of Applied Developmental Psychology*, 31, 422–427.