THE EFFECTIVENESS OF THE BUDDY SUPPORT SYSTEM ON TEACHER PARENT COLLABORATION AND STUDENTS' SOCIAL INTERACTION IN SPECIAL EDUCATION IN MALAYSIA

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THESIS SUBMITTED IN FULFILMENT OF THE REQUIREMENTS FOR THE DEGREE OF DOCTOR OF PHILOSOPHY

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ABSTRACT

This research examined the effectiveness of the buddy support system on teacher parent collaboration and students' social interaction in special education in Malaysia. Until recently, there has been growing awareness of the powerful influence a peer group can have in supporting inclusion. The study will explore teachers' and parents' understanding of special educational practices, their willingness to communicate with each other, their perceived roles as well as their expectations of each other in which these elements were deemed vital in a collaboration process that encourages students' social interaction while the effectiveness of the Buddy Support System as a moderator is investigated in this collaboration process. This study adopted a sequential mixed method design, where quantitative data was collected using teachers' and parents' questionnaires which highlights the elements and importance of collaboration for a successful special education programme, the elements of friendship, interactions, acceptance by classmates, the importance of social interaction of young students with special needs, and the elements of the effectiveness of the buddy support system. Two types of statistical techniques were used to analyze the quantitative data. Descriptive statistics comprising mean and standard deviation were used to analyze data relating to the domains of teacher-parent collaboration, students' social interaction among SEN and mainstream pupils and the effectiveness of the buddy support system as perceived by teachers and parents. Inferential statistics comprising Pearson's R Correlation was used to analyze the relationship between teacher-parent collaboration and students' social interaction as perceived by the teachers and parents. PROCESS procedure for SPSS (Hayes, 2013) was used to determine whether the buddy support system significantly moderates the relationship between teacher-parent collaboration and students' social interaction in the implementation of special educational practices. Results showed that the teachers rated

themselves highest on the understanding about SEN while parents rated themselves highest on the expectations of teachers' role in the implementation of SEN. Both teachers and parents rated the acceptance by classmates domain the highest in students' social interaction among SEN and mainstream pupils. Teachers rated the influence and benefit domain of the buddy support system the highest while parents rated highest on the influence domain of the buddy support system. Hierarchical multiple linear regression results were able to confirm that by controlling the Buddy Support System variables (moderators), teacher-parent collaboration domain did not significantly predict the students' social interaction domains, which accounted for a significant proportion of the variance in students' social interaction. Emerging themes from the qualitative data supports the quantitative data results. The findings of this study will provide essential guidelines for fostering effective buddy support system on teacher-parent collaboration in special educational practices. Training and support could be further provided by MOE to aid the goal towards 75% of students with special needs enrolled in inclusive programs by 2025.

ABSTRAK

Kajian ini menyiasat keberkesanan sistem sokongan buddy terhadap kolaborasi guru ibu bapa dan interaksi sosial pelajar dalam pendidikan khas di Malaysia. Sehingga baru-baru ini, terdapat kesedaran yang semakin meningkat tentang pengaruh kuat rakan sebaya dalam menyokong kemasukan. Kajian ini akan meneroka kefahaman guru dan ibu bapa terhadap amalan pendidikan khas, kesanggupan mereka untuk berkomunikasi antara satu sama lain, persepsi peranan dan ekspektasi mereka terhadap satu sama lain di mana unsur-unsur ini dianggap penting dalam proses kolaborasi yang menggalakkan interaksi sosial pelajar dan keberkesanan sistem sokongan buddy sebagai moderator disiasat dalam proses kolaborasi ini. Kajian ini menggunakan reka bentuk campuran yang berurutan, di mana data kuantitatif dikumpulkan melalui soal selidik guru dan ibu bapa yang menonjolkan unsur-unsur dan kepentingan kolaborasi untuk kejayaan program pendidikan khas, unsur-unsur persahabatan, interaksi, penerimaan oleh rakan-rakan sekelas, kepentingan interaksi sosial pelajar pendidikan khas, dan elemen-elemen keberkesanan sistem sokongan buddy. Dua jenis teknik statistik digunakan untuk menganalisis data kuantitatif. Statistik deskriptif seperti min dan sisihan piawai digunakan untuk menganalisis data yang berkaitan dengan domain kolaborasi guru -ibu bapa, interaksi sosial pelajar dalam kalangan pendidikan khas dan pelajar arus perdana dan keberkesanan sistem sokongan buddy sebagaimana dilihat oleh guru-guru dan ibu bapa. Statistik inferensi, korelasi Pearson R digunakan untuk menganalisis hubungan di antara kolaborasi guru - ibu bapa dan interaksi sosial pelajar sebagaimana dinilaikan oleh guru-guru dan ibu bapa. Prosedur PROSES untuk SPSS (Hayes, 2013) telah digunakan untuk menentukan sama ada sistem sokongan buddy memberi kesan tahap sederhana terhadap perhubungan di antara kolaborasi guru - ibu bapa dan interaksi sosial pelajar dalam pelaksanaan amalan pendidikan khas. Hasil kajian menunjukkan bahawa guru-

guru menilai diri mereka pada tahap tertinggi dalam pemahaman tentang pendidikan khas manakala ibu bapa menilai diri mereka pada tahap tertinggi terhadap expektasi peranan guru dalam pelaksanaan pendidikan khas. Kedua-dua guru dan ibu bapa menilai penerimaan oleh rakan-rakan sekelas domain paling tinggi dalam interaksi sosial pelajar di kalangan pendidikan khas dan pelajar sebaya arus perdana. Guru-guru menilai pengaruh dan manfaat domain sistem sokongan buddy pada tahap paling tinggi manakala ibu bapa menilai domain pengaruh pada tahap tertinggi. Analisis regresi berganda mengesahkan bahawa dengan mengawal pembolehubah sistem sokongan buddy (moderator), domain kolaborasi guru -ibu bapa tidak signifikan dalam meramalkan domain interaksi sosial pelajar, yang merupakan sebahagian besar daripada varians dalam interaksi sosial pelajar. Kemunculan tema daripada data kualitatif menyokong dapatan data kuantitatif. Hasil kajian ini akan menyediakan garis panduan penting untuk memupuk sistem sokongan buddy yang berkesan terhadap kolaborasi guru -ibu bapa dalam amalan pendidikan khas. Latihan dan sokongan boleh disediakan oleh Kementerian Pelajaran untuk membantu matlamat ke arah 75% murid pendidikan khas mendaftar dalam program inklusif menjelang 2025.

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LIST OF SYMBOLS AND ABBREVIATIONS

SEN   - Special Educational Needs

BSS   - Buddy Support System

SII   - Students' Social Interaction

MOE   - Ministry of Education

UNESCO   - United Nations Educational, Scientific and Cultural Organisation

UNICEF   - United Nations Children's Fund

UNCRPD   - United Nation Convention on the Rights of Persons with Disabilities

EDU NKRA   - Education National Key Results Area

IDEA   - Individuals with Disabilities Education Act

IEP   - Individualized Education Programme

IPA   - Interpretative Phenomenological Analysis

SEIP   - Special Education Integrated Programme

ZPD   - Zone of Proximal Development

LIST OF APPENDICES

CHAPTER 1: INTRODUCTION

1.1   Introduction

In Malaysia the special education (SEN) system has undergone increased public scrutiny in recent years, particularly in its capacity to prepare students with special educational needs (SEN) sufficiently for the challenges of the 21st century. SEN provision began early in the 1920s in the state of Malacca with the launch of the 1st special educational needs school for the blind. More SEN schools followed in different states in Malaysia to accommodate the needs of special needs students.

Evidence shows 10% of children with SEN are enrolled in some form of educational program (UNICEF, 2013; UNESCO, 2007). In Malaysia, only 1% of children and young people have been recognised in the special needs category and are currently placed in appropriate special education needs programs (Ministry of Education, 2013). This figure is likely to be an underestimate as children who have special needs seldom volunteer to register themselves. Yet, Malaysia, as a state party to the Convention on the Rights of the Child (1989, Article 23), has agreed to ensure that the legislation is in place to provide resources, financial aid and free education to children with special needs if their families are unable to afford these expenses.

Bernama (2014) reported that the Malaysian government through a special lab session in its Government Transformation Programme revealed inadequate efforts were being made to support education development for students with SEN. Following this, the Education

National Key Results Area (EDU NKRA) executed the SEN Holistic Inclusive Programme aimed at raising the awareness and standards of special education programs in schools to ensure students with special educational needs received all the support and help they need. In 2013, the Buddy Support System was also introduced involving 10 primary and secondary schools in the Klang Valley with the prime objective of building friendship and fostering mutual understanding among special needs and mainstream students. This initiative is the focus of this doctoral research and will be outlined in more detail in Chapter 2.

Additionally, the Education Ministry through the SEN Vocational Programme aimed to equip students with SEN with knowledge, skills, and industry-recognised certification for employment. 292 SEN students enrolled in selected vocational institutions across five states. These vocational institutions were selected based on their facilities and the guarantee of employment upon graduation. Further assistance was provided for students with SEN to integrate into employment through the Employment Transition Programme in June 2013 with a collaboration with Malaysian Care, a non-governmental organisation. The Education Ministry also launched a one-stop information portal named iSayang for parents with SEN students. Initiatives such as this were intended to encourage parents with SEN children to come forward and register themselves to access this privilege.

Education for SEN children in Malaysia are available in both academic and vocational streams at the pre-school stage, primary school stage and secondary school stage. The Ministry of Education, Ministry of Women, Family and Community Development, and Ministry of Health, currently oversee these SEN programs. In Malaysia, students with SEN are identified early by health personnel as they are screened in their infancy. Eaude (1999) observed education systems often use technical terms and definitions that are confusing with

reference to disability. In Malaysia, many different terms such as 'less able', 'disabled', 'handicapped' and 'special needs' are used to describe students with SEN (Adnan & Hafiz, 2001).

According to the Ministry of Education's (2014) Educational Statistics, enrolment in mainstream primary schools for special education integration program are 28, 658 students with 8,563 special need teachers. In main stream secondary schools the number of students is 24, 268 with 4,535 special need teachers (refer to Table 1.1). Those children in inclusive education where students with physical disabilities (e.g hearing or visually impaired) are placed in a regular classroom totals to 2,226 students.

Table 1.1: Educational Statistics for Special Education Integration Program

	Level	Student Enrolment	Teachers
Special Education	Primary	28,658	8,583
Integration Program	Secondary	24,268	4,535

The policy of the Malaysian government has now shifted towards the encouragement of inclusive practices of SEN at the school level. A report by the Ministry of Education, Malaysia (2004) at the International Conference on Education in Geneva, 2008 entitled "The Development of Education" stated that "inclusive" means:

"*A process of addressing the diverse needs of all learner by reducing barriers to, and within the learning environment*".

The main focus of the special education integration program was that of equipping students with SEN with the attributes and skills to *"fit into"* the mainstream school. The inclusive model by contract is focused on the child's right to equal education without discrimination. Now there is a responsibility on the school to accept them, to provide appropriate facilities and support to meet these students' needs (Lee, 2010).

1.2   Background to the Problem

The United Nations (UN) and United Nations Educational, Scientific and Cultural Organisation (UNESCO) initiated a global agenda towards an inclusive education. This has seen Malaysia begin its inclusive education agenda for students with SEN to be included into mainstream classes from the mid-1990s. Several UN policies such as the UN Convention on the Rights of the Child (UNCRC, 1989), the UN Standard Rules on the Equalisation of Opportunities for Persons with Disabilities (UNSREOPD, 1993), the UNESCO Salamanca Statement (UNESCOSS, 1994), and the UNESCAP Biwako Millennium Framework (UNESCAP, 2002) emphasizes the right of all students to equal education without discrimination within the mainstream education system.

Inclusive education is seen as vital to assist students with SEN in building friendship and gaining acceptance from other people around as well as providing quality education. According to Allen & Cowdery (2005), the benefits of inclusive education are firstly; it is the fundamental right of students no matter what their abilities and disabilities are to equal education; secondly, the opportunity to develop students' social skills and thirdly; the access to quality education. The Ministry of Education of Malaysia in view of making social unity possible, decided to integrate students with SEN into the national schools as part of a reform

initiative to educate the community, increase awareness on the educational rights of children and youth with SEN (Jelas, & Ali, 2012; Ali, Mustapha, & Jelas, 2006).

The Ministry of Education in Malaysia has increased its attention towards SEN as highlighted in the recent 2013 - 2015 Malaysia Education Blueprint. In Chapter 4 - Student Learning inclusive education for students with SEN is advocated, based on current national policy and international best practices. The Ministry of Education (MOE) states that it is committed towards an inclusive education model and moving more students with SEN towards inclusion. The Ministry of Education, Malaysia (2013) in its National Education Blueprint states that by 2021 to 2025, 75% of students with SEN will be enrolled in inclusive programs, all teachers will be equipped with basic understanding and knowledge of SEN, and high-quality education provided to every child with special needs. Many educators, parents and individuals with special needs believe it's time for all students, regardless of their special needs to attend class together with their peers, a move which has come about through changing beliefs and attitudes towards disabilities (Beacham & Rouse, 2012; Krahé & Altwasser, 2006; Rietveld, 1994).

The Ministry of Education (MOE) aims to achieve these objectives with the first wave from year 2013 to 2015 with a series of initiatives focused on strengthening existing programs whereby students with SEN will now have schooling options according to their competency levels. High-functioning students with SEN will now be encouraged to attend inclusive education programs if they are able to cope with the mainstream curriculum and assessments. Moderate-functioning students with SEN will be able to attend the Special Education Integrated Program. A simplified curriculum at special education schools that will focus on basic social and life skills will be provided to low-functioning students with SEN. The second

wave from year 2016 to 2020 will focus on a range of initiatives, such as to increase the recruitment of experts to deal with a wider range of special needs spectrum and the increasing number of such students. The move towards greater inclusion requires teaching to be tailored effectively to support the students with SEN enrolled in mainstream classes. The third wave from year 2021 to 2025 will review the success of all initiatives from the first two waves and consolidate successful ones (Ministry of Education, 2013).

A set of evaluation instruments and screening process will be developed by MOE to enable accurate identification of students' competency levels and placing them in the right schooling options (Ministry of Education, 2013). Continuous efforts by MOE to raise the quality of education will be implemented through the incorporation of more vocational skills into all special needs curricula such as reflexology and computer graphics, improving the facilities, equipment and infrastructure at special education schools, IPGs and public universities will now provide basic special education training modules made available with various expertise levels ranging from basic to expert, and a tailored curriculum and assessment according to students' abilities.

"As a result of these efforts, the Ministry is projecting a 15% annual increase in enrolment from approximately 50,000 students in 2011, to 88,000 by 2015. Of these 88,000 students, 30% are targeted for enrolment in inclusive education programmes" (Ministry of Education, 2013; pg. 4-17).

Gartin and Murdick (2005) and the Individuals with Disabilities Education Act (IDEA, 2004) highlights that the concerns of parents should also be considered as these are vital to realising a child's potential and development. Welch and Sheridan (1995) found that parents are

mostly an underutilized resource in the educational development of a child. They added parents and teachers in collaborative relationships depend on one another equally and reciprocally. The Education for All Handicapped Children Act (EAHCA, 1975); the Education of the Handicapped Act Amendments (EHAA, 1986), and the Individuals with Disabilities Education Act Amendments (IDEA, 1997), are a few policies and law that recognizes teacher-parent collaboration as an essential component in special educational practices.

The underlying assumption of such partnerships is that teachers and parents should work together to provide the child with the best education possible. In reality, however, many different ideas and beliefs among teachers and parents can arise that leads to a disconnection in relationships and communication among them. In such situations, fluid partnerships between teachers and parents can be challenged and resulting tensions can emerge which, in turn, can affect a child's educational experience (Staples & Diliberto, 2010).

Mislan, Kosnin, and Yeo (2009) define collaboration as a process of two or more parties working together hand in hand towards achieving a common objective and goal. Effective collaboration is based on all parties' efforts towards a similar direction. The development of teacher-parent collaboration in special education practices is an aspect to be taken seriously as a cornerstone of assuring more beneficial achievements for students with SEN. It is bounded by law and is a fundamental component in educational reform (Welch & Sheridan, 1995; West, 1990). Teachers and parents needs to collaborate to adjust more effectively to their responsibilities, their roles and their actions to continuously improve students' developmental outcomes (Bateman & Herr, 2006). Policies needs to take into account schools as a living systems and important issues are addressed by understanding the

individual, organizational, and community learning needs (McCombs, 2003). Some studies found that existing teachers' training had somehow neglected the teacher-parent collaboration component and building productive relationship element (Reynolds & Clements, 2005).

The reason for a collaborative approach between teachers and parents lies in its efficiency for decision making and its potential to produce high quality student outcomes. Various writers have acknowledged the importance of parents' involvement in improving student's outcomes in school (Wanat, 2010; Mislan et al., 2009; Hoover-Dempsey et al., 2005; Lawson, 2003; Mattingly et. al., 2002; Hinojosa et. al., 2002; Jordan, Orozco, & Averett, 2001; Miedel & Reynolds, 1999; Trusty, 1999; Sanders, 1998; Epstein, 1995; Fantuzzo, Davis, & Ginsburg, 1995; Greenwood & Hickman 1991). Studies examining teacher-parent collaboration and extend of parents' involvement in improving student's outcomes at Malaysian special education schools are limited. Therefore this study will explore the opportunities of parents' involvement and their roles as productive team members in working towards thriving collaborative SEN practices in schools.

Friend and Cook (2007) identified several key concepts that determine the success for teacher-parent collaboration. These concepts include realizing collaboration should be voluntarily, the need to share resources, being responsible in decision-making, aim towards common goals, acknowledge each other's roles, the ability to work together intuitively to plan a formal programme process, and finally trust and respect towards each other. It is of paramount importance teachers and parents understand what special educational needs is, the Individualized Education Programme (IEP) contents, and the processes involved in order to work as a team (Mislan, Kosnin, & Yeo, 2009). The development of students' social

interaction requires effective teacher-parent collaboration as constant support and feedback are needed. Teacher-parent collaboration are more difficult to promote and maintain if teachers and parents work as separate units (Braley, 2012). Teachers and parents need to recognize their shared interests and responsibilities for the student, and work collaboratively to create better opportunities for the student (Epstein, 1995).

Communication encourages shared decision-making and ideas. Teachers and parents require active communication with each other in order to plan the IEP programme and to discuss ways in improving students' performance. Communication between teachers and parents therefore needs to be in a variety of forms and should not be only be one-dimensional (Taylor, Smiley, & Richards, 2009).

According to Christenson (2002), sound educational outcomes in teacher-parent collaboration relies on shared responsibilities. Cramer (2006) says teachers play a vital role by providing support to parents with the resources available inside and outside the classrooms and as executors of the educational plans while parents needs encouragement to carry out their roles effectively in their child's development and academic performance. A teacher's role in special education is even more challenging in order to meet parents' expectations and the needs of their students. Teachers face a huge challenge if they fail to form a connection between school and home. Successful student outcomes can be more easily achieved if both teachers and parents know each other's roles in the collaboration process.

Teachers' and parents' perceived roles in a collaboration process needs to be investigated. Factors such as unclear role definition between parents and teachers' can impede the effectiveness of teacher-parent collaboration process. Parents also need to have a positive

mind set and attitude to cooperate with the teachers to ensure successful social integration. Yi et. al. (2006), revealed parents' concerns on the inability of teachers to implement the individualized instruction effectively due to insufficient relevant training and resources. For successful collaboration, teachers and parents preconceived ideas on each other's role has to be put aside and instead the focus should be on what's important that is meeting the specific needs of the students with SEN.

Although their roles differ, both should contain similar objectives such as helping students progress further in their social interaction development to achieve successful integration efforts. The American National Council on Disability (1996) underlines the importance of enhancing parents collaboration with the whole service system and with teachers in shared decision-making for students with SEN.

Another aspect of investigation are teachers' and parents' expectations of each other's role in special education practices. It's of paramount importance both parties know what was expected of each other's roles in order to collaborate effectively. Teachers and parents are able to understand and work together if they knew what is expected from each other in a collaboration process. Effective teachers and parent partnership requires a lot of patience, planning and structure to be implemented (Couchenour & Chrisman, 2004). Factors in engaging teachers and parents in a collaborative partnership should be clearly defined for SEN practices to be implemented successfully.

Maximizing the social interaction between more able peers and students with SEN is a crucial aspect of inclusion as it might have a positive effect on the social–emotional development of the students with SEN (Koster et. al., 2009; Frederickson, et. al., 2005). However, questions

frequently arise if students with SEN do have frequent interaction and forms friendships with their able peers (Koster et. al., 2009). Research has consistently shown that opportunities for students with SEN to have regular meetings and interactions with their able peers are the primary drive behind parents' motivation to send their child to a regular school (Nakken & Pijl, 2002; Sloper & Tyler, 1992). In their opinion it is important for their child to grow up as far as possible in a normal environment as they assume contacts with able peers in a regular neighbourhood school will surround their child with SEN with more positive peer influences. Furthermore, parents hope of a change in attitude among the society as a whole will arise in the long-term due to their child's presence in an ordinary school (Koster, Pijl, Houten, & Nakken, 2007).

Vygotsky's sociocultural theory emphasized human learning through as a social process. The development of cognition is fundamentally driven by social interaction (Vygotsky, 1978). Vygotsky noted the notion zone of proximal development (ZPD). Social interaction is required for this "zone" to fully develop. This "zone" defines if a student is prepared cognitively. A constant interaction with more able children can enhance learning outcomes significantly (Parke & Locke, 2003). "Scaffolding" is a process to support the student's growing knowledge and development of complex skills by a teacher or more experienced peer. Social interaction between students with SEN and their teachers, parents and able peers will enable them to scaffold basic knowledge to solve problems that usually require a higher thinking level.

In Malaysia, the Ministry of Education (MOE), the Performance Management and Delivery Unit of the Prime Minister's Department (Pemandu) and Challenges Magazine is piloting a program called the Buddy Support System in schools to support the initiative of more regular

social interactions between students with SEN with their able peers through fitness and sports sessions (Kulasagaran, 2013). A Buddy Club programme allows students with SEN to interact socially with other pupils through various interaction activities such as football. In order to be able to evaluate how the buddy club programme aids these interaction development, it is necessary to investigate the effectiveness of the Buddy Support system in helping student with SEN form friendship, interaction and acceptance with their able peers.

The Buddy Club and its outcomes is the focus of this doctoral research. This research conducted in 10 pilot buddy club schools aimed to examine to what extent teachers and parents understand special educational needs, their willingness to communicate with each other, their perceived roles and their expectations of each other's role in their collaborative efforts. The aim of the study was to investigate how collaboration efforts could be improved further to ensure the successful inclusion of students with SEN and their able peers in an inclusive environment.

Collaboration efforts between teachers and parents at schools needs to be evaluated and in particular what are the various factors that might affect their roles. Schools have to recognise parents as equally important members in decision-making, be tactful to their needs and increase their involvement in SEN programmes (Villa et. al., 1990). Teachers needs to be confident in their actions to encourage the collaboration process with parents. With such discernment, responsive and proactive approaches can be taken by the school to encourage better relationships with parents.

1.3   Statement of the Problem

The MOE is determined to increase the enrolment of students with SEN towards the inclusion process as highlighted in the recent 2013 - 2015 Malaysia Education Blueprint. Based on current national policy and international best practices, the MOE aspires to Wave 3 of its education blueprint that by year 2021 to 2025, 75% of students with SEN will be enrolled in inclusive programs, all teachers will be equipped with basic understanding and knowledge of SEN, and high-quality education provided to every child with special needs.

Requirements such as appropriate support development and education for all students with SEN are highlighted in various law such as the Individuals with Disabilities Educational Acts (IDEA), Education for All Handicapped Children Act of 1975, the Education of the Handicapped Act Amendments of 1986, and the Individuals with Disabilities Act Amendments of 1997. This laws also recognizes the importance of parents' involvement in schools and as key decision makers.

Although laws exist for parents' rights as key decision makers for their children's education plans, parents' active participation often doesn't materialize (Welch & Sheridan, 1995; Malen & Ogawa, 1988; Brinkerhoff & Vincent, 1986). Teachers and parents needs to collaborate to identify which areas of the students' development needs attention and determine together the goals and objectives that are appropriate to achieve it (Carlisle, Stanley, & Kemple, 2005; Epstein, 2001).

Studies carried out in other countries suggests that it is essential teacher-parent collaboration exist for teachers and parents to consult, join efforts and share information in providing

efficient and meaningful education for students with SEN (Hendersen & Mapp, 2002; Christenson & Sheridan, 2001). The students' with SEN needs to be assisted to fit into mainstream classrooms where social interaction with their able peers is vital.

Students with SEN are a part of the society and have a right to equal education. The contributions of parents, teachers and their more able peers in this collaboration process is therefore important. The Buddy Support System is directed at promoting and inculcating positive social interaction development among students with SEN and their able peers. In supporting this process, teachers and parents need to share their common understandings about special education practices, be willing to discuss matters pertaining to students' development through effective communication, rely on shared responsibilities, know their roles and expectations of each other. For MOE's inclusive education goals to be reached and successfully implemented by 2025, more initiatives need to be focused on building constructive teacher-parent collaboration.

There is research on teacher-parent collaboration in vocational programme for learning disabilities (Sameon, 2004), studies on school-parent collaboration in special education (Salleh, Mahmud, & Jelas, 2003), teacher-parent collaboration in Individualized Education Program (Mislan et al., 2009) and teachers' and parents' perspectives on their involvement in special education (Taib, 2008; Abidin, 2004; Alias & Salleh, 2004; Osman, 2003).

The relative lack of studies on teacher-parent collaboration towards social interaction in the development of students with SEN and their able peers was noted. Therefore this thesis focuses on the problem of teacher-parent collaboration in an integrated special education

setting in Malaysia. Research suggests that successful and effective education for students with SEN should be a collaborative effort with parents as the foundation (Cramer, 1998; Turnbull & Turnbull, 1997). A structural change from a competitive to a collaborative child focused system is required to develop the potential in every learner in an inclusive education system (UNCRPD, 2006).

Recently, there has been growing interest on the influence a peer group can have on social–emotional development of the students with SEN (Koster et. al., 2009; Frederickson, et. al., 2005). Initiatives are being taken to harness the positive influence peers influence on inclusion of SEN (Sapon-Shevin, Ayres, & Duncan, 2002; Cross & Walker-Knight, 1997). The Buddy Support System is designed as an intervention to involve peers in helping a student with SEN develop their social interaction, confidence and self-esteem so these students with SEN are able to fit into mainstream classrooms where social interaction with their able peers is vital.

Systematic information about the effectiveness of the Buddy Support System is not available. So far, little research has been conducted. The published research on the circle of friend approach in the UK has however indicated encouraging results (Newton et al., 1996; Taylor, 1996; Pearpoint & Forest, 1992). These studies have demonstrated the effectiveness of the circle of friend intervention but as highlighted by Whitaker et al. (1998), it is not possible to attribute any outcomes to the circle of friend program. Frederickson and Turner (2003) results indicated the circle of friend approach does significantly impact the attitudes of the able peers in the group towards the child with SEN. So this investigation into the effectiveness of the buddy support system can offer some additional evidence to the field about the effect of teacher-parent collaboration on the inclusion of SEN students into mainstream education.

There is not much evidence about inclusion in developing nations such as Malaysia (Lee, 2010). Developed and developing nations are progressing at different rates in their implementation of inclusive education (Helldin, et. al., 2011; Lee, 2010). Thus, the manifestation of an education system geared towards inclusion needs investigations within our context, Malaysia.

Therefore, the aim of this study is to examine the effectiveness of the buddy support system on teacher-parent collaboration and students' social interaction as part of the co-curriculum. It will explore teachers' and parents' understanding of special educational practices, teachers' and parents' willingness to communicate with each other, teachers' and parents' perceived roles as well as their expectations of each other's role in purposeful collaboration. The effectiveness of the Buddy Support System as a moderator on teacher-parent collaboration and students' social interaction is also investigated.

1.4   Research Objectives

The research aim of this study is to examine the effectiveness of the Buddy Support System on the relationship between teachers-parents collaboration and students' social interaction in special educational practices in Malaysia. The objectives are identified as below:-

1. To examine the extent teacher-parent collaboration contributes to:-

    i)   understanding about special educational needs

    ii) willingness to communicate on matters pertaining to special educational needs

    iii) their perceived roles in the implementation of special educational needs

    iv) expectations of each other's role in the implementation of special educational needs

2. a) To identify the extent students' social interaction among SEN and mainstream pupils exist, as perceived by teachers

   b) To identify the extent students' social interaction among SEN and mainstream pupils exist, as perceived by parents

3. a) To examine the relationship between teacher-parent collaboration and students' social interaction as perceived by teachers

   b) To examine the relationship between teacher-parent collaboration and students' social interaction as perceived by parents

4. a) To examine the extent and in what ways is the buddy support system effective, as perceived by teachers

   b) To examine the extent and in what ways is the buddy support system effective, as perceived by parents

5. To identify the moderating effect of Buddy Support System on the relationship between teachers-parents collaboration and students' social interaction in the implementation of special educational practices as perceived by teachers.

1.5 Research Questions

This study was designed to answer the following research questions:-

1. To what extent does teacher-parent collaboration contribute to:-

   i. understanding about special educational needs?

   ii. willingness to communicate in matters pertaining to special educational needs?

   iii. their perceived roles in the implementation of special educational needs?

   iv. expectations of each other's role in the implementation of special educational needs?

2. To what extent does students' social interaction among SEN and mainstream pupils exist, as perceived by teachers?

3. To what extent does students' social interaction among SEN and mainstream pupils exist, as perceived by parents?

4. What is the relationship between teacher-parent collaboration and students' social interaction as perceived by teachers?

5. What is the relationship between teacher-parent collaboration and students' social interaction as perceived by parents?

6. To what extent and in what ways is the buddy support system effective, as perceived by teachers?

7. To what extent and in what ways is the buddy support system effective, as perceived by parents?

8. Does the Buddy Support System significantly moderate the relationship between teacher-parent collaboration and students' social interaction in the implementation of special educational practices as perceived by teachers?

1.6 Significance of the Study

The research findings will provide contemporary information of current special educational practices among teachers and parents. This research is a first of its kind in Malaysia in examining the effectiveness of the Buddy Support System on Teacher-Parent Collaboration and Students' Social Interaction. Training and support could be further provided by MOE to help foster a strong collaboration practice between teachers and parents to aid the goal towards 75% of students with SEN enrolled in inclusive programs by 2025. Teacher-parent

collaboration needs support as the process enables sharing of inputs, determine goals and services for students with SEN.

Initiatives such as the buddy support system will yield greater returns if school leaders, teachers and parents work in partnership with one another. The focus of the buddy support system in an integrated special education should be on achieving the goals that teachers and parents aimed for the students with SEN. This could further improve students' learning and relationship between home and school.

No matter how skilled professionals are, or how loving parents are, each cannot achieve alone what two parties, working hand-in-hand, can accomplish together (Peterson & Cooper, 1989; 208).

Limited research was found on teacher-parent collaboration and students' social interaction in Malaysia. The findings from this research may highlight the important role of students' more able peers in further enhancing the social interaction development and academic progress of the students with SEN. The buddy support system in this study may also be shown to encourage able peers to develop respect for other SEN students with unique abilities, learn how to form friendship with these children and to value human differences. Effects such as the students with SEN will feel they are not secluded as a special group, their peers do not view them differently, they feel more comfortable to relate to people their own age group and the feeling of belonging in a community will increase the student's self-esteem and self-confidence. The involvement of the students' more able peers may bring a whole new dimension of social inclusion and acceptance in classroom learning.

The study will contribute to policy formation and decision making about enhancing inclusion in Malaysian schools. To date, the evidential base, apart from that which will emanate from this study, is very limited. The results could also be used as a guideline for other special education schools in fostering effective teacher-parent collaboration in special educational practices. The buddy support system may be an added initiative to further accelerate the social interaction development of students with SEN.

1.7 Operational Definitions

For the purpose of clarity, this study utilizes the following operational definitions:

1.7.1 Teacher-parent Collaboration

Teacher-parent collaboration in this research means a process in which teachers and parents actively work together towards achieving similar goals and objectives in special educational practices. Teachers and parents are key players with equal opportunities in decision-making in a collaboration process in the scope of this research. Both parties have their own rights and responsibilities.

Teacher-parent collaboration in special educational practices arise from teachers' and parents' understanding about SEN, teachers' and parents' willingness to communicate with each other, teachers' and parents' perceived roles as well as teachers' and parents' expectations of each other's role. Opportunities to support and motivate one another exist in the four collaborative aspects above. Such collaborative efforts encourages reflection and exploration on the ways they can work together to further improve students' with SEN social interaction development.

1.7.2 Students' social interaction

Students' social interaction in this study means students with SEN acquiring sufficient sets of social skills close to their age-group. These social skills may be learned by copying others or with a guided instruction from more able people. Building relation with able peers is often a difficult task for students with SEN. King et al. (1997) describes students with SEN as particularly at risk as some of them are not physically, sensorial or intellectually capable to learn the social skills needed. Young children are relatively comfortable being in the same classroom settings with children who have special needs, however as they age, this may change.

1.7.3 Buddy support system (BSS)

Buddy support system or more commonly known as the Buddy Club in this study means a peer interaction program where teachers select the most able or appropriate students in the mainstream class to assist students whom the teacher has identified that needs extra help with specific skills. This students act as 'coaches' and rotate roles as activities change and are required to work on a variety of activities such as football. The benefits of BSS are two ways as the students with special needs will develop through this social interaction, so will the more able peer in their understanding of the activity. The more able peer is expected to be more or less actively engaged with their buddy in order to achieve the aims set by the teacher.

This should also allow the students with special needs to spend more time in a least restrictive environment and accelerate their achievement. However for the BSS to be successful, clear instructional activities are required to be planned in advance by teachers and parents and based on a syllabus. The procedures and routines for working in pairs are taught and

monitored by the teachers. BSS is an initiative to empower able students to work with students with SEN drawing the positive influence of the able peer. The support of appropriate coaching will enable students to become active members in the educational process rather than passive recipients of a set message.

1.8   Theoretical Framework

Theoretical evidence suggests that teachers' and parents' involvement results in positive learning outcomes for children (Stevenson & Baker, 1987; Rutter, 1985; Scott-Jones, 1984). Teachers' responsibilities are focused on preparing suitable IEP, lessons and teaching guides to meet the learning needs and interests of SEN students (Hassan, 2000) while parents play their role as their children's lifetime educators and in providing appropriate support for their child. Thus, both teachers and parents play a vital role in impacting upon students' development.

Bronfenbrenner's Bioecology theory (1977, 1979, 1995), Erikson's psychosocial theory (1963, 1982) and Vygotsky's sociocultural theory (1980) are the three theories chosen to frame the perspective of teacher-parent collaboration and students' social interaction in special educational practices in Malaysia. In the context of this research, the researcher recognized each of these theories has a contribution towards this doctoral research because all these theories emphasize, that students' developmental outcomes and achievements emanate from this dynamic inter-relationship between teachers, parents and students (both SEN and regular students).

Erikson's (1982) psychosocial theory is centered on the development of a person's abilities, beliefs, and their sense of identity to become productive or failed members of the society. It's a combination of a person's psychological and mental beliefs with their learning to cope within a society. The chronological order of the stages are: trust versus mistrust; autonomy versus shame and doubt; initiative versus guilt; industry versus inferiority; identity versus identity confusion; intimacy versus isolation; generativity versus stagnation; and integrity versus despair and is associated with an age span and life timeline (Erikson, 1963). Each stages explains children's mastery of the types of stimulation and potential developmental delays or problems that may arise in failure to master the stimulation for them to become productive members of society.

This doctoral study will focus on the stages of industry versus inferiority where the children are aged from 10 to 12 years and identity vs. role confusion where the children are aged from 13 to 15 years. The reason for this is the pilot implementation of the buddy support system in upper primary and secondary schools in the ten Malaysian government funded schools consist of children in this age range.

The stage of industry versus inferiority sees children discovering themselves as individuals by being responsible, displaying good behaviour and doing the right things. Erikson (1982) viewed the elementary school years as vital years for the development of a child's self-confidence. Many opportunities are there to receive appraisal and recognition from teachers, parents and peers such as completing tasks, completing projects, achieving excellence in academic, sports and co-curriculum. If children are encouraged in a task and are subsequently praised for their achievements, they begin to be more diligent and persevere more in tasks until completed. However, if children are constantly punished or demoralised for their efforts,

feelings of inferiority about their capabilities begun to develop as they find themselves in incapable of meeting their teachers' and parents' expectations.

The stage of identity vs. role confusion is the concern of adolescent self-image, i.e. how does their image appeal to others. The psychosocial frame focuses upon the teenager's puberty, their discovery of their self-image through their peer group that models a range of possible identities which he or she will ultimately develop their own identity. Alternatively, teenagers may experience a fragmented sense of self (Erikson, 1982). According to Erikson, eventually most adolescents will achieve a sense of identity of themselves.

This doctoral study explains the relevance of this theory which can be applied for the development of students' social interaction among students with SEN and their able peers through the buddy support system in an integrated special education setting. Erikson's (1982) theory focuses on students with SEN as a whole and students' development within a social context. Erikson believed in the influence of significant others on a students' development at each stage.

Students' social interaction development within a social context is also closely related to Vygotsky's (1978) sociocultural theory where learning in a society or culture is described as a social process. Vygotsky's (1980) theoretical framework emphasizes the importance of social interaction in the development of cognition. Vygotsky's proposal is that learning happens on two levels. The first level is through interaction with people around the individual that will be formed into an individual's cognition. The second level emphasized the potential development of an individual's cognition however it's restricted to the "zone of proximal development" (ZPD) (Vygotsky, 1980).

As noted earlier, the ZPD is the area where a student's cognitive ability is ready however needs further social assistance to achieve full development. Teachers and parents are able to provide "scaffolding" to the learner known as the ZPD in which learner's cognitive abilities can be further enhanced through a guided process. Vygotsky (1980) added a students' learning and mastery of a task can be further improved when teachers and parents offer sufficient encouragement and guidance.

Bronfenbrenner's Bio-ecological System theory (1977, 1979, 1995) forms the foundation that supports the other two theories in this doctoral research as the ecological systems theory underlines a child's learning is affected by their social relationships with people around them. Bronfenbrenner points that a child's environment is divided into four different levels: the microsystem, the mesosystem, the exosystem, and the macrosystem.

The microsystem is identified as the closest to the child in which direct contacts occurs frequently such as at home, at school, or at a day-care. This system typically consist of teachers, family, and students' peers where the relationships are bi-directional. This is the most influential level as how you react to these people will result in how you're treated in return such as social interactions with teachers and students in a class and school.

The next level consist of the mesosystem where the various components of a child's microsystem interact. A person's microsystems are interconnected and asserts influence upon one another. These interactions with the microsystem components has an indirect effect on the child. The child's parent relationship with their teachers is an aspect of a student's mesosystem. Different components of microsystem working together will impact positively on the child's development. Examples of a child's parent's active participation

in school are attending parent-teacher meetings and regular contact with the teachers. Contrary if the different components in the microsystem are working against each other, the child's development may be affected negatively.

The exosystem is a setting where the child is not an active participant in it however events occurring in here has an effect on the child's development. For example, a mother has been particularly stressed at work and, as a result, behaves more irritably than usual with her son when she gets home. The mother's work is an exosystem for the child because he spends no time there, but it has an indirect influence on him (Tudge, Mokrova, Hatfield, & Karnik 2009).

The macrosystem is the fourth level of the ecological systems theory. It predominantly encompasses the child's cultural environment. It can impact a child's development positively or negatively. For an example, a child in a third-world country economy versus the economy of China will have different effects on the child's development.

Bronfenbrenner's theory (1977, 1979, 1995) highlights if teachers and parents work together, the students will benefit in many ways. Therefore this theory is important for this doctoral research.

A combination of Vygotsky's sociocultural theory (1978, 1980) and Erikson's psychosocial theory (1963, 1982) exemplifies that teachers and parents shared beliefs can secure better outcomes in the development of students' social interaction. The theoretical framework for this doctoral research is illustrated in Figure 1.1.
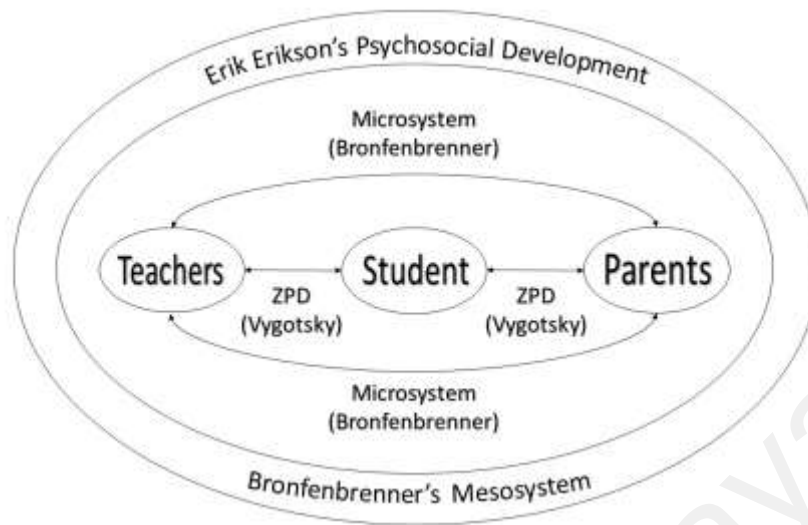
Figure 1.1: Theoretical Framework

This theoretical framework underlines the importance of social interaction in a child development. Teacher-parent collaboration in the context of special educational needs is vital to support and enhance students with SEN development. In highlighting the interrelated theories of Bronfenbrenner's (1977, 1979, 1995), Vygotsky's (1978, 1980) and Erikson's (1963, 1982), a key to understanding the process of collaboration between teachers and parents, and the influence of able peers in the social interaction development of students with SEN was underlined.

1.9   Conceptual Framework

Successful teacher-parent collaboration strategies includes the formation of monitoring teams, training for teachers, curriculum modification and acceleration and modification of learning and teaching methods.

Research evidence shows the importance of effective collaboration (Cook & Friend, 2010; Mislan et. al., 2009; Friend & Cook, 1996; Johnson & Johnson, 1991; West & Cannon; 1988;

Conoley, 1981). There are four exogenous variables deemed important in an effective collaboration process. These are teachers' and parents' understanding about SEN, teachers' and parents' willingness to communicate with each other pertaining to SEN, teachers' and parents' perceived roles pertaining to SEN and teachers' and parents' expectations of each other roles pertaining to SEN.

Three endogenous variables were identified to focus on the development of students' social interaction. These are students' friendship, students' interaction and students' acceptance by classmates.

In addition, three moderating variables related to the Buddy Support System were identified. These are teachers' and parents' understanding of the Buddy Support System's co-curriculum, teachers' and parents' perception of the Buddy Support System's influence and teachers' and parents' perception of the Buddy Support System's benefits.

This research aims to investigate the effectiveness of buddy support system on teacher-parent collaboration and students' social interaction in special educational practices in Malaysia. The conceptual framework for the study is shown in Figure 1.2.

| EXOGENOUS CONSTRUCT
Teacher-parent Collaboration in Special Educational Practices

- Understanding about SEN
- Willingness to communicate
- Perceived roles in SEN
- Expectations of each other in SEN | ENDOGENOUS CONSTRUCT
Students' Social Interaction

- Friendship
- Interactions
- Acceptance by classmates |

Moderator
Buddy Support System

- Understanding of the Co-curriculum
- Influence
- Benefits

Figure 1.2: Conceptual Framework

1.10 Summary of Chapter

This chapter has served to introduce the nature of this study, by outlining its purpose, background, research problem, objectives, research questions and significance of the study. Definitions of certain terms, theoretical framework and conceptual framework relevant to this study have also been included.

Chapter 2 reviews related literature on special education in Malaysia, teacher-parent collaboration in special educational practices, students' social interaction, with a view to examine the effectiveness of the buddy support system in terms of its impact on teacher-parent collaboration and students' social interaction.

CHAPTER 2: LITERATURE REVIEW

2.1   Introduction

This chapter provides an overview of the literature pertaining to special educational needs, teacher-parent collaboration, students' social interaction and the buddy support system in the context of Malaysia. This substantive literature review will focus on four major collaborative themes- 1) teachers' and parents' understanding about special educational needs, 2) teachers' and parents' willingness to communicate with each other, 3) teachers' and parents' perceived roles and, 4) teachers' and parents' expectations of each other's roles. The literature review will also focus on the development of students' social interaction in three major themes – 1) students' friendship, 2) students' interaction and 3) students' acceptance by classmates. In addition, three themes related to the Buddy Support System will be- 1) teachers' and parents' understanding of the Buddy Support System's co-curriculum, 2) teachers' and parents' perception of the Buddy Support System's influence and 3) teachers' and parents' perception of the Buddy Support System's benefits.

2.2   Special Education in Malaysia

Malaysia's active planning in special education began with its signatory on the Salamanca Statement (UNESCOSS, 1994) which advocated an inclusive education for all students. In October 1995, a Special Education Division (previously called the Special Education Department) was formed to streamline provisions and support for special educational needs in Malaysia. The Malaysian Education Act announced by the Malaysian Ministry of Education in 1996 introduced a chapter on special education. Following this, for the first time the Malaysian law has officially defined the term 'special school' and 'special education'. A

'special school' was defined as a designated school tasked to provide special education while 'Special education' was defined as an education that is tailored to meet the needs of students with SEN (Lee & Low, 2014).

The special education division in the MOE are responsible in providing special educational services to students with SEN and these are extended to learning disabilities, remedial education, visual impairment and hearing impairment. Few of these program such as the visual impairment and hearing impairment are offered through special schools. Students with Attention Deficit Hyperactivity Disorder (ADHD), Minimal Retardation, Specific Learning Difficulties such as Dyslexia and those with Down's Syndrome and Autism are placed in the Learning Disabilities (LD) category (Hoque, Zohora, Islam, & Al-Ghefeili, 2013; Bosi, 2004).

Inclusive education was introduced in the Malaysian Education Act 1996 (1998) in respond to The Salamanca Statement on Principles, Policy and Practice in Special Needs Education (UNESCOSS, 1994) which highlighted the need for policy-making in systems management and national capacities development in support of inclusive education. The Malaysian Education Act also highlighted the need for equal access to educational opportunity to all students including those with special educational needs (SENs).

In the subsequent year, the Education Rules (Special Education) 1997 was introduced to drive the implementation of the Education Act 1996. The rules defined three special education programmes that were implemented in Malaysian schools and students with special needs can now choose from three different schooling options: (1) Special education school program for students with visual or hearing impairment; (2) Special Education Integrated Programme

(SEIP) where students with learning disabilities, hearing impairment and visual impairment are placed in regular schools but in separate classrooms from their able mainstream peers; and (3) Inclusive education programs where students with special needs will attend regular mainstream classes with their able mainstream peers in regular schools (Ministry of Education, 2013; Lee & Low, 2013). Students with special needs are first diagnosed by a Medical practitioner before they are placed accordingly in these categories. Currently only 6% of students with special needs are in inclusive programs. 89% attend SEIP programs, and the remaining 5% attend the special education schools (Ministry of Education, 2013).

In 2008, the Persons with Disabilities Act shifted to a human rights model that promotes equal participation in society and added an emphasis on improved access to quality education (Government of Malaysia, 2008). However, this act does not compel ministries and agencies to comply with the promotion equal participation in society and people with disabilities may still be discriminated against and they have no provision for referral. On a global scale, consensus to shift from a welfare model to a social model (Lee & Low, 2014) has resulted in a gradual change of perception towards people with disabilities in Asia and there is less discrimination now (Parker, 2001).

There has been major developments in the field of special education recently in Malaysia. A new special education regulations (Government of Malaysia, 2013), has replaced the previous 1997 regulations. This regulations defined special education services, its codes of practice and students with special needs in greater detail. The MOE has made efforts to provide better quality services for students with SEN. Compulsory education for these students has been made mandatory in 2003 and a free education was advocated in 2008. An

incentive scheme in the form of monthly allowance was provided at the start of 2006 for students registered in the SEN programme and the special education teachers.

Literatures in this chapter results predominantly in the mid-1990s due to the United Nations and UNESCO's global agenda towards an inclusive education then. Most literatures during this time was centered on UN policies such as the UN Convention on the Rights of the Child (UNCRC, 1989), the UN Standard Rules on the Equalisation of Opportunities for Persons with Disabilities (UNSREOPD, 1993), the UNESCO Salamanca Statement (UNESCOSS, 1994), and the UNESCAP Biwako Millennium Framework (UNESCAP, 2002).

2.2.1   Special Education Integrated Programme (SEIP)

In the nineties, integration became a central theme in education. The physical placement of students with SEN in a mainstream school was known as 'integration' and 'mainstreaming' (Farrell, 2000, 2004; Kavale & Forness, 2000; Gottlieb, 1981). Students with SEN could experience integration in a variety of ways such as occasional visits to a mainstream school or a permanent placement in a regular mainstream class of the mainstream school (Farrell, 2000). Despite emerging inclusion policies and innovative implementations, Malaysia and other developing countries is still faced with the challenge to make all classrooms inclusive.

Children with learning disabilities may receive special educational needs support in the regular Malaysian mainstream schools through the SEIP and inclusive special education programs. In the SEIP program, students shares access to all the facilities with other normal students in the school however they are confined to their own special education programs in their special classes. The SEIP program helps prepare special education students towards an

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inclusive education program where they may be placed in normal mainstream classes with their able peers.

The main aim of SEIP is to enable students with SEN to learn in a normal learning environment and enhance social integration between children with special needs and their mainstream peers in as many school's activities as possible. Thus, they will also be able to develop their social and communication skills effectively. All the special classes in regular schools are equipped with appropriate teaching and learning facilities to ensure that the students can learn in a conducive learning environment equitable to their peers in the mainstream school.

The Malaysian SEIP programme however is still associated, in reality, with segregation. For example, six students with learning difficulties are placed in a mainstream school however they are in a special class taught by special education teachers. This generally means these students are learning and being taught separately from their typical peers in the mainstream school. Students are integrated based on their readiness to learn the standard school curriculum under the recommendation of the special education teachers (Lee, 2010).

Problems have risen from misconceptions of the idea of inclusivity and the collaboration among stakeholders such as special education teachers, parents, administrators and mainstream classroom teachers. Mainstream educators hold a misconception that integrated education is similar to inclusive education. They feel the special education teachers should be responsible in the teaching and learning process since the beneficiaries are the students with SEN (Maria, 2013).

All students with and without disabilities have a right to equal education (Bunch, Finnegan, Humphries, Doré, & Doré, 2005; Fisher, Roach, & Frey, 2002; Rea, McLaughlin, & Walther-Thomas, 2002). This concept is supported by educators (Ashman & Elkins, 1994) who assert that it is the moral right of students with special needs to attend traditional schools and receive quality support. The goal is not to erase differences but to enable all students to learn within an educational community that validates and values individuality (Lusthaus, Gazith, & Lusthaus, 1990; Perrin & Nirje, 1985).

Policies for special education in most developed and developing countries have the intention to integrate children with special needs into ordinary schools (Barnartt & Kabzems, 1992). Inclusive education in some countries are conducted based on the initiatives by parents of students with SEN. Parents' motives to choose a mainstream education setting due to the possibilities of their child' interactions with their regular peers. Parents hope the physical presence of their child with SEN will lead to a social inclusion with their peer group (Scheepstra, Nakken, & Pijl, 1999).

Parents involvement is important to facilitate an inclusion process (Palmer, Fuller, Arora, & Nelson, 2001). Teachers and support staff will be more supportive of an inclusion process if parents of students with SEN are more active and involve in the collaboration process. The ultimate aim of SEIP programme in Malaysia is to ensure all students are an integral part of the mainstream education system.

The initiatives in the National Education Blueprint (2013–2025) pave the way for the next step in the evolutionary process of special education in Malaysia, as a target for 75% of students with special needs to be enrolled in inclusive programmes by 2025. However, more

worrying is the lack of standardised outcome measures for students with learning difficulties in Malaysian SEIP programmes. There is a need for an alternative to measure the outcome for these students and an alternative assessments such as monitoring students' social interaction development with their able peers could be placed in the child's IEP. The main focus of the SEIP program was of equipping students with SEN with the attributes and skills to *"fit into"* the mainstream school. The inclusion model by contract is focused on helping the child *"fit into"* the mainstream school and mainstream classroom.

2.3   Teacher-Parent Collaboration in Special Educational Practices

"*It takes a village to raise a child* (Buzzell, 1996)". This proverb is applicable to the idea of parent-teacher collaboration in special educational practices in inclusive schools. In special educational needs, inclusion is often a controversial issue among teachers and parents. Friend & Bursuck (2002) says inclusion means all types of students should be placed in regular classrooms regardless if their abilities meet the curricular standards. Forest & Pearpoint (2004) claims it's difficult to establish an inclusive education which integrates quality and equality however it can be a very rewarding process.

Collaboration is important for a reflection of practices and exchange of knowledge. Collaboration has been used as a main strategy to generate creativity and innovation into the formation of effective educational programs (Adams, 2005). Teachers are faced with great challenges and often find it difficult to effectively meet the needs of all students. The creation of effective schools requires a combination of teachers' and parents' knowledge and skills on instructional strategies and assessment practices, understanding the child's behavioural problems and approaches to cooperative learning (Friend & Cook, 2007; Kampwirth, 2003;

Arguelles, Hughes, Schumm, 2000; Idol et al., 2000; Jordan, 1994). Many studies show the professional expertise of an inclusive school is its ability to work as team (Ainscow & Sandill, 2010).

The collaborative team approach has emerged as a model of addressing the curricular needs of all children, both disabled and non-disabled in the same classroom (Tanner, Linscott, and Galis, 1996). A study by Fernandes et al. (2014) revealed its participants experience on the importance of parents and family's presence and role as a facilitator in the social inclusion process. Bazon and Masini (2011) findings further added that the family has the most influence on the students with SEN. A collaboration between teachers and parents optimizes students' monitoring and learning which leads them to achieve their full potential and achievement (Reed, Osborne, & Waddington, 2012; Lee et. al., 2008; Corsello, 2005).

However, Friend and Cook (2007) suggest for a highly effective collaboration to occur, certain condition needs to be in place such as teachers and parents having a common goal; the process is voluntary; active participation; equality among participants, equal responsibilities and sharing of resources. According to Brownell et. al. (2010), special education teachers have to be able to cooperate and engage parents in a collaborative process.

Santos et. al. (2014) empathizes the importance of factors such as parental involvement in collaboration, IEPs, and curricula adaptations in the implementation of an inclusive philosophy. Dettmer, Dyck, and Thurston (1999) further support the need for collaborative working team, stating its importance towards accomplishing the goals of inclusion. Hallahan & Kauffman (1991) refers to collaboration as the formation of teams to aid the development

of effective education and support for students with SEN. They expressed the need to create these teams as they might be insufficient human resources in schools.

Tantixalerm (2014) found a lack of collaboration in Thai Inclusive Classrooms. Thailand's cultural regime influences people to embrace changes and to avoid disagreement with a group decision. This has an impact on teachers' and parents' role in the inclusive practice as they rather passively agree with the administrator's decision rather than express their inputs or opinions during meetings. Findings also reveal parents' participation in their child's IEP meeting was lacking and parents did not understand its importance towards their child's education. This is due to the top-down management style rather than the collaborative work style.

Special education programmes geared towards social inclusion of students with SEN and their able peers requires more than modifying teaching methodologies in an inclusive classroom (Maria, 2013; de Boer, Pijl, & Minnaert, 2011; Cook et al., 2010; Wang, McCart, & Turnbull, 2007). Special educational practices also needs to be modified to include all stakeholders in the collaborative team.

A main factor for the successful implementation of an inclusive education is the collaboration process between teachers and parents (Lipsky & Gartner, 1998). Andrews and Lupart (1993) stated that educational leaders have increasingly advocated an inclusive educational system. The rationale for inclusive educational system, includes the assumption that students with SEN will achieve the skills of academic and social competencies through interaction, with a range of other learners and their more able peers gain an appreciation of individual differences. Success for an inclusive education in the future is not simply a matter of sending

students with special needs to regular classroom and waiting for a miracle to happen, it depends largely on the cooperation of teachers and parents at present moment to establish a solid platform to build on toward realizing this mission.

2.3.1 Understanding Special Educational Needs (SEN)

A country policy might become problematic if special educational needs are developed and promoted with the concept of "inclusive education for students with special needs" instead of "inclusive education for all" (Tantixalerm, 2014). Research shows a community that embraces a robust model of SEN that meets the needs and supports opportunities to learn and succeed for all students significantly enhance understanding between practitioners and families (Worthington, 2014). For Malaysia to realize its special education goals, there are a number of factors that must be in place. These factors range from effective teacher-parent collaboration, well-structured and constructed IEP, government disposition and finally changing its societal perception (Olufemi & Oluwadami, 2014). Societal perception are also important in the inclusion process as students with SEN's social interaction development are commonly influenced by their neighbourhood and peers (Desforges, Abouchaar, & Britain, 2003).

Serrano & Pereira (2011) asserts collaboration efforts between teachers and parents should involve the sharing of information and observation between themselves and primarily focused on understanding the child's health and potential. Correia (2010), notes that just over half of the students with SEN in Portugal are not receiving education to fulfil their learning needs and further suggests training for all stakeholders involved. Existing legislation needs

to be modified to encourage meaningful dialogue between school staffs, parents and the community in general (Mills, 1994).

Although there are opposing views on collaboration, critics agree that there must be a collaborative spirit within a school. Ali, Mustapha and Jelas (2006) in their study of primary and secondary special education teachers' perceived knowledge in SEN found special education teachers agree on the importance of collaboration and suggested a clear guideline is required on its implementation, specifically in an inclusive education.

Amodio (2003) suggested that it is necessary to have the spirit of collaboration among everyone involved and flexibility in the terms of meeting all students' individual needs. Such needs includes the students' social interaction development among their more able peers. Meeting special educational needs requires special education teachers to be responsive and adaptive in terms of the unique learning needs of all students. They must be innovative, collaborative, and able to accommodate student diversity through effective planning, communication, participation and flexibility (Bosi, 2004).

Teachers are faced with the enormous challenge of educating and developing the potential of children with different skills and needs. Consequently, teachers needs to understand their students' abilities and characteristics so appropriate intervention may be given to boost their potential. Mousouli et. al. (2009) reported in their study physical education teachers has limited awareness and understanding about inclusion. They added teachers associated it with "mental retardation." In Malaysia, teachers usually only discover students with special learning requirements over time as the identification of these students are not yet made compulsory during their school entry. However, these teachers are constantly left to fend for

themselves once they've discovered there is a student with SEN in their classes (Lee & Low, 2013).

It is fundamentally important teachers recognizes students' learning needs by their level, in order to offer pedagogical interventions to assist the students achieve their potential. Unfortunately, parents often have low expectations towards students with SEN, especially if they're in special education schools (Lee, Abdullah, & Mey, 2011; Shah, Arnold, & Travers, 2004; Watson et. al, 1999). Therefore it is necessary to establish regular IEP meetings between the teachers and the student's parents and to reinforce the importance of such meetings to parents. Current educational laws outlines students with SEN rights to be educated a non-restrictive environment, given equal rights to mainstream education curriculum, and to the best possible extend be included in the same school setting as their typically developing peers, leading to increased number of SEN students' enrolment in mainstream schools.

Azad (2014) findings revealed mainstream teachers coped with the new inclusive classroom changes by modifying their teaching curriculum and applying physical adaptations. Teachers used different teaching techniques to meet the various students' needs in their classrooms. This study further revealed teachers' understanding of their students' specific learning needs helped them modify the learning tasks and adapting the tasks so these students could have the same learning access as their peers. These modifications resonate with the 'differentiation' approach (Westwood & Graham, 2003; Westwood, 2001; Coutinho & Repp, 1999; Kyriacou, 1997). The primary aim of 'differentiation' is to make learning accessible for students with SEN through a specially designed curriculum and teaching techniques (Westwood, 2001). Criticism of the 'differentiation' idea were highlighted (Brown, 1999;

Wang, 1998; Reynolds & Farrell, 1996; Hart, 1992; Burton, 1992) as modifications of curricula widens the learning gap between these students and their regular peers.

However, Kubaski et.al. (2014) study showed teachers´ lack understanding on the learning needs of students with SEN highlights the needs for teachers to undergo adequate training based on the integration of learning to meet specific student's needs and social development theories. Nunes, Azevedo, & Schmidt, (2013) findings in Brazil revealed teachers' perceived inclusion as merely placing students with SEN in mainstream classroom, while other studies proves teachers' understands what is special educational needs and the difference between integrating and inclusion of students with SEN into mainstream classroom (Sanini, Sifuentes, & Bosa, 2013; Camargo, Pimentel, & Bosa, 2012). Teachers' understood the long term objective of inclusive education is for SEN students to be socially accepted and valued by others.

Bell, Martin, and McCallum (2014) highlighted 5 major elements in their study; (a) The teacher creates learning by understanding the concepts, tools and structures of the subject to enable learners mastery of subject content; (b) The teacher ensures an inclusive learning environment for each learner by understanding their individual differences to meet high standards; (c) The teacher understands to encourage learners to develop deep understanding of subject area, a variety of instructional strategies is required to build learners skills in applying the knowledge learned; (d) The teacher understands the needs to plan instructions by drawing upon the knowledge of subject areas, its curriculum, pedagogy, as well as the level of knowledge of their learners; and (e) The teacher understands the need to use multiple methods of assessment to monitor learners progress. The teacher education standards were designed to develop expertise in meeting the needs of diverse student populations, including

those with disabilities. Evidence supports the effectiveness of inclusive practices on student achievement (Friend & Bursuck, 2002).

However, teachers' views and beliefs influences their teaching and learning (Mansour, 2009; Standen, 2003; Aguirre & Speer, 1999; Pajares, 1992; Thompson, 1992). Azad (2014) study revealed the suitability of a mainstream education for students with SEN is debatable. Few teachers were in the belief regular school curriculum was the appropriate place provided these students are provided with adequate support such as extra or individual attention meanwhile there was teachers who believed an inclusive education should be based purely on students' performance. If a child with SEN is not making sufficient progress, the child should go to a special school as it's unfair for their typically developing peers as much effort was placed for that child without any result.

An inclusive approach provides social benefits such as positive role models for students with SEN. Hwang and Evans (2011) added the social benefits extends to students without disabilities as they learn to accept students who are different from them. They also highlighted teachers' views on SEN students' development in their social skills (e.g., friendship) with their regular peers and teachers began to see these students as important members of their class. Teachers also reported successful inclusion in their classes as all students were seen playing together regardless of their differences.

Parents' preference to send their child with SEN to a mainstream school due to opportunities such as friendship and development of social skills with the 'normal' children. Also the discrimination on their child's disability is lesser in mainstream classrooms as they're treated equally as all other students (Jelas, 2000). Parents who are good observers often have a deeper

understanding of their child's capabilities as frequent comparison with other children occurs (Brassard & Boehm, 2008; Rydz, Shevell, Majnemer, & Oskoui, 2005).

Cummings and Hardin (2014) findings of parents' understandings of SEN revealed there was a shift from not noticing to seeking more knowledge and understanding about the disability once they've learned their child has a disability. However this is inconsistent with Gavish and Bar-On (2014) findings, where the parents of children with SEN did not identify with their child's disability and when it's visible, parents take it very harshly upon themselves. Parents were seen to lack the ability to copy with the child's disability and were helpless. Parents begin to view the disability in a subjective "emotionally involved" way and decision are made instinctively rather than thoughtfully. Unlike some parents, teachers are more objective and are able to understand better a child with SEN thus succeeding in choosing the appropriate intervention program for the child.

Mislan et al., (2011) investigated parents' of children with SEN understanding on IEP implementation and found parents understood IEP is tailored to meet their individual child's needs and their involvement in the education plan is needed for home activities with their child. Parents also understood their support is needed in an IEP implementation for their child to further improve their abilities. However, in Rainforth & York-Barr (1997) research, parents were found to have little understanding of IEP, its contents and the implementation of it.

Inclusion is a continuous process of acceptance for individuals with special needs and the realization of their individual potential. Inclusion should be based on a supportive and fair society that views education as a right for all students. Inclusion is not merely placing

students with SEN side by side a typically developing peer but requires the collaboration of teachers and parents whom are responsible for the quality and access to meet the needs of these students. This research is vital to measure teachers' and parents' knowledge about SEN and their participation especially in the collaboration aspect of this study. The understanding of special educational needs to go beyond just the teacher-student relationship. Parents' involvement in school programmes are vital to enhance the quality of education and support that is provided for their child.

2.3.2 Willingness to communicate in matters pertaining to SEN

Inclusion of students with SEN in schools and society bring great challenges. Misconception on the meaning of integrated special education are rather apparent among principals, implementers, parents, policy makers and typical developing peers in Malaysia (Adnan & Hafiz, 2001). McCaleb and Dean (1987) in assessing teachers' communication skills identified teachers' knowledge, explanation and feedback is important when communicating with parents. He believed more frequent communication between teachers and parents leads to more information and knowledge of a student's progress.

Amodio (2003) findings showed an overwhelming frustration with the process of communication in its current format. There is a strong indication of need in the area of communication and utilization with the special education staff. It is not indicated if this is from the perspective of a general education teacher or by special education staff. However, it is clear that there are some issues to address. Teachers need to learn how to communicate effectively with parents of various backgrounds. They need to know the attitudes and needs

of parents from various economics background. They need to 'teach' parents how to assist with their children's social development and academic performance at home.

Lee and Low (2013) note that teachers' communication with parents is important for them to collaborate and share information. Teachers underlined their willingness to hear parents' suggestions and make changes, meet their special demands, and it's not difficult to meet these demands as long it benefits the child. The IEP's detailed plan provides agreed meeting schedules with parents to keep them involved in their child's education plans. Just as teachers are concerned on meeting the students' learning needs, they should also try to meet the needs of parents so they're more comfortable with their child's education program.

Lawson (2003) in his study of parents' and teachers' perceptions of parents' involvement in school found there existed a good relationship between teachers and parents and active communication permitted a continuous collaboration process. However, Lawson did not detail which factors that were crucial in the formation of good communication between teachers and parents in the collaborative process. Effective communication between teachers and parents happens when both parties are honest and supportive of each other's responsibilities and roles (Unger, Jones, Park, and Tressel, 2001).

Azad (2014) found regular parent teacher meetings were held for the continual process of reassessment of the child's needs. Parental collaboration was regularly sought to evaluate the child in the social context and to respond to their learning differences effectively. Teachers were then able to address individual student's needs. Parents' inclusion in the child's IEP program highlights the importance of decision-making as a team and acknowledges parents

as the experts in knowing their child's specific learning needs (Lo, 2014; Overton, 2012; McDermott-Fasy, 2009).

Barrett (2005) found teachers hoped for realistic expectations from parents when parents communicates their suggestions to the teachers. Realistic expectations should also be there when parents are listening to teachers' explanation on their child's IEP. In order for special education services to be carried out effectively, communication between parents and teachers should be made a priority (Barrett, 2005). Barrett further added teachers should be send for training on enhancing their communicative and collaborative skills to encourage parents involvement in the IEP process.

Choudry (2014) identified teachers and parents who both encouraged social inclusion for children with SEN and the typical developing peers as they both had open communication between them and understood how it helps to meet the child's needs. This resulted in increased social skills and self-concept for the child with SEN, increased understanding and friendships between students. Students' interaction among peers and their academic achievements increased significantly. Mainstream students also has increased empathy for their peers with SEN.

However, Vorapanya and Dunlap (2012) reveals contrary findings. Teachers felt uncomfortable collaborating with parents as they did not attend IEP meetings, fail to understand the importance of IEP in meeting their child's needs and development. Zilda et. al. (2014), however reinstated the communication support from families is encouraging and family members were willing participants according to their available time. The importance

of social and educational inclusion were recognised as important for the child's acceptance and acquisition of knowledge.

Teachers have the capability to develop an effective communication process with parents (Lloyd & Hallahan, 2005). Teachers have to develop resourceful ways to initiate interaction and connection with parents as they have limited opportunity to meet them to discuss on the students' progress. Sometimes this tasks can be quite challenging as certain programmes such as IEP requires teachers to listen and understand parents' ideas and views (Collins, 2007). Hallahan and Martinez (2002) suggested teachers communicate with parents on the areas of discussion before the IEP meetings so parents could be well prepared for the meetings.

Research has been done on how parents' involvement in special educational practices has helped students' academic and social development (Mattingly et. al., 2002). Epstein (1995) concluded there are six different types of parents' involvement consisting of active communication, decision making, parenting, volunteering, home learning and collaborating with community.

These types of involvements are all different from one another and are based upon many different factors of why the parents become involved. The first form of parent involvement defined "active communication" are parents' active communication with teachers on school programs and student progress. Types of communicating include: a parent's attendance at meetings with the teachers at least once a year (and attending follow-up meetings, if needed); attention to folders that go home with student work where they can write comments or read teachers' comments; and a parent's attendance at conferences on how to improve student grades. It also includes other forms of communication such as phone calls to the school and

the ensuring that teachers provide them with clear information about schools, school courses and programs, school policies, and activities. Communicating helps the parents understand the school's programs and policies, raises their awareness and helps monitor their child's progress, and opens the line of communication between them and the teachers. Teachers benefit from this method through understanding the parents' views on policies, programs and progress.

It has also been discovered that parents communication with teachers has also helped to improve student attendance, to improve enrolment in challenging high school courses, and to promote successful transitions for the students from special education to general education, thus developing positive social interaction (Jordan, Orozco, & Averett, 2002). For example, this study showed that students can improve skills such as their behaviour and social ability as well as create a more positive student-teacher/adult and student-peer relationships. These positive relationships can lead to strong role models for the students to follow. Braley (2012) shared all of the parents expressed that they needed open lines of communication between all parties that have a hand in their child's education and wishes for more collaboration and communication with teachers. Communication between parents and special education teachers helps them to connect to what the students with special needs is learning at school and to what they are learning at home.

A partnership between parents and teachers creates an environment that is comfortable and safe for the child. A parent-teacher partnership in special education is especially needed (McDermott-Fasy, 2009). A student with special requirements needs a helping hand to guide them. Although the parents of a student with special needs and the teacher may meet at an IEP meeting, the parents should know what goes on in the classroom on a regular basis. If

there is a problem that the teacher discovers about the student, the teacher should be able to feel that they can speak freely to the parents to address the problem as parents understand their child best. What many of the scholarly resources are missing is the experiences that parents have while interacting with the teachers, what works well between them so the child reaps the benefits of this collaboration for their development.

Johnson & Duffett (2002) found 70% parents of children with SEN are unaware of what their children are entitled to in education. The biggest complaint conveyed by parents was the process to obtain information on the types of services entitled to their child. Teacher-parent collaboration in their willingness to communicate with each other could be facilitated with a positive and friendly communication process centred on the SEN child's social and learning needs.

2.3.3 Perceived roles in the implementation of SEN

The importance of collaboration among teachers and parents, for the social interaction development of students with special needs may lead to possible innovations in ideas, knowledge and pedagogical practices for inclusive education change in Malaysia. Success towards inclusion would be easier if teachers and parents recognize each other's specific roles in achieving the child's educational objectives. A special education teacher's role is to help identify the child's learning needs and assist to fulfil the needs (Smith & Strick, 2001). Teacher-parent collaboration can define roles and commitment from both teachers and parents to ensure a smooth functioning of the collaborative process (Arguelles, Hughes, and Schumm, 2000).

Teachers' and parents' perceived roles in the context of special educational practices in Malaysia are crucial (Smith et. al., 2015) as special education teachers now work in classes with many SEN students. A repertoire of strategies are therefore needed to deliver knowledge, achieve ambitious targets and to corporate with various professionals (Eisenman et. al., 2010; Symeonidou & Phtiaka, 2009; Hoover & Patton, 2008; York-Barr et. al., 2005; Lamar-Dukes & Dukes, 2005). Special education teachers now spend additional time to teach in one-to-one or in small groups to meet the needs of students with SEN. These teachers role has evolved from just a presenter of information to a more learning coach (Sams & Bergmann, 2012).

A special education teacher needs multiple skills (Brownell, Ross, Colón, & McCallum, 2005) to accommodate the complexity of their roles in an often ambiguous profile (Gersten, Keating, Yovanoff, & Harniss, 2001). Gavish & Bar-On (2014) defined special education teachers' role as caring for the student's needs and meeting parents' expectations. The teacher is viewed as "more than a teacher and educator." The teachers are viewed as mediator between the students with SEN and the society. Teachers in Gavish & Bar-On's study also identifies and diagnose the child's needs and difficulties. Teachers are required to know student's special needs in depth, review past diagnoses and its accuracy. Teachers are then able to prepare an IEP for the student guiding them on basic life skills so they're independent and able to integrate into society.

Gersten, Camine, and Woodward (1987) found some evidence on the change in perception of special education teachers' role. "The special educators' role is changing from a pull-out or self-contained service provider to one whose function is consultation and instructional adaptation". They added there is a new trend towards redefining the role of the para-

educators. The roles of all special education staff must be clearly perceived and defined as a reflection of the inclusionary vision of a school. Harrington (1997) supports that "Special educators have a variety of experiences in the inclusionary setting. Some felt like aides, while others a supervisory role".

Teachers' have two roles, the technical role requires their competency in teaching while their human relations role requires their sensitivity in dealing with the students and their parents (Phillips & McCullough, 1990). Lee (2010) reported that a special education teacher has multiple roles to play such as a coordinator, a trainer or an advisor, whichever deemed fit for a situation. The teacher provides the leadership and coordination for the successful inclusion of a child through collaborative effort with the parents. The teacher is instrumental in bringing about change through her roles as a collaborator, an organizer, an advisor and a trainer to respond to the needs of the school.

Teachers talking with parents helps facilitate decision-making process and creates opportunity for a family-centred practice on the children's development and behaviour. Teachers could support parents with their child's diagnosis and providing reinforcement, among others (Rydz et al., 2005; Williams & Holmes, 2004; Glascoe, 1999). Teacher-parent roles could be enhanced further with a positive approach to attract parents' involvement in their child's education (Epstein, 1995; Galinsky, 1990). Lee and Low (2013) further reinstated teachers' rated parents' role highly in continual teaching at home rather than them depending solely on classroom learning as it attributed to the students' academic success.

Mislan, Kosnin, Jiar, & Shariffudin, (2010) discovered teachers understood and carried out their roles in special educational needs practices. They also felt parents play an important

role in supporting SEN. However, Amodio (2003) respondents discussed needs for collaboration and guidelines for staff regarding roles and legal guidelines. The respondents seem unclear of their professional responsibilities of the process as well as unclear as to how they are to carry out the actual inclusion of the students in their classes. There was concern for roles and responsibilities of the personnel involved in the inclusion process.

The role of parents has always been an important topic in inclusive education practices (Braley, 2012; McDermott-Fasy, 1999). Past research includes reasons why parents involve themselves in their child's education (Hoover-Dempsey, Walker & Sandler, 2005; Epstein, 1995), and the different ways parents can become involved (Wanat 2010; Lee & Bowen, 2006; Driessen, Smit, & Sleegers, 2005; Epstein, 1995).

Parents have decision making rights concerning their child's education although teachers may feel pressured due to this (Cramer, 2006). As executors of the educational plans, teachers play multiple roles. They take proactive actions with the resources around them and supports parents' involvement in their child's educational plans. Two studies by Bazon & Masini (2011) and Fernandes et. al. (2014) highlighted the important roles parents and family play in the social inclusion process as they have the closest relationship that may impact students' school life performance. Parents are the best equipped agents of change as they have a thorough knowledge of their child's needs (Dixon, Badawi, French, & Kurinczuk, 2009; Glascoe, 1999).

It can be concluded that there is no, currently, strict guidelines on the roles and responsibilities of the individual players in the integrated special education process in Malaysia. The biggest barrier that seems apparent is, blurring of roles and responsibilities

among teachers and parents. The need for clarification of these things should be helpful for educators towards an inclusion process that develops and enhances students' social interaction and its development.

Parents' role for their child with SEN are well documented (Beveridge, 1997). Reynolds and Clement (2003) highlighted many educational programmes and policies are addressing areas of improvements for further parental involvement. IDEA (1997) further emphasized parent equality as teachers in making decision for the child's education. Parents' have rights to be heard in the decision making process of their child's placement or evaluation.

Baker and Sodden (1998) found many methodological limitations concerning the definitions of parents' involvement in more than 200 research studies. Nevertheless, parental involvement has proven to be a crucial factor on students' success in school (Henderson & Berla, 1994). Teachers will be bereft from a potentially powerful source of support if parents' role and involvement is ignored in a child's development process (Lloyd & Hallahan, 2005).

Its vitally important parents understand the process in supporting the child. Boueri, Schmidt, & Veiga, (2014) reported parents played a role in reinforcing their child's learning at school and introducing new learning materials for the child with SEN at home resulting in increased student performance. Parents felt empowered in this process and know their roles well especially in the scope of their child's development. Findings by Stevenson & Baker (1987) involving 179 teachers and parents revealed children whose parents played an active role and participation in parent-teacher meetings performed significantly better than children whose parents who were less involved. These active parents were more knowledgeable about the school's goals and had additional resources to aid their child's learning.

Individualised Education Programme (IEP) is a document that contains information such as students' current performance, how their disability affects their involvement and progress in school, measurable goals and benchmarks or objectives, accommodations and modifications in classrooms and during testing, information regarding needed special education services such as where and how often these services are offered, and the responsibilities of the local educational agencies are all included in the IEP (Lo, 2014).

Parents face various challenges to participate actively in their children's special education program due to numerous factors such as their lack of ability to read and comprehend school documents (Lo, 2014; Pizur-Barnekow et. al., 2011; Singh et. al., 2009; Fitzgerald & Watkins, 2006) which leads to parents' dependency on teachers for professional opinion (Morgan, 1982; Banks, 1993). Research has indicated that parents seek information to help their child and involve themselves in the educational programs (Hoover-Dempsey et. al., 2005; Hoover-Dempsey & Sandler, 1997; Eptein & Dauber, 1989; Dornbusch & Ritter, 1988).

Parents' perception of their incapability to guide their child with SEN effectively as they are often poorly equipped to be able to contribute productively (McConkey & Bradley, 2010). Valle and Aponte (2002) supported this by mentioning parents of students with SEN often are passive participants in IEP meetings. Parents often feel their contributions and views has little value and are often distanced team members of IEP meetings (Dabkowski, 2004). Henderson (1987) believes it is sufficient if parents are made aware of the benefits for their involvement in school programmes and it does not need parents to be highly educated to make a contribution. Parents should convey their expectations across to the teachers.

Parents play an imperative role in a student's IEP preparation. Parents are better equipped to play their roles effectively in assisting their child's development if they have sufficient information and awareness of the IEP and its process (Green et. al., 2007; Hoover-Dempsey et. al., 2005; Christenson, 2004). Parents' attitude and interactions with their children plays an influence in shaping their child's social and intellectual well-being (Smith et. al., 2015; Lloyd & Hallahan, 2005).

Parents could also play their role to help improve and develop the child's social functioning (Jordan et al, 2002). For example, studies have shown that students can improve their social ability as well as create a more positive student-teacher and student-peer relationships. These positive relationships can lead to strong role models for the student to follow. Parents should play their role in inspiring their child with SEN with positive feelings towards learning and school. The role of parents should be included in all aspects of planning (Wright, Stegelin & Hartle, 2007) as what works for one child might not work for another.

Khalid, Yasin, & Said, (2012) research regarding the role of parents' in special education discovered that the child's IEP discussion needs to take place between the teachers and parents during their meetings. Parents should not set too high expectations and that parents should not allow the influence of academic achievements as a yardstick become a measurement their children's development. They also highlighted parents' needs to expand their skills and knowledge to facilitate the social interaction development of their child. Hammill, Leigh, McNutt, & Larsen (1988) states that parents should embrace their roles as advocates for their children, and it's a skill to be used throughout the years.

The goal of special education must be a clear goal that is shared by all and cannot accomplished in isolation. The perceived role of teachers and parents are vital for SEN to serve its purpose as both teachers and parents are directly engaged in the program's implementation and learning goals. For this study, it will be interesting to know teachers' and parents' perception of their roles in special educational practices in Malaysia. Teachers in this study may have different perceptions on parents' decision making and rights towards their child's educational plans. Both teachers and parents should aim towards similar objectives in the IEP that is helping students with special needs progress further in their social interaction development and academic achievement.

2.3.4 Expectations of each other in SEN

Teachers' roles have evolved in such a challenging way that they now need to cater to their students' needs and meet parents expectations. Teachers training are also now centered on creating partnerships with parents. Teachers and parents could enhance students with SEN social development and academic achievement if both parties aim for the same goal.

One of the major concerns for an inclusive process is the state of readiness of the students with SEN. These students needs to undergo a transition from segregated special classrooms with low expectations of their performance to a more challenging mainstream education classroom with high expectations on their outcomes. Considerable support should be extended to both teachers and students to guarantee social interaction development and academic achievement. Teachers must understand the role of the parents; collaborate with them as working partners to build reliable partnerships

Tonini, Correia, and Martins (2014) findings revealed the collaboration practice for all involved in the educational process has both its challenges and benefits. Challenges exist in relation to parents to practice "collaboration and not demanding" as when parents collaborate with teachers instead of demanding, the gains are both effective and efficient. Literature emphasizes teachers' role in encouraging parents' involvement in all aspect of their child's development (Sameroff, 2010; Dunst & Trivette, 2001, 2009; Sameroff & Fiese, 2000).

However, teachers sometimes perceived more complex expectations from parents' if they're involved in their child's educational plans (Welch & Sheridan, 1995). Findings by Cramer (2006) portrayed teachers view on working with parents as both a challenge and a request. Nonetheless, the study emphasized parents' involvement in their child's IEP assisted teachers to meet students' need more efficiently. Fernandes et al. (2014) found parents placed high expectation towards teachers in their child's education. This is a direct relation due to parents' involvement, encouragement and participation in their child's school activities

Teachers should encourage parental involvement in order for them to further support their children (Correia, 2010). Parents should be involved in important decisions as team work values such as cooperation and collaboration are the key to have equal expectations from both sides (Tonini et al., 2014). The effectiveness of the special educational practice can be disrupted if various factors come into play such as a lack of role clarity between teachers and parents. Therefore, role clarity needs to be emphasized in a collaborative team (van Hover, Hicks, & Sayeski, 2012).

Teachers could play a role in helping parents understand their role better by creating opportunities for parents to see the IEP activities being implemented, refer them to other

parents with children of similar SEN and or to parents support groups (Couchenour & Chrisman, 2004; Guernsey & Klare, 1993). Shapiro and Sayers (2003) highlighted teachers' role in informing parents of their child's learning outcomes and the teaching techniques used to accomplish it. In some cases parents and teachers do not know who should initiate and maintain the collaboration.

The main goal of a teacher-parent collaboration is to share the same belief in the outcomes and to improve services for students with SEN (Cook & Friend, 2000). A strong collaborative partnership can be sustained if both teachers' and parents' understand each other's roles and their capacity to act in the collaborative process towards social inclusion (Thomas, Correa & Morsink, 1995).

Bauer and Shea (2003) suggested barriers to a strong collaboration should be removed. Spinelli (1999) added barriers to a collaborative process often consist of assumptions that teachers and parents have on each other that impedes cooperation. They stressed both teachers' and parents' needs to find a way to deal with these assumptions. This is to avoid frustrations from teachers that the collaboration initiatives with parents is not successful and to their expectations (Hoover-Dempsey, Walker & Sandler, 2005). As such, a key factor in efficient teacher-parent collaboration is understanding each other's role and perceptions in their efforts towards students' social interaction development.

Many parents, especially parents who have children with special needs, become dissatisfied with the relationship they have, they think that the teachers are unable to fulfil their responsibilities and do not want to have a collaborative relationship. In Wanat (2010) findings, a parent that was frustrated that because there were no defined roles between

teachers and parents, their miscommunications were standing in the way of helping the special child. In Ding et. al. (2006) study, parents expressed their concern that teachers lack sufficient training and relevant resources to implement an individualized instruction effectively.

In Malaysia, the special education teacher is expected in terms of inclusion to *ready* the student to be placed in regular classes (Lee, 2010). The teacher will then recommend the student's readiness for inclusion based on two criteria: the student with SEN is intellectually *ready* for academic learning and behaviourally *ready* for a formal classroom learning (Lee, 2010).

This study will focus on determining the expectations of roles between teachers and parents to ascertain its consistency against previous research findings. The inclusion process will work successfully if teachers and parents have clear expectations of each other's role to address the specific needs of every student with special needs. Parents' collaboration with teachers in their child's social interaction development can yield remarkable results in spite of inadequate resources.

2.4   Students' Social Interaction

Students with SEN often face an obstacle with social interaction (Wendelborg & Tøssebro, 2011). The field of social sciences has seen an increased focus on interpersonal relations. An understanding of the social and communication process is a key factor in a social inclusion of students with SEN. These students are often incapable to express their thoughts and feelings leading to hindered social interaction development (Wendelborg & Tøssebro, 2011).

Social inclusion of students with SEN remains an important aim in current times (Koster et al., 2007). For some time it was assumed students with SEN won't be able to fit into mainstream school and it's better for them to remain in special education schools. Consequently, many countries begin to develop an education system consisting of different types of special schools catering to different types of special needs. These special education schools was viewed as possessing various advantages such as trained special education teachers, individualised instructions in classrooms, lower teacher-student ratio, and a curricular based on social and vocational development (Kavale & Forness, 2000).

However, many of the presumed advantages came increasingly questionable as these students with SEN are segregated from the typically developing peers. For instance, Gartner and Lipsky (1987) research on 50 studies concerning academic performances of mainstream and special education students found no significant evidence that specialized special education programmes offered more significant benefits for students with SEN than mainstream education. On the contrary, students with SEN performance was much lower compared to their typically developing peers in mainstream education. Baker (1995), Westwood and Graham (2003) concluded similar results having summarised several studies based on the students' learning performances.

Research shows students with SEN in regular mainstream schools often finds it difficult to participate socially. They are often neglected by their peers, low acceptance by their peers, have relatively few friendship circles compared to their typically developing peers (Pijl, Frostad, & Flem, 2008; Bramston, Bruggerman, & Pretty, 2002; Kuhne & Wiener, 2000; Le Mare & de la Ronde, 2000; Soresi & Nota, 2000).

Initiatives to increase social inclusion for students with SEN are a major step towards total inclusion apart from just complying with these students' right to be educated alongside their typical peers in mainstream schools. Parents often view social inclusion as being the primary motive in placing their child with SEN in a regular mainstream school (Koster, Pijl, Nakken, & Van Houten, 2010; Koster, Nakken, Pijl, & van Houten, 2009; Sloper & Tyler, 1992). These parents hope the physical presence of their child will lead to social inclusion where positive relationships are built with their peers.

Parents also assume frequent contact with their child's able peers will have a positive effect on their child thus the push for their child to be educated alongside their able peers in regular mainstream schools. Parents have expectations that their child may be able to integrate into the local community as the inclusion process will lead to increased social situations and opportunities for contact with able peers (De Monchy et al., 2004). Furthermore, some parents hope in the long term, society's attitude towards special needs will change as a result of their child's presence in a mainstream school as a change of attitude might arise among other peers. Because of the emphasis of social inclusion by parents, it is important to investigate if this aspect of social inclusion can really be achieved in Malaysia to aid students with SEN social interaction development.

Literatures have shown difficulties with peer relationship and a low social position at school among students with SEN might lead to maladjustment in the future (Nelson, Rubin, & Fox, 2005; Bagwell, Newcomb & Bukowski, 1998; Terry & Coie, 1991; Parker & Asher, 1987). Ollendick, Weist, Borden, and Greene (1992) discovered students with low social position in school leads to weaker academic achievements, have a higher failure rate in school, increased chances of drop out and committing delinquent offences. Due to the effects of low social

position in schools, it's important to observe the social inclusion process and social interaction development of students with SEN. Appropriate measures could be taken if these students are teased, isolated or lonely.

Recent literature emphasized the interaction between students with SEN and their typically developing peers is an important aspect of social inclusion (Bossaert, Colpin, Pijl, & Petry, 2013; Wendelborg & Tøssebro, 2011; Koster, Nakken, Pijl & van Houten, 2009). These research has looked at the frequency of contacts, friendships, and reactions among students with SEN and their peers in an inclusive settings.

Many studies use the concepts 'social integration', 'social inclusion' and 'social participation' (Koster et. al., 2009). However, there is uncertainty about the meaning of these terms. A literature analysis pointed out these terms are used interchangeably but points to the same meaning (Bossaert et. al., 2013). The use of different concepts but highlighting the same notion is both confusing and causes ambiguity. This doctoral research will therefore use only the term 'social interaction' for the social inclusion dimension of this study.

2.4.1 Friendship

The literature has consistently shown that inclusion of students with SEN in a mainstream school does not spontaneously lead to friendship and positive contacts with their typical counterparts (Guralnick et. al., 2007; Guralnick et. al., 2006; Monchy, Pijl, & Zandberg, 2004; Lee, Yoo, & Bak, 2003; Scheepstra et. al., 1999; Guralnick et. al., 1996). Physical integration of students with SEN is an important first step however, the acceptance of these students by classmates is equally vital for a successful inclusion process. Both teachers and

parents have an important task to ensure the success of the physical integration process as its failure results in lower social status among students with SEN.

Friendship is an important element to gauge the success of a social inclusion process between students with SEN and their able peers (Koster et. al., 2009; Williams et al., 2005; Davis et al., 2002; Stinson & Antia, 1999; Harper et al., 1999; Kennedy et al., 1997). De Monchy et al. (2004) assess the social interaction development of students with SEN in terms of their number of friends with their able peers, performing a task together, being liked, and the degree to which they are bullied by classmates. Vaughn et al. (1998) describes the social interaction development by focusing on friendship, friendship quality, and the social skills development.

Fryxell and Kennedy (1995) in their research to measure students with SEN social interaction in general education classrooms found these students had more social contacts and richer friendship networks with their typical developing peers. These students with SEN also received more social support than their peers who were educated in self-contained classrooms. Kennedy, Shukla, and Fryxell (1997) research compared the social interactions of students placed in inclusive classrooms and inclusive schools. Their findings revealed that the students who were educated in inclusive classrooms had a larger friendship network, greater number of interactions and social contacts with students without disabilities.

Williams, Johnson and Sukhodolsky (2005) in their study suggests a combination of (reciprocal) friendships with social interactions and peer acceptance are important strategies to facilitate social inclusion. Yude, Goodman, and McConachie (1998) also highlighted the

essential aspects of social inclusion for students with SEN is the combination of friendship and peer acceptance.

Odom (2000) distinguishes between positive and negative indicator of social inclusion using the terms social acceptance and social rejection. Social rejection happens when students with SEN often teased, rejected and neglected by their peers in mainstream settings (Pijl, 2007; Monchy, Pijl & Zandberg, 2004; Gottlieb, 1981). Students with SEN friendship difficulties in childhood may have a serious maladjustment in later life (Terry & Coie, 1991; Parker & Asher, 1987). According to Jackson and Bracken (1998), students with SEN who face social rejection will likely develop aggressive behaviours. Encouraging social interaction among students with SEN and their typically developing peers needs to be a guided process as these students often lack the knowledge how to interact and join in group activities effectively (Jackson & Bracken, 1998; Ollendick et. al., 1992).

The effectiveness of a social inclusion program has to take into consideration its effect on the students with SEN's academic and social behaviors. Cushing and Kennedy (1997) documented findings of three case studies with students without disabilities who were peer supports for students with SEN. These students had improvements in their academic, grading and classroom participation. Staub et. al (1994) research findings of students without disabilities friendships with the students with SEN helped them feel important; recognise their strengths and they found companionship.

Hendrickson et. al. (1996) survey of 1,137 middle and high school students' friendships with their SEN counterparts revealed these students were willing to form friendships with the SEN students and that inclusion facilitated the development of their friendships. Helmstetter, Peck,

and Giangreco (1994) survey of 166 high school students without disabilities indicated that friendships with students with SEN were beneficial to them as it resulted in the students' acceptance of human diversity contributing to their own personal growth.

The studies reviewed reveal that placing students with SEN in an inclusion classroom has positive views of inclusion from students without disabilities. These students believe that inclusion benefits them in terms of an increased acceptance, understanding, and tolerance of individual differences; a greater awareness and sensitivity to the needs of others; greater opportunities to have friendships with students with SEN; and an improved ability to deal with disability in their own lives (Salend, & Duhaney, 1999).

2.4.2   Interactions

Interactions between students with SEN and students without disabilities is an essential part of a social inclusion process (Lambert & Frederickson, 2015; Bossaert et. al., 2013; Koster et. al., 2009; Attwood, 2000; Brown et. al., 1999; Kamps et. al., 1999; Goldstein et. al., 1995; Luetke-Stahlman, 1995).

Hunt et al. (2002) shows evidence of social interaction between students with SEN and their able classmates seems to be at the core based on the frequency of interaction and the quality of their communicative functions. Hunt et al. (2003) further investigated the interaction development of students with SEN in mainstream classrooms based on their interaction patterns such as initiating, responding to interactions, their level of engagement and participating in conversations with their able peers and findings revealed students with SEN improved on their interactions and began to initiate conversations with their able peers.

Improved participation in classroom activities and on their academic skills were also visible and noted.

Ring and Travers (2005) describe the inclusion of a student with SEN in a mainstream school based on the frequency and nature of interactions with classmates and the number of acknowledged and unacknowledged initiatives to make contact with classmates. Findings reveal students without disabilities has learned great patience, great tolerance and great understanding. Interactions to ask for assistance, the use of verbal and non-verbal gestures with more able peers were predominantly initiated by the student with SEN.

On the contrary, Bauminger, Shulman, and Agam (2003) observational study found students with SEN displayed less eye contact, smiling and social interactions engagement with their able peers. Similar findings were reported by Humphrey and Symes (2011), Lord and MagillEvans (1995), Hauck et al. (1995) and Stone and Caro-Martinez (1990). These findings however are somewhat limited in context as they were not drawn from a mainstream classroom setting but from a special education setting. There are a handful of peer interaction studies that exist from a mainstream classroom setting, however, these studies are limited to only early years/primary school settings (Owen-DeSchryer et al., 2008; Anderson et al., 2004).

The researcher was unable to find any published studies which examined the peer interaction patterns of students with SEN and their typically developing peers in secondary schools in the Malaysia. The 'missing link' in the local literature is the frequency of interactions among peers. This study aim to test interaction patterns of students with SEN and their typically

developing peers thus potentially providing an important link for Malaysia's effort towards an inclusive education system.

2.4.3 Acceptance by classmates

Peer acceptance is a frequently used term for researchers and of great importance to an inclusive education system (Doll, Murphy & Song, 2003; Davis, Howell & Cooke, 2002; Kemp & Carter, 2002; Scholtes, Vermeer & Meek, 2002; Manetti, Schneider & Siperstein, 2001; Kuhne & Wiener, 2000; Cook & Semmel, 1999; Frederickson & Furnham, 1998).

Research on peer acceptance shows students with SEN in a mainstream classroom are more prone to rejection from their regular mainstream classmates (Freeman & Alkin, 2000), usually have a lower social status then their regular classmates (Manetti, Schneider, & Siperstein, 2001; Pavri & Luftig, 2001; Kuhne & Wiener, 2000; Larrivee & Horne, 1991; Sabornie, Marshall, & Ellis, 1990; Coben & Zigmond, 1986) and prone to social isolation (Wong & Kasari, 2012; Skårbrevik, 2005; Margalit & Efrati, 1996).

Cartledge and Johnson (1996) perceived social inclusion as being successfully accepted as a group member, participating equivalently in group activities and having at least one mutual friendship. Stinson and Antia (1999) emphasized the importance of peers' acceptance to the continued process of social inclusion. This includes students with SEN ability to connect and relate to their typically developing peers, make friends and ultimately be accepted by their peers. An important essence in the process of social inclusion is social acceptance or 'peer group socialisation' (Cambra & Silvestre, 2003).

Scholtes et al. (2002) measured perceived social acceptance with perceived competence. In their study, aspects such as sitting next to a normal peer, playing with friends at home or at the playground, staying at a friend's home and receiving invitations to birthday parties are perceived aspects of peers' acceptance of students. Besides acceptance, Davis et al. (2002) highlights the importance of peer relations and friendships among students with SEN and their peers. There is a need to go beyond sociometric assessments in greater depth, such as interviews and direct observation of behaviours to examine relationships of students with SEN in aspects of peers' acceptance (Cook & Semmel, 1999; Siperstein & Leffert, 1997).

Vaughn, Elbaum, Schumm, and Hughes (1998) focused their study on peer acceptance, friendship and friendship quality more extensively to describe the social outcomes of students with and without learning disabilities in an inclusive classroom. Kemp and Carter (2002) in their study however focused on students with intellectual disabilities' social skills and social interaction with their classmates besides just emphasising on social acceptance.

Dunn (1993) proposed positive support of parents are important as they may directly influence their children's peer relationships and attitudes by teaching them to be more accepting to the inclusion of peers with special needs in their classrooms. This is further supported by de Boer, Pijl, & Minnaert (2010) where the importance of parenting role is highlighted in the development of their children's acceptance towards peers with special needs.

Considering the literature on the possible low social position of students with SEN if they face peer rejection and the risks involved if intervention are not made, acceptance by classmates of students with SEN is an important aim for this research. This study will provide

teachers and parents of an overview of students with SEN acceptance by their regular mainstream classmates and assist them to monitor this development on a collaborative platform.

2.5   Buddy Support System

Students with SEN are often faced with the challenge to develop positive social interactions with their typically developing peers. Much of the interaction among mainstream education students and students with SEN occurs in an academic setting, which doesn't lend itself to establishing the social relationships necessary to function in a larger social context. Many students with SEN are included in mainstream schools or some in the general education classroom for some part of the school day. In these classrooms, educators direct attention to developing interventions for academic skill acquisition, maintenance, and generalization but may lose sight of one of the most important aspects of the school experience, the social and emotional life of the child.

A new initiative was jointly formed by the Malaysian Education Ministry, the Performance Management and Delivery Unit of the Prime Minister's Department (Pemandu), Malaysia and *Challenges* magazine, Malaysia's 1st Cross-Disability National Magazine (Star Online, 2013). The Buddy support system or better known as 'Buddy Club Programme' aims to encourage opportunities for students with special needs to interact socially with other more able peers through fitness and football sessions (Star Online, 2013). The objective is to build positive peer relationships through play & sports between students with special needs and their more able counterparts in a socially-inclusive environment (Calabrese et al., 2008), allowing them to enrich their experience (Balqis, 2013) and achieve their full potential in the

game while at the same time boosting their physical well-being. This is also an important initiative to encourage mainstream students to have more empathy for those with disabilities.

This pilot project, the Buddy Club Programme will be implemented as a co-curricular programme for students to help shape and enhance their overall educational experience (Star Online, 2013) via extra-curricular sessions for children with and without disabilities to encourage the integration of special needs students within the mainstream schooling system. Presently only 9% of students with special needs in Malaysia are integrated into the mainstream schools (Kulasagaran, 2013). The MOE is pushing for a more inclusive education of 75% students with special needs integrated into mainstream classrooms by 2020 (Kulasagaran, 2013).

Students with SEN needs to be afforded opportunities to develop friendships and the educational context is an especially important factor. Students with SEN may be less involved in extracurricular activities than their able peers (Solish, Perry, & Minnes, 2010). Therefore school settings such as an inclusive or integrated special education program plays a crucial role for these children's social and friendship development. The goal of the buddy support system is to provide a pathway for students with SEN to enter into and become accepted members of the school's social network (Miller, Cooke, Test, & White, 2003, Schlein, Green, & Stone, 1999).

The group of more able peers must possess personality traits that are conducive to others, easy to be contacted, jovial, responsible and sincere, with moral values and patience (Abdullah, Alzaidiyeen, & Seedee, 2010). However, several researchers have shown there

are also risks in this area. Research shows that students with special needs are rejected, teased, abused and neglected in mainstream settings, which is, in fact, harmful to their self-image (Gottlieb, 1981). They also face difficulty in forming friendships with their typical peers in an inclusive environment, often rejected by classmates and fail to form positive relationships with their peers (Frostad & Pijl, 2007; Orsmond, Krauss, & Seltzer, 2004; Miller et al., 2003; Buysse, Goldman, & Skinner, 2002; Hall & Strickett, 2002; Freeman & Kasari, 1998; Kamps, Potucek, Lopez, Kravits, & Kemmerer, 1997; Guralnick et al., 1996; Stainback, Stainback, & Forest, 1989). These findings indicate the importance of social integration, rather than physical integration alone, as a necessary component of educational programming for students with special needs (Miller et al., 2003).

The establishment of peer relationships and friendships between students with special needs and their peers without disabilities is viewed as an important outcome of school integration efforts (Frostad & Pijl, 2007; Miller, Cooke, Test, & White, 2003; Roberts & Smith, 1999; Miller, Rynders, & Schleien, 1993; Cavallaro, Haney, & Cabello, 1993; Haring & Breen, 1992; Clunies-Ross & O'meara, 1989). Inclusion enhances socialisation and a sense of belonging for all students. The approach presents a challenge and opportunity for many educators (Jelas, & Ali, 2012; Ali, Mustapha, & Jelas, 2006; Barr, Schultz, Doyle, Kronberg, & Crossett, 1996). It develops social, language, communication skills (Irmsher, 1995).

Lee and Low (2013) study on socialisation and communication noted students with SEN had benefited from an inclusive education by having good behavioural models such as their able peers in their surroundings. This study further highlighted that regular students in the class also benefited from the inclusion process and were found to be more responsible, tolerant and caring through an early exposure to their peers with SEN. The 'little teacher' classroom and

resource management technique applied by the teacher helped to enhance regular and SEN students' involvement in classroom learning.

Social relations helps in the human learning process relations (Bronfenbrenner, 1977, 1979, 1995). The aim of inclusion is to provide a socialization opportunity for students with SEN at regular mainstream schools (Lo, 2007). Some educators (Clark, Dyson, & Millward, 1995; Andrews & Lupart, 1993; Lusthaus et al., 1990) perceive inclusion as more than placing students with SEN in regular classes. The philosophical belief is that all students should be taught in the regular classroom, however more support and assistance are needed for them to succeed (Bosi, 2004). The concept of inclusive education has emerged, based on human rights, equality and equity (Foreman, 1996). Equality in education means that each student is given the support required to achieve to the best of their abilities (Coots, Bishop, Grenot-Scheyer, & Falvey, 1995).

Solish et al. (2010) documented typically developing children had a higher number of reciprocal friends, engaged in more social and recreational activities and and were more likely to have a best friend compared with their peers with SEN. Numerous differences in developmental level (i.e., language skills, mental age, and socialization) and classroom context (self-contained special education settings versus inclusion classroom) contribute to the development of friendship (Freeman & Kasari 1998).

Peer interactions and peers assistance can enable tremendous amount of learning for students (Simmons et. al., 1995). Friendship circles provides an opportunity to acquire skills to boost social, emotional and cognitive development (Ladd, 1990). Friendship circles are possible if the composition of the classroom is rearranged (Pijl et al., 2008) to include small groups of

students with SEN in a regular mainstream classroom rather than individual students separately. This would assist students to create their own friendship circles with their similar peers (McPherson, Smith-Lovin, & Cook, 2001; Farmer & Farmer, 1996). Denari (2014) argues the presence of students with SEN in the mainstream classroom provides them with opportunities to interact with their peers which will help prepare them for life in the society. Typically developing peers in the same classroom will realize the unique and diversity of human characteristics leading them to understand common issues and differences that exist.

Bunch and Valeo (2004) in their examination of elementary and secondary students' attitudes towards their peers with SEN in inclusive schools and special education schools found students in inclusive schools developed friendships with their peers with SEN compared to those students enrolled in special education schools. These difference was attributed to the amount of routine contact and exposure between the students. However, Guralnick et al., (2007) argues although contact and exposure are important prerequisites to developing friendships between students with SEN and their able peers, the friendship development does not often occur spontaneously.

Heiman (2000) reported adolescents with SEN in three educational settings had lower quality friendship than their able peers. Their findings also reported adolescents with SEN in self-contained special education schools were lonelier and had poorer quality friendships then their counterparts in special education classrooms in a mainstream school and their able peers in regular classrooms.

Interventions such peer friendship programmes helps students with SEN develop peer relationships with their able peers (Hunt, Alwell, Farron-Davis & Goetz, 1996). Frederickson

and Turner (2003) in their evaluation of the Circle of Friends intervention approach stated an average social acceptance/social inclusion rating (acquired via a sociometric rating scale) during the peer intervention activity. The Circle of Friends intervention was aimed at improving the social acceptance/social inclusion (the terms are used interchangeably) between students with SEN and their able peers. Similar findings were reported by Harper, Maheady, Mallette, and Karnes (1999) when two peer-tutoring programmes was used within the regular classroom and it improved friendship patterns among students with SEN and their regular peers.

Fritz (1990) found a single friendship awareness activity was not enough to produce increases in social interactions for any participant in the study. However, a circle of friends program was initiated with a 12-year-old deaf male student with significant needs (Luckner, 1994). Increases in appropriate social interactions occurred with a support group of peers without disabilities. In this study, the circle met for 1 hr each week with the target student and the group facilitator.

Peer network approaches, such as the circle of friends, have reportedly proven beneficial for students with moderate to severe SEN across age levels. For example, Collins, Ault, Hemmeter, and Doyle (1996) reported peer buddy programs and peer networks at the junior high school and high school levels have increased the friendships circles among students with SEN and their able peers. Similar success was reported at the preschool level.

Hughes et al. (1999) showed that a peer buddy system allowed a special education student to initially spend at least one period a day with his/her nondisabled "buddy," who served as a role model and provided support integral for the special education companion to be included

in increasingly more general education and vocational classes following the intervention (Hughes et al., 1999). Beneficial peer networks were established around students with autism and moderate mental retardation in a junior high school (Taylor, 1997; Haring & Breen, 1992). The results of this peer network intervention are increased social skills for students with SEN.

Miller et al. (2003) research on the effectiveness of Circle of Friends on students with disabilities indicated a higher percentage of appropriate interactions were recorded during lunch for all three of the target students and their peers following introduction of the intervention. Students also maintained these levels following the withdrawal of intervention, suggesting that students with mild disabilities can learn to engage with peers in appropriate interactions at levels that approximate that of their more able peers. Falvey et al. (1997) suggested the implementation of a circle process that provides peer support can assist students with SEN to develop friendships in case these students find difficulty in forming their own friendship circles.

Urban (2014) research demonstrates that the buddy system is used for regular art students to coach, model and provide visual examples for their peers with SEN. The students with SEN were provided with opportunities to learn the directions in a simplistic manner, see visually how the art is meant to progress and by viewing the completed assignment. The students with SEN do become frustrated and stressed when they are tasked with a multi-step or skill-based art project, however these quickly diminished with the support of their regular peers in the circle of friends. Urban's study added regular peers took responsibility to report both progress and difficulty encountered with their SEN peers to the classroom teacher.

Bell et al. (2014) study identified that teachers can use the buddy system intervention to facilitate learning activities that are based on students' need. For example, regular peers in a mainstream classroom can be engaged in a role play to act out the rotation of the Earth, moon and sun while students with physical disabilities orally describe the process. This promotes a variety of instructions to best meet individual student's needs and engagement among learners. Lindquist and Altemueller (2014) added this process encourages students to help each other learn instead of relying solely on the teachers for knowledge.

Peer intervention programmes involving both students with SEN and their able peers has shown considerable promise over the years. The "buddy support programs", "peer buddies", "circles of friends," and "peer support committees" have encouraged the development of friendships, social interactions and peer acceptance between students with SEN and their able peers (Frederickson & Turner, 2003; Miller et al., 2003; Hughes et al., 1999; Kamps et al., 1997; Hunt et al., 1996; Haring & Breen, 1992; Stainback & Stainback, 1990). These findings suggests the benefits and influence of the buddy support system in assisting students with SEN develop their social and communication skills (Kalyva & Avramidis, 2005; Frederickson & Turner, 2003).

However, presently there is no empirical evidence or independent research in Malaysia that has looked at the effects, benefits and influence of the buddy support system on students with special needs and their able peers. This doctoral research will therefore address these gaps in the literature.

2.6   Summary

Inclusive education continues to have mixed reactions among special education teachers, mainstream teachers, and administrators due to their understanding and experience of inclusion and SEN. An effective inclusion program is highly dependent upon the collaboration process between teachers and parents, appropriate training, resources, planning, preparation and administrative support available in schools. Teachers needs support from all stakeholders to run a highly effective inclusion program.

There has been growing awareness of the powerful impact that the peer group can have on the social–emotional development of students with SEN (Koster et. al., 2009; Frederickson, et. al., 2005). The Buddy Support System is designed as an intervention to involve peers in helping a student with SEN develop their social interaction, confidence and self-esteem so these students with SEN are able to fit into mainstream classrooms where social interaction with their able peers is vital. An investigation into the effectiveness of the buddy support system can offer some additional evidence to the field about the effect of teacher-parent collaboration on the inclusion of SEN students into mainstream education.

CHAPTER 3: METHODOLOGY

3.1   Introduction

The main aim of this study is to examine the effectiveness of the Buddy Support System on Teacher-Parent Collaboration and Students' Social Interaction. The study has explored teachers' and parents' understanding on special educational needs, their willingness to communicate with each other, their perceived roles as well as their expectations of each other, the extent students' social interaction among SEN and mainstream pupils exist, and to what extent and in what ways is the buddy support system effective within their school environments.

Empirical research findings examined prior to this study have shown that specific aspects of parent involvement lead to improved student outcomes (Carter, 2002). This research looks at teacher-parent collaboration and students' social interaction through the specific medium of the pilot buddy support system, as part of the co-curriculum in the schools.

The following sections in this chapter describe the methodology of this research study. It contains an overview of the research design, research instruments, validity and reliability, research population, pilot study, data collection procedures as well as data analysis techniques.

3.2   Research Design

A research design is a master plan specifying the methods and procedures for collecting, analysing, and utilizing data (Creswell, 2005; Cohen, Manion, & Morrison, 2003). A good

research design ensures that accurate and economical procedures are articulated and the collected data are consistent with the research objectives (Kinnear & Taylor, 1996). A research process can only be successful if the researcher makes the right choices in the research design (Hussey & Hussey, 1997). Figure 3.1 illustrates the step-by-step process taken to conduct this research study.

Initially, the literature was reviewed to identify the research gaps, specifically concerning dimensions of teacher-parent collaboration in special educational practices, students' social interaction and the buddy support system. Following this a conceptual framework was developed to represent the key conceptual connections that frame the research. The conceptual model was built based on a theoretical foundation whereby the relationships of the exogenous or independent variables - teacher-parent collaboration in special educational practices, the endogenous or dependent variable – students' social interaction and the buddy support system as the moderating variable were specified. Subsequently, eight research questions were formulated. The overall discussion about the origins of the research questions are detailed in Chapter 1 and 2.

The researcher chose to pursue a detailed, mixed method explanatory case study in order to determine the effectiveness of the buddy support system during its pilot phase, as part of the school co-curriculum. This approach allowed an in depth exploration of the effectiveness of the buddy support system in Malaysia and it offered a detailed understanding of the collaboration process between teachers and parents that aids students' social interaction and development.

Importantly, there is no contemporary research available on the effectiveness of the buddy support system in Malaysia. Therefore this doctoral study will involve all schools that are currently piloting the buddy system (10) at the time this study is conducted. Moreover, the buddy support system is considered a new policy or new program, which is best examined by using a sequential mixed method case study design as only a small number of schools were involved at the time of this study.

The researcher will use quantitative approach as the core method and qualitative approach to support the data and to further triangulate the findings. According to Morse (2008), triangulation during which both methods are usually used, provide a more thorough approach in exploring into a research topic.
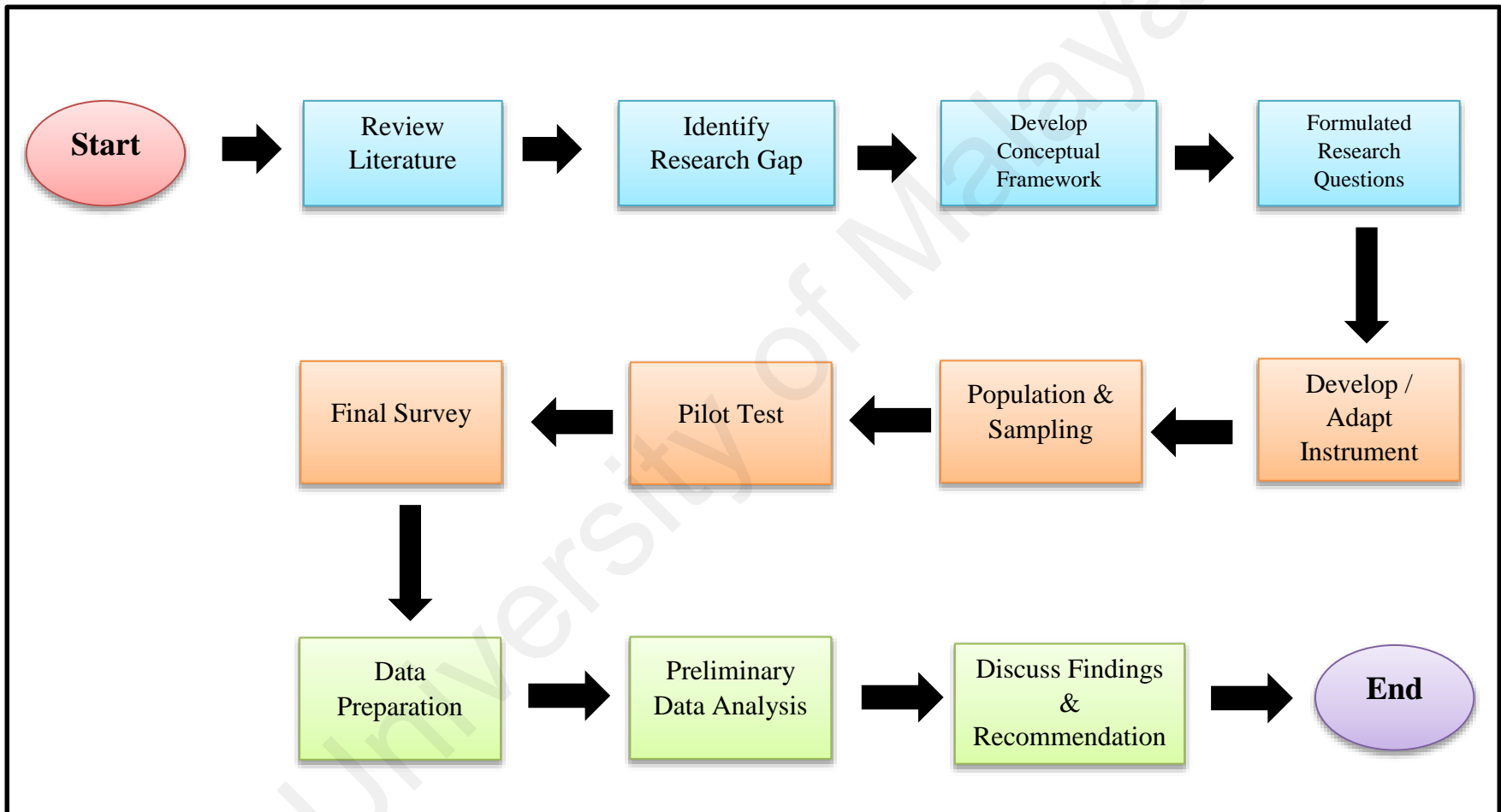
Figure 3.1: Research Design

3.2.1 Mixed-methods Research

This study adopted an explanatory sequential mixed methods design (Creswell & Plano Clark, 2011), which is a combination of quantitative and qualitative methods as each has different advantages in studying the effectiveness of the Buddy Support System on Teacher-Parent Collaboration and Students' Social Interaction. Creswell (2003) identified the mixed-methods sequential explanatory design as highly popular among researchers and implies collecting and analyzing first quantitative and then qualitative data in two consecutive phases within one study.

A researcher first does the quantitative data collection and then does the data analysis (numeric). Next, the qualitative data collection (text) are done and the data analysis done second in the sequence. This is to assist in explaining or elaborating quantitative data results obtained in the first phase. The second qualitative data phase builds on the first quantitative data phase, and the two phases are connected in the intermediate stage in the study. Mixed methods is a procedure for collecting, analyzing, and "mixing" or integrating both quantitative and qualitative data at some stage of the research study (Teddlie & Tashakkori, 2012; Creswell, 2005).

The rationale for this mixed method approach is that the quantitative data and data analysis provides a general understanding of the research problem. The qualitative data and its data analysis refine and explain those statistical results by exploring participants' views in much more depth (Creswell, 2012; Teddlie & Tashakkori, 2012). Quantitative and qualitative data can combine to triangulate findings so that they may be mutually corroborated (Bryman, 2006).

A constant comparative approach was used to confirm or refute the results, from both data sets, as well as strengthening the reliability and validity of the findings. Bryman (2006) suggests that it is more desirable to use a complementary combination of methods whenever possible. Flick (2006) shares that different methodological perspectives can support each other in a research study and counteract the disadvantages of data collection in each single method.

Creswell and Plano Clark (2007) deem mixed-methods research as the preferred design when only one approach (quantitative or qualitative) is inadequate to address the research questions. According to Creswell and Plano Clark (2007), mixed methods research provides "strengths that offset the weaknesses of both quantitative and qualitative research" as well as "a more comprehensive evidence for studying a research problem than either quantitative or qualitative research alone" (Creswell & Plano Clark, 2007, p.9). Additionally, Creswell and Plano Clark (2007) notes that mixed methods research is "practical" in that the researcher is free to use all the methods possible to address a research problem, where both numbers and words are used, combining inductive and deductive thinking.

In this study, a quantitative survey instrument was administered to teachers and parents involved in the buddy support system followed up with semi-structured interviews with a selected sample of a few individuals who participated in the survey. This explanatory sequential mixed methods design draws upon qualitative data following a quantitative phase (Creswell & Plano Clark, 2007, p.11).

Quantitative methods are particularly useful in examining the relationship between teacher-parent collaboration and students' social interaction, with the buddy support system as a

moderator. The quantitative data is essentially descriptive and not illuminative. A survey questionnaire can provide insights into individual perception as well as attitudes (Baruch & Holtom, 2008). Creswell (2005) offers additional views that quantitative research seeks to establish the overall tendency of responses from individuals and to note how a large population views an issue through objective values. The survey method was preferred because of the rapid turnaround in data collection (Fowler, 2009; Babbie, 1990). It provides a way of systematically gathering and analysing a large amount of data over a short period of time (de Vaus, 1995).

Qualitative methods as explained by Bogdan and Biklen (1998) suits a researcher's goal to better understand human behaviour and experiences. Qualitative research as a whole includes various overlapping structures or approaches to investigations such as in case studies, grounded theory, ethnography and phenomenology (Merriam, 1998; Denzin & Lincoln, 1994). A qualitative research design utilizing semi-structured interviews or sometimes called in-depth interviews are used by the researcher as to gather as much information required to explore the phenomenon (Esterberg, 2002). Interview are seen as a vital way in collecting evidence to study human affairs (Yin, 2003) in line with the purpose of this study that is to explore further the effectiveness of the buddy support system in a teacher-parent collaboration process and students' social interaction development by getting them to share their experiences.

The researcher was aware that he needs to allow the teachers and parents to speak openly during the interview thus, listening to their responses is important (Esterberg, 2002; Patton, 2002). Parker (2004) notes that the task of interview in fundamental research is to uncover meaningful patterns of thoughts in creating a research agenda. He adds that interview can be

turned into a methodology in which some analysis is consciously done in the process of collecting the data itself.

The research methodology used in this study employed a mixed methods approach comprising quantitative and qualitative analysis. Results from both the quantitative and qualitative study were integrated. Integration refers to the stage or stages in the research process where the mixing or integration of the quantitative and qualitative methods occurs (Creswell, 2003). Specific quotes from the qualitative study will be highlighted to reinforce which are teachers' and parents' strongest collaboration domain, students' social interaction development and the effectiveness of the buddy support system. This will allow better understanding of the initial quantitative data, adding more depth and richness to the study. The combination of these types of data provided a complementary and robust basis for analysis required for mixed methods design (Johnson & Onwuegbuzie, 2004).

In the first quantitative part of the study, the use of teachers' and parents' questionnaires addressed the relationship between teacher-parent collaboration and students' social interaction with the buddy support system as a moderator. In the second qualitative part, semi-structured interviews with a sub sample of respondents from the teachers' and parents' questionnaires were conducted. This was to verify that the questionnaire answers are accurately measuring the intended construct and to discover the underlying reasons for some of the quantitative results (Yukl, 2013, p. 403). In a sequential explanatory design, two phases of a study are usually connected while participants are selected for the qualitative follow-up analysis based on the quantitative results from the first phase (Creswell & Plano Clark, 2011).

In the third qualitative part, an observation method of a buddy club activity in one primary school was conducted. Supplementary evidence of video recordings and photographs were taken as part of the participant observation process at the buddy club activity. The photographs taken (with permission) intend to provide additional, corroborating evidence of students' social interaction between SEN and mainstream pupils. Video recording showing nonverbal activities (e.g., gazes) (Goodwin, 1995, 2000; Heath, 1997) was used. Video captures a version of an event as it happens. It provides opportunities to record aspects of social activities in real-time: talk and visible conduct of students (Heath, Hindmarsh, & Luff, 2010). Video recordings are also used when conducting interactional studies of children to understand their social conduct in peer relations (Evaldsson, 2003; Sparrman, 2002; Sparrman & Aronsson, 2003).

Therefore, the questionnaire, interview sessions and observations provide a detailed account and description of teacher-parent collaboration and its influence upon students' social interaction to determine the effectiveness of the Buddy Support System as a moderator in special educational practices in Malaysia. Combining the quantitative and qualitative data findings helped explain the results of the statistical tests, which elaborated the purpose for a mixed-methods sequential explanatory design (Creswell, 2003). The value of providing a visual model of the procedures is well documented in the mixed-methods literature (Teddlie & Tashakkori, 2012; Creswell, 2005; Creswell, 2003). A graphical representation of the mixed-methods sequential explanatory design procedures used for this study are illustrated in Figure 3.2.
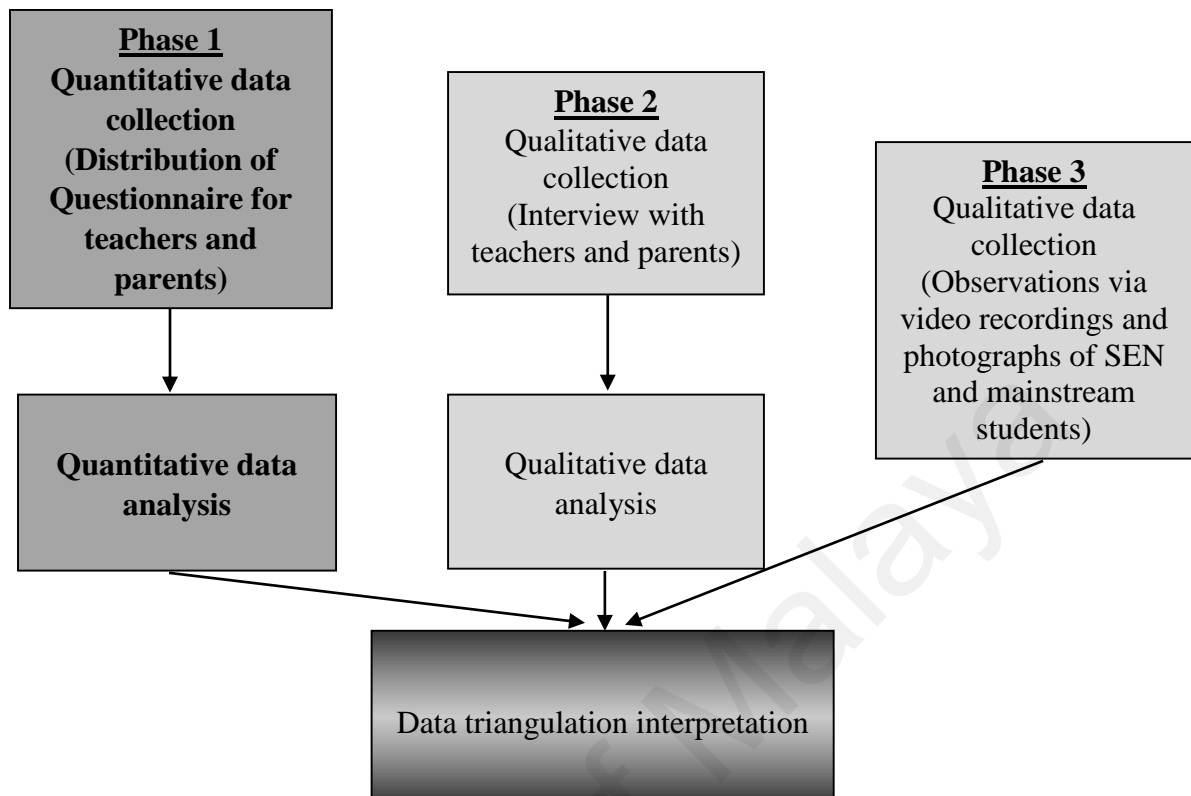
Figure 3.2: Data Collection Methods

Data from the questionnaire, interview sessions and observations will be analysed respectively and separate analysis will be brought together at data comparison stage. The combination of multiple methods, data gathering and perspectives act as a robust strategy that adds thoroughness and merit to any investigation (Flick, 1992). Mertens and McLaughlin (2004) classified this as a mixed method approach whereby discussion and conclusion are based on the findings of various methods used in the study. They also mentioned that mixed method approach can also be used to confirm or disconfirm analysis made on the first strand or even to rationalize unexpected findings when they unfold.

Welch and Sheridan (1995) cited that triangulation provides a useful way to combine qualitative and quantitative data. Although the conclusions made at the end of this study do not allow any generalization to a larger population, they help to determine the effectiveness

of the buddy support system during its pilot phase as part of the school co-curriculum and it provides in-depth understanding of the collaboration process between teachers and parents that aids students' social interaction development. Data triangulation and discussions will be discussed further in Chapter 5.

3.3   Research Population

The population in this study consisted of teachers, parents, students with special needs and their able peers from five Malaysian primary schools and five Malaysian secondary schools, all were involved in the pilot implementation of the buddy support system. These are the key informants in the study who provided their response on the collaboration process and the effectiveness of the buddy support system thus addressing the research questions developed for this study.

3.3.1 Teachers as Research Participants

Teachers as research participants were selected based on purposive sampling criteria as there were only 111 teachers involved in the Buddy Support System at the 10 pilot schools. It was important to gather information on their collaborative efforts with parents. Purposeful sampling can help to identify meaningful situations on fundamental issues to meet the purpose of the research (Patton, 2002).

All 111 teachers were given the questionnaires. Semi-structured interviews with a sub sample of 6 teachers were carried out to collect teachers' views based on the research questions of this study. The interview sessions were carried out in the schools during their free periods,

and each session lasted about 45 minutes hour. The interviews were scheduled during the month of July 2015.

3.3.2 Parents as Research Participants

Parents involved in this study were also selected based on purposive sampling as there were only 121 parents whose children were involved in the Buddy Support System at the 10 pilot schools. Merriam (1988) mentioned that in order to gain better understanding and uncover certain phenomenon, the researcher needs to select participants who have experience and are familiar to the topic under investigation. Through purposive sampling more and exact descriptions can be collected from selected individuals to answer the research questions.

Semi-structured interviews with 5 parents were carried out to collect parents' views based on the research questions of this study. The interview sessions were carried out at the parents' work place or at the comfort of their own homes. The researcher allowed the parents to decide on the best time and place for the interview to be carried out. The interviews were scheduled during the month of June and July 2015 and each interview session lasted about an hour.

3.3.3 Students as Research Participants

Students involved in this study were selected based on random sampling. A total of 121 students with special needs and 56 mainstream students were enrolled into the buddy support system, age ranging from 8 years olds' to 15 years olds'. These students are in the upper primary level and secondary level with various special needs and learning disabilities and deemed by the school to require special attention.

An observation method of a buddy club activity in one primary school was conducted. Video recordings and photographs of 3 SEN students and 1 mainstream student were taken as part of the observations process at a buddy club activity. The photographs taken (with permission) intend to provide evidence of students' social interaction between SEN and mainstream pupils. These students was enrolled in the buddy support system for at least 4 months and video observation were carried out at the school during the month of August 2015, each session should last approximately 30 minutes.

3.4   Research Instruments

This study involves mixed methods in which both quantitative and qualitative approaches are used to examine the effectiveness of the buddy support system in teacher-parent collaboration and students' social interaction. Two types of instruments are used namely questionnaire and semi-structured interview questions. The instruments used will be explained in the following subsections. These methods are further supported by an observation of students' social interaction between SEN and mainstream pupils of a selection of the buddy club activity in one primary school.

3.4.1 Teachers' Questionnaire

Questionnaires were used to gather information on the effectiveness of buddy support system on teacher-parent collaboration and students' social interaction. The teachers' questionnaires (refer to Appendix A, page 320) consists of four sections. Section A is the respondents' biographical information such as gender, age, academic qualification, area of specialization, which includes the period of time they have been working in the field of special education and their involvement in special education practices in the particular school.

Section B of the teachers' questionnaire was based on the Individualized Education Plan: Resource guide (1998) which highlights the elements and importance of collaboration for a successful special education programme, developed by Nora Mislan et al. (2009). The guidelines given in the Individualized Education Plan: Resource guide included common understanding among teachers and parents on SEN, the necessity to interact or communicate with each other, understanding own roles and expectations of each other's roles as necessary elements for a collaborative teamwork. Section B comprised of 34 items designed for respondents to indicate the extent to which they found the aspects of their collaboration in special educational needs practices (the 34 items included the following subscales: teachers' understanding of special educational needs, teachers' willingness to communicate with parents, teachers' perceived roles and expectations from parents).

Section C was adapted from the *Social Participation Questionnaire (SPQ)* developed by Koster, Timmerman, Nakken, Pijl, and van Houten (2009) which highlights the elements of friendship, interactions, acceptance by classmates. The above key themes laid the foundation for the SPQ, which aims to make more accurate assessments of the social interaction of all students with and without special needs in regular schools (Koster et al., 2008). Such a questionnaire, addressing the total concept of social interaction, is all the more important because the reliability and validity of many instruments used to measure aspects of social interaction have not been proven (Koster, Timmerman, Nakken, Pijl & van Houten, 2009). Section C comprised of 16 statements designed for respondents to indicate the extent to which teachers' perceived the students' social interaction (the 16 items included the following subscales: friendship, interactions, and acceptance by classmates).

Section D was adapted from a questionnaire developed by Abdullah, Alzaidiyeen, and Seedee (2010) which highlights the elements of understanding of the co-curriculum, influence and benefit of buddy support system implementation. Adaptation of the instrument was been made by the researcher to reflect teacher-parent collaboration in an integrated special education schools setting. Section D comprised of 13 statements designed for teachers to indicate the effectiveness of the buddy support system (the 13 items included the following subscales: understanding of the co-curriculum, influence, benefits).

Teachers were asked to rate each item based on a Five Point Likert scale ranging from 1 (Strongly Disagree) to 5 (Strongly Agree). Rating scales are commonly used in the social sciences (Croasmun & Ostrom, 2011). A Likert-type scale requires an individual to respond to a series of statements by indicating whether he or she strongly agrees (SA), agrees (A), is undecided (U), disagrees (D), or strongly disagrees (SD) (Jamieson, 2004; Croasmun & Ostrom, 2011). "Each response is assigned a point value, and an individual's score is determined by adding the point values of all of the statements" (Gay, Mills, & Airasian, 2009, pg. 150-151).

Five negatively-worded items are added to the scale and are indicated in the following sections of the questionnaires as below. The inclusion of these five negative-worded items were intended to "force respondents to carefully read survey items" and was "typically meant to keep respondents attentive" as suggested in (Boone, Staver, & Yale, 2014, pg. 23, 26). These modifications were also done primarily to weed out respondents, who showed a tendency to consistently agree or disagree to a series of items in their responses, thereby resulted in "response bias" as highlighted in (Bryman, 2012, pg. 227, 258).

The questionnaires were administered to elicit teachers' feedback on the effectiveness of the Buddy Support System on Teacher-Parent Collaboration and Students' Social Interaction. The following areas were covered in Section B of the questionnaires:

a) Teachers' understanding about Special Educational Needs (SEN)

The researcher is interested to assess teachers' views on their understanding of SEN and in carrying out the special education practices based on students' needs. The items measuring this subscale include the time provided for each student, the goals and objectives of the program, knowledge in IEP process and instructions as well as the paper work required to inform parents on all matters involved. There are 15 items measuring teachers' understanding out of which, item 2c is a negative item. Please refer to Table 3.1 for the list of items.

Table 3.1: Items to measure teachers' understanding about special educational needs (SEN)

Item No.	Items
1	I am knowledgeable in many aspects of SEN practices
2c	*I feel challenged in SEN practices when I have to carry out all the IEP documentation
15	In preparing for lessons, I use the guidelines set by the school in determining the short and long term IEP objectives for each student
16a	I refer to the goals and objectives that have been determined when reviewing the student's IEP
16c	I refer to the goals and objectives that have been determined when writing progress reports
17	I can identify the strengths and weaknesses of the students from IEP
18a	I improve my understanding of SEN education by finding and reading related materials
18b	I improve my understanding of SEN education by observing my colleagues interacting with students
18c	I improve my understanding of SEN education by meeting with parents in school to discuss the student's progress
19	IEP allows me to review the support given to students based on their needs
20	IEP is an effective document to determine the support required by students
21	IEP is required to ensure the services provided by teachers are sufficient in developing students' potentials

22	Positive role models for students with SEN are needed
23	I need to modify my instructions and teaching style in the classroom to meet the needs of students with SEN
24	Having other adults in the classroom is an asset when supporting SEN students

*Negative item

b) Teachers' willingness to communicate with parents

The next subscale measures teachers' willingness to communicate and reach out to parents. There are 10 items where teachers are asked on their views in sharing their concerns and giving feedback on the progress of the students with special needs with their parents out of which, items 2a and 2b are negative items. Items pertaining to their beliefs on the outcome that could be achieved by discussing with parents are also included in this part of the questionnaire. Please refer to Table 3.2 for the list of items.

Table 3.2: Items to measure teachers' willingness to communicate with parents

Item No.	Items
2a	*I feel challenged in SEN practices when I have to communicate with parents
2b	*I feel challenged in SEN practices when I have to explain the proposed IEP goals to parents
3	My ideas on SEN practices for the students are accepted by their parents
4	I explain about SEN support in detail to the parents before the IEP meeting
9a	I invite parents to attend the meeting by personally calling them
9b	I invite parents to attend the meeting by sending the invitation letters to them by post
9c	I invite parents to attend the meeting by sending the invitation letters to them via their child
14	I give feedback to parents on their child's development
16b	I refer to the goals and objectives that have been determined when discussing with parents their children's progress
25	It is easy to communicate effectively with parents about their child's SEN support

*Negative items

c) Teachers' perceived roles in SEN

The next subscale measures teachers' perspectives towards their roles in the collaboration of special educational practices. The 7 items involved in this subscale evolve around teachers' tasks in implementing IEP that begin even before the actual implementation of the program and throughout the year. Teachers were requested to give their opinions on how they were going to determine the goals and objectives that were prepared for the students. Please refer to Table 3.3 for the list of items.

Table 3.3: Items to measure teachers' perceived roles in SEN

Item No.	Items
5	I make sure parents really understand what happens in the SEN support meeting(s)
6	I make sure parents truly understand the process in supporting their child
8a	If the parents cannot attend the meeting I call and discuss the student's progress over the phone
10	I make sure parents are given information which explain the content and goals for the meeting that is held
11	I determine the short term IEP objectives for student's SEN support
12	I determine the long term IEP objectives for students' SEN goals
13	I prepare all the IEP documentation needed to be presented to parents

d) Expectations of parents in SEN

In order to collaborate effectively with parents, teachers were asked on their expectations of parents with regards to special education needs implementation. The 2 items focuses on teachers' views towards parents' attitude and how much they count on parents' participation in carrying out the students with special needs' IEP. Please refer to Table 3.4 for the list of items.

Table 3.4: Items to measure teachers' expectations of parents in SEN

Item No.	Items
7	I welcome parents' cooperation to enhance the SEN practices being offered
8b	If the parents cannot attend the meeting they call to get explanation and feedback from me about the student's progress

e) Students' social interaction

Teachers were asked on their perception of students' social interaction in a collaboration process involving both teachers and parents. The following items are being covered in Section C for the construct of Students' Social Interaction. The items measuring this construct include friendship among students and their more able peers, their interactions activities, and their acceptance by classmates. There are 16 items out of which, items 2 and 5 are negative items. Please refer to Table 3.5, Table 3.6 and Table 3.7 for the list of items.

Table 3.5: Items to measure friendship in students' social interaction (SSI)

Item No.	Items
1	The student with special needs is able to make friends in the classroom
12	The student with special needs belongs to a group of friends in their class
13	The student with special needs belongs to a group of friends from mainstream classes
14	The student with special needs willingly participates in games with their classmates
15	The student with special needs willingly participates in games with their mainstream peers

Table 3.6: Items to measure interactions in students' social interaction (SSI)

Item No.	Items
2	*The student with special needs are teased by their classmates
3	The student with special needs regularly has fun with their classmates
4	The student with special needs are involved in activities with their classmates
5	*The student with special needs are teased by their mainstream peers
8	The student with special needs are asked to play by their classmates
9	The student with special needs are asked to play by mainstream peers

*Negative items

Table 3.7: Items to measure acceptance by classmates in students' social interaction (SSI)

Item No.	Items
6	The student with special needs are assisted by their classmates in lessons
7	The student with special needs are supported by their mainstream peers in their classwork

10	The student with special needs works together with their classmates on tasks
11	The student with special needs eats together with their classmates
16	The student with special needs is happy attending school

f) Buddy Support System (BSS)

The following items are being covered in Section D for the construct of Buddy Support System. The researcher is interested to assess teachers' perception on the effectiveness of the program in terms of understanding its co-curriculum, its influence and benefits. There are 13 items measuring this subscales. Please refer to Table 3.8, Table 3.9, and Table 3.10 for the list of items.

Table 3.8: Items to measure Understanding of the Co-curriculum in Buddy Support System

Item No.	Items
1	The Buddy Support System is clearly understood by myself
2	The Buddy Support System is clearly understood by the peers of students with SEN
3	The Buddy Support System is clearly understood by the parents of students with SEN
11	The Buddy Support System guidelines are helpful
12	The Buddy Support System meets my expectations of supporting students with SEN

Table 3.9: Items to measure Influence in Buddy Support System

Item No.	Items
5	The Buddy Support System enables students with SEN and their peers to play together
6	The Buddy Support System has a positive effect on the student's interaction with others
7	The Buddy Support System has improved my knowledge of available resources to support SEN
13	The Buddy Support System can be recommended to others so they get support for their SEN students from such a program

Table 3.10: Items to measure Benefits in Buddy Support System

Item No.	Items
4	The Buddy Support System builds positive social interaction among students with SEN and their peers
8	The Buddy Support System helps students with SEN develop friendships with their peers
9	The Buddy Support System enables me to solve problems related to SEN support
10	The Buddy Support System provides more connections and support from other people in my situation

3.4.2 Parents' Questionnaire

A parallel survey was administered to elicit parents' feedback on the effectiveness of the Buddy Support System on Teacher-Parent Collaboration and Students' Social Interaction. The parents' questionnaire (refer to Appendix B, page 327) also consist of four sections. Section A is regarding respondents' biographical information such as gender, age, academic qualification, and also includes the period of time their child has been studying in the school, how long their child has been involved in a special educational practices program, how often parents had attended the IEP meeting / discussion in the school, and how long have parents been involved in special educational practices in the school.

Section B comprised of 35 statements designed for respondents to indicate the extent to which they found the aspects of their collaboration in special educational needs practices (the 35 items included the following subscales: parents' understanding of special educational needs, parents' willingness to communicate with teachers, parents' perceived roles and expectations from teachers.

Section C comprised of 16 statements designed for respondents to indicate the extent to which parents perceived the students' social interaction (the 16 items included the following subscales: friendship, interactions, and acceptance by classmates). Section D comprised of 11 statements designed for parents to indicate the effectiveness of the buddy support system (the 11 items included the following subscales: understanding of the co-curriculum, influence, benefits).

Parents were asked to rate each item based on a Five Point Likert scale ranging from 1 (Strongly Disagree) to 5 (Strongly Agree). Five negatively-worded items are added to the scale and are indicated in the following sections of the questionnaires as below.

The questions set for the teachers and parents were parallel, however, some of the items did not measure the same aspects such as a child's invitation for a birthday party and after school play dates. The questionnaires were administered to elicit parents' feedback on the effectiveness of the Buddy Support System on Teacher-Parent Collaboration and Students' Social Interaction. The following areas are being covered in Section B of the parents' questionnaire:

a) Parents' understanding about Special Educational Needs (SEN)

Similar to getting teachers' views, it is also deemed important to measure parents' views on their understanding of SEN. The items measuring this subscale include parents' understanding towards the goals and objectives of their child's IEP were also solicited. In addition, parents' views are also being solicited on the benefits of individualized instruction

for their child. There are 12 items measuring parents' understanding out of which, item 2c is

a negative item. Please refer to Table 3.11 for the list of items.

Table 3.11: Items to measure parents' understanding about special educational needs (SEN)

Item No.	Items
1	I am knowledgeable in many aspects of SEN practices
2c	*I feel challenged in SEN practices when understanding all the IEP documents
6	I truly understand the process in supporting my child
17a	I refer to the goals and objectives that have been determined when reviewing my child's IEP
17c	I refer to the goals and objectives that have been determined when receiving progress reports
18	I can identify the strengths and weaknesses of my child from IEP
19a	I improve my understanding of SEN education by finding and reading related materials
19b	I improve my understanding of SEN education by observing teachers interacting with students
19c	I improve my understanding of SEN education by meeting the teachers in school to discuss my child's progress
20	IEP allows me to review the support given based on my child's needs
21	IEP is an effective document to determine the support required for my child
22	IEP is required to ensure the services provided by teachers are sufficient in developing my child's potential

*Negative item

b) Parents' willingness to communicate with teachers

Parents' willingness to communicate with the teachers is measured in this subscale. They are

asked to state their views towards sharing their ideas as well as in sharing feedback with

teachers. There are 10 items out of which, item 2a and 2b are negative items. Please refer to

Table 3.12 for the list of items.

Table 3.12: Items to measure parents' willingness to communicate with teachers

Item No.	Items
2a	*I feel challenged in SEN practices when I have to communicate with teachers
2b	*I feel challenged in SEN practices when listening to the proposed Individualized Education Plan (IEP) with teachers
3	My ideas on SEN practices for my child are accepted by the teachers
9b	If I cannot attend the IEP meeting I call to get explanation and feedback from teachers about my child's progress
10a	I prefer an invitation to attend the IEP meeting by a phone call
10b	I prefer an invitation to attend the IEP meeting by a letter sent via post
10c	I prefer an invitation to attend the IEP meeting by a letter given through my child in school
15	I give feedback to teachers on my child's development
17b	I refer to the goals and objectives that have been determined when discussing with teachers my child's progress
26	It is easy to communicate effectively with teachers about my child's SEN support

*Negative items

c) Parents' perceived roles in SEN

Parents also play an important role in collaboration process and thus the researcher intended to get parents' perceptions on their perceived roles. Part of the roles to be measured includes parents' attendance during the meetings and deciding on the objectives as well as goals planned for their children in the program. There are 2 items in this subscale. Please refer to Table 3.13 for the list of items.

Table 3.13: Items to measure parents' perceived roles in SEN

Item No.	Items
5	I make sure that I really understand what happens in the SEN support meeting(s)
8	I make sure that I attend my child's IEP meetings whenever I am invited

d) Parents' expectations of teachers in SEN

Lastly, parents were asked on their expectations towards the teachers in the collaboration process. As teachers' were responsible in many aspects of the special education practices, parents' views as to how they preferred to be treated by the teachers when they were getting information and in sustaining cooperation were also sought. In addition, parents were asked to give their views on what they expected teachers to do in deciding the objectives of the individualized instructions provided for their children. There are 11 items in this subscale. Please refer to Table 3.14 for the list of items.

Table 3.14:   Items to measure parents' expectations of teachers in SEN

Item No.	Items
4	The teacher explains to me in detail about SEN support before the IEP meeting
7	I welcome teachers' cooperation to enhance the SEN practices being offered to my child
9a	If I cannot attend the IEP meeting the teacher calls and discusses my child's progress with me over the phone
11	I am given information which explain the contents and goals for the meeting that is held
12	I expect the teacher to determine the short term IEP objectives for my child's SEN support
13	I expect the teacher to determine the long term IEP objectives for my child's SEN goals
14	The teacher prepares all the IEP documentation needed to be presented to me
16	In preparing for lessons, the teachers use the guidelines set by the school in determining the short and long term IEP objectives for my child
23	I am satisfied with the cooperation given by teachers involved in the IEP process
24	Teachers need to modify instructions and teaching style in the classroom to meet the needs of my child
25	Having other adults in the classroom is an asset when supporting SEN students

e) Students' social interaction

The researcher is interested to assess parents' views on their child's social interaction development in a collaboration process involving both teachers and parents. The following

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items are being covered in Section C for the construct of Students' Social Interaction. The items measuring this construct include friendship among students and their more able peers, their interactions activities, and their acceptance by classmates. There are 15 items out of which, items 4, 9 and 10 are negative items. Please refer to Table 3.15, Table 3.16 and Table 3.17 for the list of items.

Table 3.15:   Items to measure friendship in students' social interaction (SSI)

Item No.	Items
1	My child is able to make friends in the classroom
2	My child has after school play dates
3	My child gets invitation to birthday parties
11	My child gets invitations to play during holidays
13	My child belongs to a group of friends in the class
14	My child belongs to a group of friends from mainstream classes

Table 3.16:   Items to measure interactions in students' social interaction (SSI)

Item No.	Items
4	*My child is included in activities by fellow classmates
7	My child are asked to play by fellow classmates
8	My child are asked to play by mainstream peers
9	*My child are teased by fellow classmates
10	*My child are teased by fellow mainstream peers

*Negative items

Table 3.17:   Items to measure acceptance by classmates in students' social interaction (SSI)

Item No.	Items
5	My child are assisted by their classmates in lessons
6	My child are supported by fellow mainstream peers in classwork
12	My child eats together with their classmates
15	My child is happy attending school

f) Buddy Support System (BSS)

The researcher is interested to assess parents' perception on the effectiveness of the buddy support system in terms of parents' understanding of its co-curriculum, its influence and its benefits. The following items are being covered in Section D. There are 11 items measuring these subscales. Please refer to Table 3.18, Table 3.19 and Table 3.20 for the list of items.

Table 3.18: Items to measure understanding of the co-curriculum in Buddy Support System

Item No.	Items
1	The Buddy Support System is clearly understood by myself
9	The Buddy Support System guidelines are helpful
10	The Buddy Support System meets my expectations of supporting my child

Table 3.19: Items to measure influence in Buddy Support System

Item No.	Items
3	The Buddy Support System enables my child and fellow peers to play together
4	The Buddy Support System has a positive effect on the child's interaction with others
5	The Buddy Support System has improved my knowledge of available resources to support my child
11	The Buddy Support System can be recommended to others so they get support for their child from such a program

Table 3.20: Items to measure benefits in Buddy Support System

Item No.	Items
2	The Buddy Support System builds positive social interaction among my child and fellow peers
6	The Buddy Support System helps my child develop friendships with fellow peers
7	The Buddy Support System enables me to solve problems related to SEN support
8	The Buddy Support System provides more connections and support from other parents in my situation

3.4.3 Interview

Interviews in qualitative design refers to conversations in exploring a few general topics to gather participants' views by respecting their thinking and structures of the responses (Marshall & Rossman, 2006). According to Altrichter, Feldman, Posch, and Somekh (1993), interviews give access to other people's perceptions including their thoughts, attitudes and opinions that lie behind their behaviour in order to gain a greater understanding of a situation. Fine, Weis, Weseen, and Wong (2003) added that once the interview sessions are completed, triangulation serves as a crucial element by adding one layer of data to another in order to build what they call a confirmatory edifice. By tapping into the resources gathered, the depth and texture of the study can be revealed.

As semi-structured interview was adopted by the researcher. Smith and Osborne (2003) mentioned that it is favorable if rapport is built between interviewer and participants. As such, exploring interesting ideas that surfaced can be made possible and participants can lead the interviewer based on their concerns. Smith and Eatough (2007) added that most phenomenological analysis utilize semi-structured interview due to its realism.

Face-to-face interviews were carried out personally with the teachers and parents by the researcher. The in-depth interviews allows the researcher to collect information that otherwise could not be gathered from the questionnaires. The interview sessions were conducted using an audio tape to record the sessions. This approach not only gives the opportunity for participants to share their real experiences and thoughts on the issues raised (Bogdan & Biklen, 1998) but it also allows the researcher to explore further teacher-parent relationships that makes a collaboration process possible, while studying the social

interaction effects among the students with special needs and their able peers and the effectiveness of the buddy support system. Smith and Eatough (2007) cited that in phenomenological analysis, it is necessary for the interview sessions to be recorded as the researcher is required to transcribe the whole interview that is going to be carried out.

As suggested by Van Dalen (1979) it is important that rapport is established and built over substantial time to ensure that both interviewer and interviewee are comfortable with each other in order to create a more friendly and open atmosphere during the interview. The researcher had been in contact with the teachers and involved in the school's activities and doing volunteering work for 3 months prior to conducting the interview sessions to become familiar with the school's culture and work environment.

The interview sessions were carried out in English and Malay language. This is to ensure questions that were asked were better understood by the teachers and parents. The excerpts that were in Malay were then be translated into English.

3.4.3.1 Interview Questions for Teachers

Teachers were asked several questions that were aimed to examine their extent of understanding about SEN, their willingness to communicate with parents, their perceived roles, their expectations of parents, students' social interaction development and to determine the effectiveness of the buddy support system. Questions asked during the teachers' interview are illustrated below. As individual face-to-face semi-structured interview was conducted by the researcher, the questions asked are not necessary in a set order and act as a guideline. Participants were first asked specific questions related to their teaching profession. The

purpose was to make them feel at ease and to boost their confidence. Anderson (1990) stated that asking participant's questions, ranging in nature from the general to specific, helps them gain confidence that would later lead to freer expression. The following are the guiding questions:

1) Tell me about your career as a teacher

After participants talked about their teaching profession, probing questions related to collaboration process were then asked. Participants were required to expand on what they had said in order to clarify their answers, opinions and feelings. The following are the guiding questions:

a)   Collaboration practices in SEN:

  i.   Can you tell me what SEN means to you?

  ii.   In your experience, what is an effective SEN intervention to encourage students' interaction?

 iii.   What approaches you have found work best to encourage SEN students to interact with their peers?

 iv.   In your view, how important are parents in supporting their child's social development?

  v.   How do you feel about sharing your views and ideas with parents?

 vi.   Do you feel any barriers when interacting and communicating with parents?

vii.   In your experience, what are the most effective ways in communicating with parents?

b)   Students' Social Interaction:

   i.   In your opinion, how important it is for children with SEN to interact with other peers of similar age?

  ii.   How do you as a teacher support this interaction?

c)   The effectiveness of the Buddy Support System (BSS):

    i.   Why did the school want to be involved in the buddy club program?

   ii.   Do you see any benefits from the buddy club?

  iii.   In your opinion, what are the aims of the buddy club?

  iv.   From your perspective, to what extend were the club activities appropriate for meeting its aims?

3.4.3.2 Interview Questions for Parents

Parents of students with special needs were expected to respond to several questions that were aimed to examine their extent of understanding about SEN, their willingness to communicate with teachers, their perceived roles, their expectations of teachers, students' social interaction development and to determine the effectiveness of the Buddy Support System. As individual face-to-face semi-structured interview was conducted by the researcher, the questions asked are not necessary in a set order and act as a guideline. Parents were first asked specific questions related to their child. The purpose was to make them feel at ease.

1) Tell me about your child

The following are the guiding questions:

a)   Students' Social Interaction:

   i.   In your opinion, how important it is for your child to interact with other students of similar age?

  ii.   What are your expectations of teachers' concerning your child's social development?

 iii.   How do you support your child's social development?

b)   The effectiveness of the Buddy Support System:

   i.   What information was provided to you about the Buddy Club?

  ii.   In your opinion, how does the buddy club benefit your child?

c)   Collaboration practices in SEN:

   i.   How does the school build a positive working relationship with you as a parent?

  ii.   How do you feel about sharing your views of SEN and ideas with teachers?

 iii.   When and how do you communicate with teachers on matters pertaining to your child's IEP?

3.5   Pilot Study

Baker (1994) states a pilot test allows researchers to try out the research instrument designed for a specific study. It's not only to give early indication to the researcher on parts that may not be justifiable, but also to help improve the methods used or giving avenues to researcher

to further improve on the instrument. A pilot test is also important for ensuring reliability and validity of the survey instrument (Creswell, 2005; Saunders, Lewis, & Thornhill, 1997). The most valuable function of a pilot test is to validate the adequacy of the questionnaire (Saunders et al., 1997). These include the content of the statements, suitability of the terminology and the syntax, questionnaire layout and sequencing, questionnaire completion time and response rate (Saunders et al., 1997). Sampson (2004) stressed that apart from refining the instruments used, a pilot study can also draw attention to gaps and wastage in data collection as well as focusing on major issues that need to be addressed.

3.5.1 Piloting the Instruments

The researcher tested the reliability of the teachers' questionnaire and parents' questionnaire and its items as reflected in the validity and reliability section in this chapter. The pilot test was carried out by the researcher at one of the 6 secondary schools involved in the pilot buddy support system. There were 25 teachers and 20 parents involved in this pilot study. The pilot study was carried out for the purpose of ensuring clarity in understanding the statements in the questionnaires among the respondents.

Pilot interviews were also conducted with 1 teacher who has 6 years of working experience in SEN and 1 parent whose child been involved in a SEN program for 3 years and attends IEP meetings with the teachers on a regular basis to familiarize and further refine the type of semi-structured questions to be asked during the interview with the teachers and parents. The pilot interviews were useful as the researcher was able to practice interviewing participants before the actual study and also refine the interview questions to make them easier to be understood by the interviewees.

3.6   Validity and Reliability

The researcher aims to focus on construct validity through people constructions of reality. According to Yin (2003), there are many ways to increase construct validity, which include using multiple sources of evidence that are relevant for the quantitative and qualitative data collection in this study.

Newman, Ridenour, Newman, and DeMarco (2002) supported this statement in using mixed method design to increase validity of the research study. This will be achieved from the semi-structured interviews and observations conducted to gather more authentic accounts as well as experiences of the teachers, parents and students involved in the buddy support system. The multiple ways to measure the same phenomenon which will be triangulated also act as an approach to overcome potential barriers that may arise in construct validity (Yin, Bateman, & Moore, 1985).

Yin (2003) also stresses on the tactic to establish a chain of evidence which is also applicable during data collection. The primary approach is descriptive in nature and look into teachers' and parents' views based on the specific questions asked. The secondary approach is exploratory in nature to understand further what the experiences in collaboration meant to the teachers and parents involved and the effect of the buddy support system has on students with special needs and their more able peers. Next is the theoretical aspect whereby their concepts and relationships are used to explain actions and meanings to the whole situation. Lastly, evaluation is made by assessing all the information and conceptualized evidence available.

The researcher found that teachers and parents had little or no problem in answering the questions. The researcher made effort to be involved and participate in the school's activities to build better rapport and trust with the teachers and parents that can help enhance the validity of the participants' accounts (Van Dalen, 1979). The researcher also requested 3 experienced teachers of more than 6 years' experience in the field of SEN from three different schools to look into the face validity and the content validity of the questionnaire. The purpose of the step was to determine the validity coefficient for each item and whether the instrument was actually interpreted in the way it was designed to be for the sample population. An instrument has face validity when it measures the construct that is intended to measure and does not contain other irrelevant constructs (Hoyle, Harrris, & Judd, 2002).

An instrument that has content validity will include all the different aspects of the construct. In order to determine face and content validity of the questionnaire, the researcher ensures that the number of items measuring a particular variable was adequate. The content validity of the questionnaires were also peer reviewed and validated by the researcher's primary supervisor in Educational Leadership field and secondary supervisor, who is a former head teacher and a practitioner with vast experience in IEP & SEN implementation. This was to ensure there was no irrelevant questions were included in the survey, the precision and clarity was obtained as well as the item arrangement was appropriate for the respondents.

The goal of reliability is aimed at minimizing errors and biases in the study (Yin, 2003). Pilot field-test was performed to assess the internal consistency reliability to evaluate whether the instrument itself is consistent, that is, if respondents answer consistently across all items of a construct (Neuman, 2006). The first measure to assess internal consistency reliability is

Cronbach Alpha. Low values of alpha indicate that the items capture the construct poorly (Churchill, 1995). The threshold for this study was set at 0.65.

The pilot study proved to be helpful in that it was able to identify the strengths and limitations of the instrument before the actual administration of the survey. The expectations of each other in SEN sub-construct in the questionnaire for teachers had a Cronbach's alpha of 0.42. Changes to the survey questionnaire were made following feedback from the pilot study. Two items were deleted from the expectations of each other in SEN sub-construct due to the increase in Cronbach's Alpha score if the two items were deleted. Table 3.21 displays the two items which was deleted and the new Cronbach's Alpha score for the expectations of each other in SEN sub-construct upon deletion of the two items.

Table 3.21: Deleted items for expectations of each other in SEN sub-construct and the new Cronbach's Alpha score

Construct	Sub-Construct	Items Deleted	New Cronbach's Alpha
Teacher-parent Collaboration in Special Educational Practices	Expectations of each other in SEN	I expect parents to attend the IEP meetings about their child whenever they are invited.	.67
		I am satisfied with the cooperation given by parents involved in the IEP process.	

The reliability from the pilot study showed that the Cronbach's alpha of the questionnaire for teachers was at 0.92. If all the values of the Cronbach's alpha role scale and subscales are 0.65 and above, these imply that the questionnaires are suitable to be used (Green, Camili, & Patricia, 2006). Table 3.23 shows the reliability of the teachers' questionnaire based on the pilot test carried out for this study. Overall, for the teachers' questionnaire, teacher-parent

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collaboration in special educational practices construct was condensed into 34-item with Cronbach's Alpha for the four sub-construct now ranging from .67 to .83.

The reliability from the pilot study also showed that the Cronbach's alpha of the questionnaire for parents was at 0.96. However, the parents perceived roles in SEN sub-construct had a Cronbach's alpha of 0.58. Changes to the survey questionnaire were made following feedback from the pilot study. An item was deleted from the parents' perceived roles in SEN sub-construct due to the increase in Cronbach's Alpha score if the item were deleted. Table 3.22 displays the item which was deleted and the new Cronbach's Alpha score for the parents' perceived roles in SEN sub-construct upon deletion of the item.

Table 3.22: Deleted items for parents' perceived roles in SEN sub-construct and the new Cronbach's Alpha score

Construct	Sub-Construct	Item Deleted	New Cronbach's Alpha
Teacher-parent Collaboration in Special Educational Practices	Perceived roles in SEN	If I cannot attend the IEP meeting, I decide on another date to meet and discuss with the teacher about my child's progress.	.65

Table 3.24 shows the reliability of the parents' questionnaire based on the pilot test carried out for this study. Overall, for the parents' questionnaire, teacher-parent collaboration in special educational practices construct was condensed into 35-item with Cronbach's Alpha for the four sub-construct now ranging from .65 to .89.

Table 3.23: Assessment of internal consistency reliability of Teachers' Questionnaire and the Cronbach's Alphas'

Instrument	Items	Cronbach's Alpha	Construct	Items	Cronbach's Alpha	Sub-Construct	Items	Cronbach's Alpha
Teachers' Questionnaire	63	.92	Teacher-parent Collaboration in Special Educational Practices	34	.87	Understanding about SEN	15	.72
						Willingness to communicate	10	.83
						Perceived roles in SEN	7	.69
						Expectations of each other in SEN	2	.67
			Students Social Interaction	16	.81	Friendship	5	.88
						Interactions	6	.75
						Acceptance by classmates	5	.67
			Buddy Support System	13	.93	Understanding of the Co-curriculum	5	.87
						Influence	4	.80
						Benefits	4	.87

Table 3.24: Assessment of internal consistency reliability of Parents' Questionnaire and the Cronbach's Alphas'

Instrument	Items	Cronbach's Alpha	Construct	Items	Cronbach's Alpha	Sub-Construct	Items	Cronbach's Alpha
Parents' Questionnaire	61	.96	Teacher-parent Collaboration in Special Educational Practices	35	.93	Understanding about SEN	12	.89
						Willingness to communicate	10	.87
						Perceived roles in SEN	2	.65
						Expectations of each other in SEN	11	.80
			Students Social Interaction	15	.82	Friendship	6	.77
						Interactions	5	.70
						Acceptance by classmates	4	.82
			Buddy Support System	11	.90	Understanding of the Co-curriculum	3	.74
						Influence	4	.78
						Benefits	4	.71

3.7 Procedure

The study was conducted in ten government funded integrated special education primary and secondary schools located in Peninsular Malaysia. Questionnaires were distributed to teachers and parents. A demographic section was also included in the questionnaires for teachers and parents to obtain relevant information required for this study. The researcher distributed the questionnaires to the teachers together with a cover letter which explained the nature of the study. The questionnaires were anonymous to gain teachers' confidence in giving their sincere responses to the questions asked. As their identity would not be known, the researcher labelled each questionnaire accordingly for recording and filing purposes.

The questionnaires that was distributed to parents included a cover letter explaining the nature of the study and inviting their participation. The researcher also included a letter to invite parents to the interview sessions that would be conducted on a later date. Each parent who confirmed their commitment to participate further in the research interview was contacted and a meeting date was then arranged. Only 5 parents had stated their willingness to participate in the interview session.

For the qualitative part, interview sessions were carried out on a later date with teachers and parents to share their experiences on the effectiveness of the buddy support system and in carrying out their roles and responsibilities in the collaboration process. The teacher interviewees were coded Teacher 1 to Teacher 6 and the parent interviewees were coded Parent 1 to Parent 5 to address the issue of respondent confidentiality. The interview questions were distributed and mailed to 6 teachers and 5 parents prior to the actual interview with them. First-hand knowledge and personal experiences were obtained through the

participants' own words regarding the effectiveness of the Buddy Support System on teacher-parent collaboration and students' social interaction. Multiple views regarding the study were obtained through interviews (Merriam, 1998). It was necessary to use interviewing as a tool to obtain information that could not be observed such as feelings, thoughts and impressions.

An interview protocol was prepared to match the research objectives and research questions in this study (refer to Appendix C & D, page 335 and 338). The interview questions were semi-structured so as to allow other questions to emerge during the interviewing process and additional ideas could be explored. The use of the interview guide allowed more structure, which in turn eased the researcher's task of organizing and analyzing interview data. The general atmosphere in all interviews was very casual. In addition to their ability to concentrate, their communication skills and their ability for self-reflection contributed greatly to the quality of the interviews.

Interviews were supported with analysis of a video observation done on students with special needs and their able peers in a Buddy Support System activity and whether there exist any social interaction. Several exemplary studies such as (Heath & Hindmarsh 2000, Goodwin, 2003) highlights the access video provides to otherwise difficult or impossible to examine aspects of human interaction. The responses from the interviews and observations will be tape and video recorded so that full attention could be given towards the response of the participants. Teachers, parents and students were assured of the anonymous identity to gain their confidence in giving their sincere responses to the study. As their identity would not be known, the researcher labelled each interview accordingly for recording and filing purposes.

3.8 Data Analysis

This section discusses the different stages of data analysis that was carried out in this research. Combining quantitative and qualitative analyses in the mixed-method research allowed a broader and complementary view to the research issue being studied. The emerging results will be discussed in chapter 4.

According to Rabiee (2004), the first step in establishing a trail of evidence is a clear procedure of data analysis, so that the process is clearly documented and understood. This step allows another researcher to verify the findings; it safeguards against selective perception and increases the rigour of the study. In order to achieve this objective, there must be sufficient data to constitute a trail of evidence. With the guided approach, the researcher will look into each individual research question and establish a clear procedure of data analysis to identify useful data for the research findings. Table 3.25 shows the quantitative data analysis methods used for the eight research questions.

Table 3.25:   Quantitative data analysis method

Research Question (RQ)	Method of Analyzing

RQ1: To what extent does teacher-parent collaboration contribute to:-
  i. understanding about special educational needs?
  ii. willingness to communicate in matters pertaining to special educational needs?
  iii. their perceived roles in the implementation of special educational needs?
  iv. expectations of each other's role in the implementation of special educational needs?
	Descriptive Statistics (Mean & Standard Deviation)

RQ2: To what extent does students' social interaction among SEN and mainstream pupils exist, as perceived by teachers?	Descriptive Statistics (Mean & Standard Deviation)

Research Question (RQ)	Method of Analyzing
RQ3: To what extent does students' social interaction among SEN and mainstream pupils exist, as perceived by parents?	Descriptive Statistics (Mean & Standard Deviation)
RQ4:sWhat is the relationship between teacher-parent collaboration and students' social interaction as perceived by teachers?	Pearson's R Correlation Test
RQ5:sWhat is the relationship between teacher-parent collaboration and students' social interaction as perceived by parents?	Pearson's R Correlation Test
RQ6: To what extent and in what ways is the buddy support system effective, as perceived by teachers?	Descriptive Statistics (Mean & Standard Deviation)
RQ7: To what extent and in what ways is the buddy support system effective, as perceived by parents?	Descriptive Statistics (Mean & Standard Deviation)
RQ8: Does the Buddy Support System significantly moderate the relationship between teacher-parent collaboration and students' social interaction in the implementation of special educational practices as perceived by teachers?	Moderation Test: Hierarchical Multiple Regression

3.8.1 Data Analysis Technique for the Questionnaire

Statistical Package for the Social Sciences (SPSS) version 21.0 was used to analyse the quantitative data collected from the questionnaires. The quantitative data from the questionnaires consist of a series of Likert-type questions that when combined measures a particular trait, thus creating a Likert scale (Boone & Boone, 2012). According to Joshi et. al. (2015), the construction of Likert scale is rooted into the aim of the research that is to understand about the opinions/perceptions of participants related with single 'latent' variable (phenomenon of interest). This 'latent' variable is expressed by several 'manifested' items in

the questionnaire. These constructed items in a mutually exclusive manner address a specific dimension of phenomenon under inquiry and in cohesion measure the whole phenomena.

Primarily researchers have emphasized the psychometric limitations of the Likert scale and have debated whether the resulting data are ordinal or interval (Sumintono & Widhiarso, 2014; Blaikie, 2003; Cohen et al., 2000), whether a mid-point should be used (Garland, 1991) and have explored the extent to which the number of categories on a scale and the use of numbers versus labels influences the responses given (Kieruj & Moors, 2010). The researcher analysed the Likert scale data collected from the questionnaires using parametric tests with an interval scale. The researcher combined the items in order to generate a composite score (Likert scale) of a set of items for a single variable (Joshi et. al., 2015).

Likert scales (collections of items) as opposed to individual Likert items are not ordinal in character, but rather are interval in nature and, thus, may be analysed parametrically (Joshi et. al., 2015; Boone & Boone, 2012; Norman, 2010; Carifio & Perla, 2008; 2007; Pell, 2005). Carifio and Perla (2007) argue if one is using a 5 to 7 point Likert response format, and particularly so for items that resemble a Likert-like scale and factorially hold together as a scale or subscale reasonably well, then it is perfectly acceptable and correct to analyze the results at the (measurement) scale level using parametric analyses techniques. They added claims, assertions, and arguments to the contrary are simply conceptually, logically, theoretically and empirically inaccurate and untrue and are current measurement and research myths and urban legends.

Carifio and Perla (2008) argue that those who hold the "ordinalist" view of Likert scales do not consider the abundance of empirical research that have supported the interval view and

opined that it is perfectly all right to use the summed scales to conduct parametric tests. The type of statistical analyses conducted on Likert scale data do not affect the conclusion drawn from the results as it yields similar interpretations (Murray, 2013).

Carifio and Perla (2008), resolving the 50-year debate around using and misusing Likert scales believe the issue of whether a parametric test is suited to the analysis of Likert scale data stems from the views of authors regarding the measurement level of the data itself: ordinal or interval. They added the debate on Likert scales and how they should be analysed, therefore, clearly and strongly goes to the intervalist position, if one is analysing more than a single Likert item. However, it is acknowledge that other quantitative researchers hold different views of Likert scale measurement due to its inconsistencies (Sumintono & Widhiarso, 2014; pg. 13) and this has been referred to explicitly in the limitations section of this study on page 274.

Norman (2010) using real scale data suggests that Likert data can be analysed using parametric tests without "fear of coming to the wrong conclusion". The researcher used two types of statistical techniques to analyze the quantitative data, namely descriptive statistics and inferential statistics. Descriptive statistics recommended for interval scale items include the mean for central tendency and standard deviations for variability (Joshi et. al., 2015; Boone & Boone, 2012).

Mean and standard deviation were used to analyze data relating to the domains linked to what extent does teacher-parent collaboration contribute to special educational practices (research question one) and to what extent does students' social interaction among SEN and mainstream pupils exist as perceived by teachers and parents (research question two and

research question three) and the extent and in what ways is the buddy support system effective as perceived by teachers and parents (research question six and research question seven).

The mean values were further categorized into three different levels based on the range set for each level and interpreted based on low level, moderate level, or high level as illustrated in Table 3.26. This interpretation was applied for each item as well as for each variable. These levels were derived by dividing the five-point scale into three categories which gives each level a score range of 1.33 [(5.0-1)/3]. The overall mean for each variable was obtained by adding all the mean values of every item then dividing with the total number of items for each variable.

Table 3.26: Mean range levels

Levels	Range
Low	1.00 - 2.33
Moderate	2.34 - 3.67
High	3.68 - 5.00

Data analysis procedures appropriate for interval scale items would include the Pearson's R Correlation Test (Joshi et. al., 2015; Boone & Boone, 2012). Inferential statistics comprising Pearson's R Correlation Test was used to analyze the relationship between teacher-parent collaboration and students' social interaction as perceived by the teachers (research question four) and the relationship between teacher-parent collaboration and students' social interaction as perceived by parents (research question five).

The researcher used a correlation analysis to examine the strength and direction of the relationship between two random variables (Zou, Tuncali, & Silverman, 2003). Pearson linear correlation are commonly used for measuring linear and general relationships between two variables (Zou, Tuncali, & Silverman, 2003; Quirk, Quirk & Horton, 2013, pg. 107). Correlation also tells the magnitude of the relationship between two random variables (Quirk, Quirk & Horton, 2013, pg. 107).

The researcher used correlation in this study to investigate the degree to which variables change or vary together. There is no distinction between dependent and independent variables and there is no attempt to prescribe or interpret the causality of the association. Correlations apply mainly to survey designs where each variable is measured rather than specifically set or manipulated by the investigator (Logan, 2010, pg.167).

Simple regression analysis was not preferred as it focuses on the form of the relationship between variables, and it's to evaluate the relative impact of a predictor variable on a particular outcome (Zou, Tuncali, & Silverman, 2003). Regression is used to investigate the nature of a relationship between variables in which the magnitude and changes in one variable (independent or predictor variable) are assumed to be directly responsible for the magnitude and changes in the other variable (dependent or response variable) (Logan, 2010, pg.167).

The choice of analysis depended on the aim of the research. The researcher wished to assess whether there is a relationship between teacher-parent collaboration and students' social interaction as perceived by teachers and parents, thus correlation analysis was used. In comparison, if the researcher wished to evaluate the impact of teacher-parent collaboration

on students' social interaction as perceived by teachers and parent, then regression analysis will be preferred.

In statistics and regression analysis, the combined effect of two variables on another is known conceptually as moderation, and in statistical terms as an interaction effect (Field, 2013). A moderator variable is one that affects the relationship between two other variable (Field, 2013). PROCESS procedure for SPSS (Hayes, 2013) were used to investigate if by controlling the Buddy Support System variable (moderator), whether the teacher-parent collaboration domain (predictor variable) could significantly predict the students' social interaction domains (criterion variables) (research question eight).

PROCESS procedure for SPSS has several advantages over using the normal regression tools: (1) it will centre the predictor and moderator variables; (2) it computes the interaction term automatically; and (3) it will do simple slopes analysis by running a forced entry regression with the centered predictors, centered moderator and the interaction of the two centered variables as predictors (Field, 2013). Basic moderation model number 1 will be used with 1000 bootstrapped samples. Following the recommendations of Frazier, Tix, and Barron (2004), the predictor and moderator variables were centered (i.e., put into deviation units by subtracting their sample means to produce revised sample means of zero). This is because predictor and moderator variables generally are highly correlated with the interaction terms created from them. Centering reduces problems associated with multicollinearity (i.e., high correlations) among the variables in the regression equation.

If the interaction term was found to be significant, it will indicate moderation has occurred. However, to interpret the moderation effect e.g. if the relationship between teacher-parent

collaboration (predictor variable) and students' social interaction (criterion variables) is positive and becomes stronger with the values of Buddy Support System variable (moderator), two analysis approaches were applied: (1) simple slopes analysis (Aiken & West, 1991) and (2) line graph of the slopes (Field, 2013). Simple slope analysis shows how the values of teacher-parent collaboration and students' social interaction change at low, medium and high values of the moderator, whereas line graph complements the simple slope analysis by showing the moderating role graphically (Field, 2013).

3.8.2 Data Analysis Technique for the Interview

For the qualitative part, the interview questions were prepared to match mainly research question one on to what extent does teacher-parent collaboration contribute to special educational practices? Research question two and three: to what extent does students' social interaction among SEN and mainstream pupils exist as perceived by teachers and parents (research question two and research question three) and to what extent and in what ways is the buddy support system effective, as perceived by teachers and parents (research question six and research question seven). Items in the teacher-parent collaboration instrument were used as guiding questions during the semi-structured interviews. Identities of the interview participants were kept confidential.

Three main levels of data analysis were employed. At the first level of analysis, all the interviews were audio recorded with permission and were transcribed verbatim (Creswell, 2005). Transcribing the interviews verbatim provided a complete database for analysis (Merriam, 2009). A sample interview session with one of the teacher is included (Appendix

E, page 340). A sample interview session with one of the parents is also included (refer to Appendix F, page 362).

At the second level of analysis, the data obtained were analyzed using a constant comparative method, where data from the interviews, documents collected and observations were compared. Coding was done manually as the sample size was small. Specifically, the researcher assigned open codes and memos to the transcribed interviews, documents and photographs. 6 teacher interview, 5 parents' interviews, and one buddy club activity and its photographs were documented. Deductive coding was used by identifying parts of the transcripts that resonated with the four teacher-parent collaboration domains – understanding about special educational needs, willingness to communicate in matters pertaining to special educational needs, their perceived roles in the implementation of special educational needs and expectations of each other's role in the implementation of special educational needs, the students' social interaction domains and the buddy support system domains. Indicators for coding the interview transcripts are summarized in Table 3.27, page 129.

The data from the interview sessions were organized to make it easier for the researcher to refer to and quote the teachers' and parents' response. According to Merriam (1988), categorizing the data that is collected is a procedure of content analysis. Categories, themes and case examples will be gathered to answer each research questions. Core themes can be organized into their domains for the analysis of data (Berg & Lune, 2004; Miles & Huberman, 1994). The stages involved in analyzing the qualitative data and each transcript individually are described succinctly by Smith and Eatough (2007) as well as Creswell (2002) and they are as follows:

(i) Formally characterized and record initial thoughts during the analysis which will be useful for future interpretation thus ensuring that interpretations are based on participants' ideas.

(ii) The transcripts are read several times and notes are written on relevant aspects allowing the researcher to form better understanding on what is being shared by the participants.

(iii) Specific themes are built based on the initial thoughts and notes are also written to define the direction of the analysis for data collected.

(iv) The data are further reduced by connecting and refining the themes further as well as grouping them accordingly.

(v) Interpretations of the participants' accounts would be interpreted by the researcher based on his understanding of the whole experience during data collection.

At the third level of analysis, a matrix was compiled (see Appendix G & Appendix H, page 381 and 391), consisting of examples of quotes from interviews, documents and observations with the four teacher-parent collaboration domains, students' social interaction domains and buddy support system domains. This allowed the researcher to determine whether there was a pattern amongst the interview responses from teacher 1 to 6 and interview responses from parents 1 to 5, as well as the supporting documented observations of students from the photographs and video.

Table 3.27: Criteria for coding responses

Collaboration Domains	Domain-related keywords
Understanding about SEN	teach students, learning, observe, guide, help, understand, strategies, methods, suitable, facilities, specific education, aids, assistance, equal, not stranded, left out, individualized educational program, different abilities, uniqueness, specialities, differences, accepted, drop-out, trained, everyday living, independent

Willingness to communicate in matters pertaining to SEN	ask, need to know, inform, language, communication, meeting, meet parents, sharing views, chit-chat, call, WhatsApp, discuss, approach, feedback
Perceived roles in the implementation of SEN	ideas, opinion, collaborate, suggest, help to participate, involve everyone
Expectations of each other's role in the implementation of SEN	really know, full support, protective, give opportunity, concern, efforts, collaboration, share, information, encourage, concern, support, spend time, contribution
Students' social interaction	social interaction, talk, ask, discuss, interact, close, bond, accept, help each other, play together, responsible, socialization, communicating, mingle, friends, know each other, involved together
Buddy support system	Encourage, improve, play, football, place them in groups, program, accompany, guidance, motivated, mingle, co-curriculum, buddy club, skills, gives fun, mainstream students, talents, awareness, social inclusion, fitness, social skills, play skills, grouping, psychomotor skills, assisted, competitions, involve, work together, communicate, cooperation, classroom activity, group activities, space, inclusive, integrate

3.8.3 Data Analysis Technique for Observations

Additional data collection methods included observation of a selection of the buddy club activity in one primary school. Video recordings and photographs were taken as part of the observations process at a buddy club activity. The photographs taken (with permission) showed real time evidence of students' social interaction between SEN and mainstream pupils. Sample photographs are included in (Appendix I, page 398) of this study. As video was a supplementary rather than central data collection method, no detailed analysis of the

video was undertaken instead images from the video recording are selectively used to support findings from the quantitative and qualitative data.

Video captures a version of an event as it happens. It provides opportunities to record aspects of social activities in real-time: talk, visible conduct, and the use of tools, technologies, objects and artefacts (Heath, Hindmarsh, & Luff, 2010). Three main levels of data analysis were employed. At the first level of analysis, a preliminary review of the data was undertaken to catalogue some basic aspects of the activities and events that have been recorded (Heath, Hindmarsh, & Luff, 2010). It was advisable to do this review as soon as possible after data collection. Preliminary reviews should involve no more than a simple description and classification of the materials (Heath, Hindmarsh, & Luff, 2010). This provides useful vehicles when returning to the data to identify where events occur or when looking for particular phenomena.

The second level of analysis, a substantive review of the data was undertaken to find further instances of events or phenomena, so as to enable comparison and to delineate aspects of interactional organisation (Heath, Hindmarsh, & Luff, 2010).

The third level of analysis was undertaken to perform an analytic search of the data. As the study progresses, it became necessary to refine the analysis so repeated searches of the data were performed. This involved the review of related data sets in order to find examples of actions that appear to reflect similar characteristics (Heath, Hindmarsh, & Luff, 2010).

3.9 Summary

For the purpose of this study, ten government funded integrated special education primary and secondary schools located in Malaysia were selected. Teachers, parents and students as respondents were involved in the buddy support system were selected for data collection. Quantitative and qualitative methods were used to gather the data. This chapter has outlined the procedure of data collection and analysis. The goal of this study was not to generalize, as there are only ten schools operating the buddy system but to understand further on the effectiveness of the Buddy Support System on teacher parent collaboration processes and students' social interaction in special educational practices.

In chapter 4 the results from the data analysis will be discussed at length to address each of the research questions.

CHAPTER 4: RESULTS

4.0 Introduction

The main purpose of this study was to examine the effectiveness of the buddy support system in terms of its impact on teacher-parent collaboration and students' social interaction. This chapter outlines the data collection methods, analysis and the results from the quantitative and qualitative data sets. In this study, teachers and parents were asked about several aspects of their collaborative roles, in particular their understanding of special educational needs, their willingness to communicate with each other, their perceived roles, as well as their expectations of each other. Data were collected from teachers and parents through a mixed methods research design that comprised questionnaires, semi structured interviews and informal observation. Quantitative and qualitative data collection methods were used to explore the research questions (outlined in chapter 1). In the next chapter the results from the data analysis will be combined to address each of the research questions.

4.1 Quantitative Data Analysis

The initial part of this chapter presents the findings from the main data collection method, which was a survey distributed to teachers and parents. The design and intention of this survey was outlined in chapter 3. The findings from the quantitative data are also presented in this chapter. In the quantitative part of the study, the exogenous constructs are: 1) understanding about SEN; 2) willingness to communicate; 3) perceived roles in SEN; 4) expectations of each other (i.e. teachers and parents) in SEN. The endogenous constructs are students' social interaction domains of 1) friendship; 2) interactions; 3) acceptance by

classmates. The moderating constructs are the buddy support system domains of 1) understanding of the co-curriculum; 2 influence; and 3) benefits.

Two modes of statistical techniques were used to analyse the quantitative data, namely descriptive statistics and inferential statistics. Descriptive statistics comprising mean and standard deviation were used to analyse data relating to the domains concerning the extent to which teacher-parent collaboration contributes to (i) understanding about special educational needs; (ii) willingness to communicate in matters pertaining to special educational needs; (iii) their perceived roles in the implementation of special educational needs; (iv) expectations of each other's role in the implementation of special educational needs (research question 1) and (v) to what extent does students' social interaction among SEN and mainstream pupils exist, as perceived by teachers and parents (research question 2 and research question 3) and (vi) to what extent and in what ways is the buddy support system effective, as perceived by teachers and parents (research question 6 and research question 7).

Inferential statistics comprising Pearson's R Correlation Test was used to analyse the relationship between teacher-parent collaboration and students' social interaction as perceived by the teachers (research question 4) and the relationship between teacher-parent collaboration and students' social interaction as perceived by parents (research question 5). Finally, PROCESS procedure for SPSS (Hayes, 2013) was used to determine whether the buddy support system significantly moderates the relationship between teacher-parent collaboration and students' social interaction in the implementation of special educational practices (research question 8).

4.1.1 Demographic Profile of the Research Participants

Data for this study were obtained from research participants consisting of all the teachers and parents, where their pupils and children respectively were involved in the Buddy Support System. Additional detailed information from parents and the characteristics of their children was also collected as part of the data sets. Names and identities of all research participants were kept confidential. Teachers and parents were identified in the data sets and analysis by numerical symbols.

This section of the thesis will outline the findings and results from the quantitative data. In chapter 5 the results from both data sets will be interrogated in depth and conclusions relating to each of the research questions will be outlined. In this chapter the results from the analysis of each data set and the key findings will be presented.

4.1.2.1 Teachers

The total population was 111 teachers who were involved in the Buddy Support System in the 10 pilot schools. Out of this population, 95 teacher respondents from 7 pilot schools and were selected for further data analysis. This selection was based on their active running and implementation of the buddy club programs in the schools. Teacher respondents from the remaining 3 pilot schools were not selected as the buddy club programs in these schools were no longer active due to insufficient funds provided by MOE. Demographics of teacher respondents is provided in Table 4.1.

Table 4.1: Teachers' demographic information

Demographic	Variables	Percentage	Total Respondents
Gender	Male	16.8	95
	Female	82.1	
Age	< 30 years old	25.3	95
	30 – 39 years old	53.7	
	40 – 49 years old	11.6	
	50 years and older	9.5	
Highest academic qualification	None	0	95
	Diploma	9.5	
	Bachelor Degree	78.9	
	Master Degree	9.5	
	Doctorate Degree	0	
	Others	1.1	
Area of specialization	Special Educational Needs	85.3	95
	Others	14.7	
Worked in the special education field	Less than 3 years	21.1	95
	3 to 5 years	24.2	
	6 to 8 years	30.5	
	9 to 11 years	10.5	
	More than 12 years	13.7	
	Non Applicable	0	
Involved in special education practices in this particular school	Less than 3 years	23.2	95
	3 to 5 years	27.4	
	6 to 8 years	25.3	

9 to 11 years	11.6
More than 12 years	10.5
Non Applicable	0

Table 4.1 shows a total of 17 (17.9%) male teachers and 78 (82.1%) female teachers responded to the study. 53.7% of the teachers were age 30 to 39 years old, followed by below 30 years old were 25.3%, 40 to 49 years old were 11.6% and teachers above 50 years old were 9.5%. Teachers with the Bachelor Degree academic qualification were the highest at 78.9%, followed by Diploma and Master's Degree academic qualification. Teachers with others qualification consist of 1.1%. There were 85.3% teachers with special educational needs specialization meanwhile the remaining 14.7% were teachers with other subject specialization. Teachers in this study were largely very experience with 30.5% of them 6 to 8 years of experience followed by 3 to 5 years with 24.2%, less than 3 years 21.1%, more than 12 years 13.7% and finally 9 to 11 years' experience were 10.5%. Teachers involved in special education practices in this particular school recorded the highest for 3 to 5 years' experience with 27.4%, followed by 6 to 8 years with 25.3%, less than 3 years with 23.2%, 9 to 11 years with 11.6% and finally more than 12 years with 10.5%.

Out of the 95 teachers, a purposive sample of 6 teachers was selected for in depth interviews. These teachers were selected based on several criteria: they specialized in the area of special educational needs: had at least 9 years of experience in SEN and 9 years of involvement in the SEN field at that particular school. All these teachers had completed in-service staff training as well as formal and informal training such as participating in seminars, workshops as well as having on-the-job training. Interview data were gathered from selected participants best placed to provide appropriate data and to verify or augment

study results from the earlier quantitative phase of data collection and the associated analysis from members of a defined population (Creswell & Plano Clark, 2007:121). This interview data will be explored in 4.3 of the Qualitative Data Analysis section of this chapter.

4.1.2.2 Parents

There were 121 parents with children involved in the Buddy Support System at the 10 pilot schools. 104 returned the questionnaires. Out of these 104, 68 parents from the 7 selected pilot schools were selected for further data analysis. Parents' responses from the remaining 3 pilot schools were not selected as the buddy club programs in the schools were no longer active due to insufficient funds provided by MOE. The children of the parents involved in this study covered various categories of disabilities; down syndrome, autism, learning disabilities, or with intellectual disability as identified by the school. Students who are in the mild or moderate range of disabilities exhibit a wide range of SEN characteristics. These characteristics are also influenced by the age of the students as well as the severity of their disabilities. The following information contains some of the SEN traits that these sample of students share:

- Generally they are able to walk and move around independently but have some difficulty in their fine motor skills.

- Their hearing and eye sight function well.

- They have short attention spans and thus require individual attention by the teachers.

Demographic details of the parents such as their gender, age, academic qualification, how long their child been studying in this school, how long their child been involved in the special educational needs program (SEN), how often they had attended the IEP meetings and how long they have been involved in Special Education Practices in this particular school were obtained from the demographic profile section in the questionnaire. A summary of this demographic information is provided in Table 4.2.

Table 4.2: Parents' demographic information

Demographic	Variables	Percentage	Total Respondents
Gender	Male	47.1	68
	Female	52.9	
Age	Less than 30 years old	4.4	68
	30 to 39 years old	32.4	
	40 to 49 years old	47.1	
	50 years and older	16.2	
Highest academic qualification	None	33.8	68
	Diploma	39.7	
	Bachelor Degree	8.8	
	Master Degree	1.5	
	Doctorate Degree	0	
	Others	16.2	
Child been studying in this school	Less than 1 year	7.4	68
	1 to 2 years	32.4	
	3 to 4 years	39.7	
	5 to 6 years	20.6	

Child involved in a (SEN) program	Less than 1 year	7.4	
	1 to 2 years	38.2	
	3 to 4 years	29.4	68
	5 to 6 years	22.1	
	None	0	
Attended the IEP meeting / discussion in the school	1 to 2 times	48.5	
	3 to 4 times	29.4	68
	5 to 6 times	7.3	
	More than 7 times	14.7	
Involved in SEN Practice in this school	Less than 3 years	48.5	
	3 to 5 years	32.4	
	6 to 8 years	8.8	68
	9 to 11 years	4.4	

Table 4.2 shows a total of 36 (52.9%) mothers and 32 (47.1%) fathers responded to the study. 47.1% of the parents were age 40 to 49 years old, followed by 30 to 39 years old with 32.4%, above 50 years old with 16.2% and less than 30 years old at 4.4%. Parents with Diploma academic qualification were the highest at 39.7%, followed by parents who have no qualification at 33.8%, parents with other qualification at 16.2%, parents with bachelor degree qualification at 8.8% and parents with Master's Degree qualification at 1.5%. There were 39.7% of parents whose child been studying in this school for 3 to 4 years followed by 1 to 2 years at 32.4%, 5 to 6 years at 20.6% and less than a year at 7.4%. Parents whose child been involved in a (SEN) program at 1 to 2 years were highest at 38.2%, followed by 3 to 4 years at 29.4%, 5 to 6 years at 22.1% and less than a year at 7.4%. Parents attended the IEP meeting / discussion in the school were the highest at 1 to 2

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times with 48.5%, followed by 3 to 4 times at 29.4%, more than 7 times at 14.7% and 5 to 6 times at 7.3%.

Finally, parents who had been involved in SEN practices less than 3 years in their respective school were the highest with 48.5%, followed by 3 to 5 years at the school with 32.4%, 6 to 8 years at the school with 8.8%, and 9 to 11 years at the school with 4.4%. A purposive sample of 5 parents was systematically selected to be involved in the interview sessions. They were selected because all had children involved in the Buddy Support System at the school. Further details like parents' occupation, lifestyle and activities with their children at home were gained during the in-depth interview sessions.

4.1.2.3 Cronbach's alpha for reliability of the Teachers' Questionnaire (actual study)

The teachers' questionnaire was administered to 111 teachers involved in the Buddy Support System at the 10 pilot schools. 95 teachers' responses from 7 pilot schools went forward for further data analysis. Teachers' responses from the remaining 3 pilot schools were not selected as the buddy club programs in the schools were no longer active due to insufficient funds provided by MOE. The Cronbach's alpha test for reliability was carried out on the teachers' questionnaire as seen in Table 4.3 below. This test was performed to access the internal consistency reliability to evaluate whether the instrument itself is consistent, that is, if respondents answer consistently across all items of a construct (Neuman, 2006). Low values of alpha indicate that the items capture the construct poorly (Churchill, 1995).

The Cronbach's alpha reliability scores obtained from the teachers' questionnaire was at 0.96 and all the values of the subscales were in the range of .71 to .93. If all the values of the Cronbach's alpha role scale and subscales are 0.65 and above, these imply that the questionnaires are suitable to be used (Green, Camili, & Patricia, 2006). The results indicate that the items from the teachers' questionnaire are reliable for the present study.

Table 4.3: Cronbach's alpha scores for reliability of the Teachers' Questionnaire (actual study)

Instrument	Items	Cronbach's Alpha	Construct	Items	Cronbach's Alpha	Sub-Construct	Items	Cronbach's Alpha
Teachers' Questionnaire	63	.96	Teacher-parent Collaboration in Special Educational Practices	34	.96	Understanding about SEN	15	.93
						Willingness to communicate	10	.87
						Perceived roles in SEN	7	.88
						Expectations of each other in SEN	2	.71
			Students' Social Interaction	16	.91	Friendship	5	.74
						Interactions	6	.75
						Acceptance by classmates	5	.82
			Buddy Support System	13	.93	Understanding of the Co-curriculum	5	.84
						Influence	4	.85
						Benefits	4	.88

4.1.2.4 Cronbach's alpha for reliability of the Parents' Questionnaire (actual study)

The parents' questionnaire was administered to 121 parents whose children were involved in the Buddy Support System at the 10 pilot schools. 104 parents returned the questionnaires which is a high response rate. Out of these 104 responses, 68 parents from the 7 selected pilot schools were therefore selected for further data analysis. Parents' responses from the remaining 3 pilot schools were not selected as the buddy club programs in the schools were no longer active due to insufficient funds provided by MOE. The Cronbach's alpha test for reliability was carried out on the parents' questionnaire as seen in Table 4.4 below.

The Cronbach's alpha reliability scores obtained from the parents' questionnaire was at 0.96 and all the values of the subscales were in the range of .65 to .91. If all the values of the Cronbach's alpha role scale and subscales are 0.65 and above, these imply that the questionnaires are suitable to be used (Green, Camili, & Patricia, 2006). The results indicate that the items from the parents' questionnaire are reliable for the present study.

Table 4.4: Cronbach's alpha scores for reliability of the Parents' Questionnaire (actual study)

Instrument	Items	Cronbach's Alpha	Construct	Items	Cronbach's Alpha	Sub-Construct	Items	Cronbach's Alpha
Parents' Questionnaire	61	.96	Teacher-parent Collaboration in Special Educational Practices	35	.95	Understanding about SEN	12	.91
						Willingness to communicate	10	.81
						Perceived roles in SEN	2	.71
						Expectations of each other in SEN	11	.89
			Students' Social Interaction	15	.88	Friendship	6	.82
						Interactions	5	.75
						Acceptance by classmates	4	.65
			Buddy Support System	11	.92	Understanding of the Co-curriculum	3	.81
						Influence	4	.82
						Benefits	4	.81

4.2 Quantitative Data Findings and Results

Questionnaires were distributed to teachers and parents in order to collect data on four aspects of the collaborative roles between teachers and parents based on: (i) understanding of special educational practices; (ii) their willingness to communicate with each other; (iii) their perceived roles; (iv) their expectations of each other. The students' social interaction and how the buddy support system is a moderator in this relationship were also explored through the instrument.

4.2.1 Research question one: To what extent does teacher-parent collaboration contribute to (i) understanding about special educational needs; (ii) willingness to communicate in matters pertaining to special educational needs; (iii) their perceived roles in the implementation of special educational needs; and (iv) expectations of each other's role in the implementation of special educational needs?

Research question one seeks to explore the extent to which teacher-parent collaboration contributes to the four areas identified above. A teachers' questionnaire and a parents' questionnaire was used to measure teachers' and parents' understanding of special educational needs (SEN) respectively. The teachers' questionnaire was administered to a sample of (n=95) teachers while the parents' questionnaire was administered to a sample of (n=68) parents.

4.2.1.1 Itemized descriptive statistics for teachers' understanding about special educational needs

"Descriptive statistics do what they say: they describe, so that researchers can then analyse and interpret what these descriptions mean" (Cohen, Manion and Morrison, 2011; 622). "Descriptive statistics should be reported as they clearly communicate results to the reader" (Wright, 2003; 133). Descriptive statistics recommended for interval scale items include the mean for central tendency and standard deviations for variability (Joshi et. al., 2015; Boone & Boone, 2012). These were discussed in detail in Chapter 3 under Data Analysis Technique for the Questionnaire. The mean and standard deviation obtained from teachers' views about their understanding about special educational needs for each of the 15 items from the teachers' questionnaire are presented in Table 4.5.

The overall mean score obtained was 3.65, indicating that teachers felt they had a high level of understanding of special educational needs. The mean scores for this variable were between 3.14 and 3.91. This range was in the moderate and high levels. Mean scores were high for item 15 (In preparing for lessons, I use the guidelines set by the school in determining the short and long term IEP objectives for each student), item 16c (I refer to the goals and objectives that have been determined when writing progress reports), and item 18a (I improve my understanding of SEN education by finding and reading related materials).

Table 4.5: Mean and standard deviation for items of teachers' understanding about special educational needs

No.	Item	Mean	Std. deviation
1	I am knowledgeable in many aspects of SEN practices	3.55	.79
2c	I feel challenged in SEN practices when I have to carry out all the IEP documentation	3.14	.92
15	In preparing for lessons, I use the guidelines set by the school in determining the short and long term IEP objectives for each student	3.80	.69
16a	I refer to the goals and objectives that have been determined when reviewing the student's IEP	3.66	.84
16c	I refer to the goals and objectives that have been determined when writing progress reports	3.68	.85
17	I can identify the strengths and weaknesses of the students from IEP	3.56	.87
18a	I improve my understanding of SEN education by finding and reading related materials	3.75	.65
18b	I improve my understanding of SEN education by observing my colleagues interacting with students	3.80	.65
18c	I improve my understanding of SEN education by meeting with parents in school to discuss the student's progress	3.71	.70
19	IEP allows me to review the support given to students based on their needs	3.68	.78
20	IEP is an effective document to determine the support required by students	3.63	.76
21	IEP is required to ensure the services provided by teachers are sufficient in developing students' potentials	3.62	.76
22	Positive role models for students with SEN are needed	3.88	.70
23	I need to modify my instructions and teaching style in the classroom to meet the needs of students with SEN	3.91	.79
24	Having other adults in the classroom is an asset when supporting SEN students	3.43	.75
	Overall Mean	3.65	

4.2.1.2 Itemized descriptive statistics for parents' understanding about special educational needs

The mean and standard deviation obtained from parents' data concerning their understanding about special educational needs for each of the 12 items are presented in Table 4.6. The overall mean score obtained was 3.69; indicating that parents felt they had a

high level of understanding of special educational needs. The mean scores for this variable were between 3.18 and 3.88. This range was in the moderate and high levels. Mean scores were high for item 2c (I feel challenged in SEN practices when understanding all the IEP documents), item 6 (I truly understand the process in supporting my child), item 17c (I refer to the goals and objectives that have been determined when receiving progress reports), item 18 (I can identify the strengths and weaknesses of my child from IEP), item 19c (I improve my understanding of SEN education by meeting the teachers in school to discuss my child's progress), item 20 (IEP allows me to review the support given based on my child's needs), and item 22 (IEP is required to ensure the services provided by teachers are sufficient in developing my child's potential)

Table 4.6: Mean and standard deviation for items of parents' understanding about special educational needs

No.	Item	Mean	Std. deviation
1	I am knowledgeable in many aspects of SEN practices	3.18	1.07
2c	I feel challenged in SEN practices when understanding all the IEP documents	3.78	.69
6	I truly understand the process in supporting my child	3.88	.92
17a	I refer to the goals and objectives that have been determined when reviewing my child's IEP	3.64	.98
17c	I refer to the goals and objectives that have been determined when receiving progress reports	3.74	.90
18	I can identify the strengths and weaknesses of my child from IEP	3.76	.79
19a	I improve my understanding of SEN education by finding and reading related materials	3.60	.99
19b	I improve my understanding of SEN education by observing teachers interacting with students	3.54	.97
19c	I improve my understanding of SEN education by meeting the teachers in school to discuss my child's progress	3.85	.96
20	IEP allows me to review the support given based on my child's needs	3.68	.72
21	IEP is an effective document to determine the support required for my child	3.62	.69

No.	Item	Mean	Std. deviation
22	IEP is required to ensure the services provided by teachers are sufficient in developing my child's potential	3.72	.65
	Overall Mean	3.69	

4.2.2.1 Itemized descriptive statistics for teachers' willingness to communicate in matters pertaining to special educational needs

The mean and standard deviation obtained from the data relating to teachers' willingness to communicate with parents in matters pertaining to special educational needs for each of the 10 items from the teachers' questionnaire are presented in Table 4.7. The overall mean score obtained was 3.43, indicating that teachers felt more moderately about their willingness to communicate in matters pertaining to special educational needs. The mean scores for this variable were between 3.23 and 3.78. This range was in the moderate and high levels. Mean scores were high for item 14 (I give feedback to parents on their child's development).

Table 4.7: Mean and standard deviation for items of teachers' willingness to

communicate in matters pertaining to special educational needs

No.	Item	Mean	Std. deviation
2a	I feel challenged in SEN practices when I have to communicate with parents	3.36	.75
2b	I feel challenged in SEN practices when I have to explain the proposed IEP goals to parents	3.35	.78
3	My ideas on SEN practices for the students are accepted by their parents	3.46	.80
4	I explain about SEN support in detail to the parents before the IEP meeting	3.32	.71
9a	I invite parents to attend the meeting by personally calling them	3.23	.98
9b	I invite parents to attend the meeting by sending the invitation letters to them by post	3.32	1.12
9c	I invite parents to attend the meeting by sending the invitation letters to them via their child	3.66	.95

14	I give feedback to parents on their child's development	3.78	.69
16b	I refer to the goals and objectives that have been determined when discussing with parents their children's progress	3.58	.83
25	It is easy to communicate effectively with parents about their child's SEN support	3.24	.83
	Overall Mean	3.43	

4.2.2.2 Itemized descriptive statistics for parents' willingness to communicate in matters pertaining to special educational needs

The mean and standard deviation obtained from the items concerning parents' willingness to communicate with teachers in matters pertaining to special educational needs for each of the 10 items from the parents' questionnaire are presented in Table 4.8. The overall mean score obtained was 3.77, indicating that parents responded very positively in their willingness to communicate in matters pertaining to special educational needs. The mean scores for this variable were between 3.31 and 4.20. This range was in the moderate and high levels. Mean scores were high for item 2a (I feel challenged in SEN practices when I have to communicate with teachers), item 2b (I feel challenged in SEN practices when listening to the proposed Individualized Education Plan (IEP) with teachers), item 9b (If I cannot attend the IEP meeting I call to get explanation and feedback from teachers about my child's progress), item 10c (I prefer an invitation to attend the IEP meeting by a letter given through my child in school), item 15 (I give feedback to teachers on my child's development), item 17b (I refer to the goals and objectives that have been determined when discussing with teachers my child's progress), and item 26 (It is easy to communicate effectively with teachers about my child's SEN support).

Table 4.8: Mean and standard deviation for items of parents' willingness to communicate

in matters pertaining to special educational needs

No.	Item	Mean	Std. deviation
2a	I feel challenged in SEN practices when I have to communicate with teachers	3.88	.70
2b	I feel challenged in SEN practices when listening to the proposed Individualized Education Plan (IEP) with teachers	3.76	.69
3	My ideas on SEN practices for my child are accepted by the teachers	3.65	.97
9b	If I cannot attend the IEP meeting I call to get explanation and feedback from teachers about my child's progress	3.79	1.00
10a	I prefer an invitation to attend the IEP meeting by a phone call	3.53	1.37
10b	I prefer an invitation to attend the IEP meeting by a letter sent via post	3.31	1.31
10c	I prefer an invitation to attend the IEP meeting by a letter given through my child in school	4.20	.83
15	I give feedback to teachers on my child's development	3.82	.95
17b	I refer to the goals and objectives that have been determined when discussing with teachers my child's progress	3.90	.96
26	It is easy to communicate effectively with teachers about my child's SEN support	3.98	.82
	Overall Mean	3.77	

4.2.3.1 Itemized descriptive statistics for teachers' perceived roles in the implementation of special educational needs

The mean and standard deviation obtained from teachers' perceived roles in the implementation of special educational needs for each of the 7 items from the teachers' questionnaire are presented in Table 4.9. The overall mean score obtained was 3.56, indicating moderate level of agreement in terms of the implementation of special educational needs. The mean scores for this variable were between 3.40 and 3.79. This range was in the moderate and high levels. Mean scores were high for item 6 (I make sure parents truly understand the process in supporting their child).

No.	Item	Mean	Std. deviation
5	I make sure parents really understand what happens in the SEN support meeting(s)	3.61	.72
6	I make sure parents truly understand the process in supporting their child	3.79	.65
8a	If the parents cannot attend the meeting I call and discuss the student's progress over the phone	3.40	.83
10	I make sure parents are given information which explain the content and goals for the meeting that is held	3.66	.81
11	I determine the short term IEP objectives for student's SEN support	3.46	.73
12	I determine the long term IEP objectives for students' SEN goals	3.50	.77
13	I prepare all the IEP documentation needed to be presented to parents	3.49	.77
	Overall Mean	3.56	

4.2.3.2 Itemized descriptive statistics for parents' perceived roles in the implementation of special educational needs

The mean and standard deviation obtained about parents' perceived roles in the implementation of special educational needs for each of the 2 items from the parents' questionnaire are presented in Table 4.10. The overall mean score obtained was 3.73, indicating that parents' viewed their role in the implementation of special educational needs very strongly. The mean scores for this variable were between 3.70 and 3.75. This range was in the high levels. Mean scores were high for item 5 (I make sure that I really understand what happens in the SEN support meeting(s) and item 8 (I make sure that I attend my child's IEP meetings whenever I am invited).

No.	Item	Mean	Std. deviation
5	I make sure that I really understand what happens in the SEN support meeting(s)	3.75	.927
8	I make sure that I attend my child's IEP meetings whenever I am invited	3.70	.985
	Overall Mean	3.73	

4.2.4.1 Itemized descriptive statistics for teachers' expectations of parents' role in the implementation of special educational needs

The mean and standard deviation obtained from teachers' expectations of the parents' role in the implementation of special educational needs for each of the 2 items from the teachers' questionnaire are presented in Table 4.11. The overall mean score obtained was 3.57, indicating teachers' expectations of parents' role in the implementation of special educational needs was at a moderate level. The mean scores for this variable were between 3.25 and 3.79. This range was in the moderate and high levels. Mean scores were high for item 7 (I welcome parents' cooperation to enhance the SEN practices being offered).

Table 4.11: Mean and standard deviation for items of teachers' expectations of parents' role in the implementation of special educational needs

No.	Item	Mean	Std. deviation
7	I welcome parents' cooperation to enhance the SEN practices being offered	3.88	.70
8b	If the parents cannot attend the meeting they call to get explanation and feedback from me about the student's progress	3.25	.80
	Overall Mean	3.57	

4.2.4.2 Itemized descriptive statistics for parents' expectations of teachers' role in the implementation of special educational needs?

The mean and standard deviation obtained from parents' expectations of teachers' role in the implementation of special educational needs for each of the 11 items from the parents' questionnaire are presented in Table 4.12. The overall mean score obtained was 3.86, indicating that parents' expectations of the teachers' role in the implementation of special educational needs was at a moderate to high level. The mean scores for this variable were between 3.55 and 4.04. This range was in the moderate and high levels. Mean scores were high for item 4 (The teacher explains to me in detail about SEN support before the IEP meeting), item 7 (I welcome teachers' cooperation to enhance the SEN practices being offered to my child), item 11 (I am given information which explain the contents and goals for the meeting that is held), item 12 (I expect the teacher to determine the short term IEP objectives for my child's SEN support), item 13 (I expect the teacher to determine the long term IEP objectives for my child's SEN goals), item 14 (The teacher prepares all the IEP documentation needed to be presented to me), item 16 (In preparing for lessons, the teachers use the guidelines set by the school in determining the short and long term IEP objectives for my child), item 23 (I am satisfied with the cooperation given by teachers involved in the IEP process), item 24 (Teachers need to modify instructions and teaching style in the classroom to meet the needs of my child), and item 25 (Having other adults in the classroom is an asset when supporting SEN students).

Table 4.12: Mean and standard deviation for items of parents' expectations of teachers'

role in the implementation of special educational needs

No.	Item	Mean	Std. deviation
4	The teacher explains to me in detail about SEN support before the IEP meeting	3.81	.96
7	I welcome teachers' cooperation to enhance the SEN practices being offered to my child	4.04	.85
9a	If I cannot attend the IEP meeting the teacher calls and discusses my child's progress with me over the phone	3.55	1.13
11	I am given information which explain the contents and goals for the meeting that is held	3.81	.82
12	I expect the teacher to determine the short term IEP objectives for my child's SEN support	3.75	.85
13	I expect the teacher to determine the long term IEP objectives for my child's SEN goals	3.93	.79
14	The teacher prepares all the IEP documentation needed to be presented to me	4.01	.76
16	In preparing for lessons, the teachers use the guidelines set by the school in determining the short and long term IEP objectives for my child	3.94	.83
23	I am satisfied with the cooperation given by teachers involved in the IEP process	3.89	.73
24	Teachers need to modify instructions and teaching style in the classroom to meet the needs of my child	3.79	.81
25	Having other adults in the classroom is an asset when supporting SEN students	3.74	.83
	Overall Mean	3.86	

4.2.2 Research question two: to what extent does students' social interaction among SEN and mainstream pupils exist, as perceived by teachers?

In research question two, a questionnaire adapted from the *Social Participation Questionnaire* (SPQ) developed by Koster, Timmerman, Nakken, Pijl, and van Houten (2009) was used to measure students' social interaction among SEN and mainstream pupils. The SPQ aims to make more accurate assessments of the social participation of all students with and without special needs in regular schools (Koster et al., 2008). These were

discussed in detail in Chapter 3 under Research Instruments. This was added to section C of the teachers' questionnaire. Adaptation of the instrument was made by the researcher to capture teacher-parent collaboration in an integrated special education schools setting. Section C of the questionnaire was fully piloted to ensure the adaptation and the addition to the questionnaire did not cause any data collection issues or any fundamental problems in the integration of different inputs into the instrument. The three students' social interaction domains are: 1) friendship, 2) interactions, and 3) acceptance by classmates. Data analysis were conducted on teachers (n = 95) responses.

4.2.2.1 Itemized descriptive statistics for the three students' social interaction domains as perceived by teachers

The mean and standard deviation obtained from the teachers for each of the 16 items from the teachers' questionnaire are presented in Table 4.13 to Table 4.15. There are 5 items for the friendship domain, 6 items for the interactions domain and 5 items for the acceptance by classmates' domain.

Table 4.13: Mean and standard deviation for items of the friendship domain

No.	Item	Mean	Std. deviation
1	The student with special needs is able to make friends in the classroom	3.67	.64
12	The student with special needs belongs to a group of friends in their class	3.80	.66
13	The student with special needs belongs to a group of friends from mainstream classes	3.28	.86
14	The student with special needs willingly participates in games with their classmates	3.85	.68
15	The student with special needs willingly participates in games with their mainstream peers	3.22	.99
	Overall Mean	3.57	

Table 4.13 shows that within the friendship domain, the overall mean score obtained was 3.57, indicating a perceived moderate level of friendship. The mean scores for this variable were between 3.22 and 3.85. This range was in the moderate and high levels. Mean scores were high for item 12 (the student with special needs belongs to a group of friends in their class), and item 14 (the student with special needs willingly participates in games with their classmates).

Table 4.14: Mean and standard deviation for items of the interactions domain

No.	Item	Mean	Std. deviation
2	The student with special needs are teased by their classmates	3.38	.75
3	The student with special needs regularly has fun with their classmates	3.87	.61
4	The student with special needs are involved in activities with their classmates	3.73	.69
5	The student with special needs are teased by their mainstream peers	3.28	.82
8	The student with special needs are asked to play by their classmates	3.68	.64
9	The student with special needs are asked to play by mainstream peers	3.41	.79
	Overall Mean	3.56	

Table 4.14 shows that within the interactions domain, the overall mean score obtained was 3.56, indicating a perceived moderate level of interactions. The mean scores for this variable were between 3.28 and 3.87. This range was in the moderate and high levels. Mean scores were high for item 3 (the student with special needs regularly has fun with their classmates), item 4 (the student with special needs are involved in activities with their classmates), and item 8 (the student with special needs are asked to play by their classmates).

Table 4.15: Mean and standard deviation for items of the acceptance by classmates domain

No.	Item	Mean	Std. deviation
6	The student with special needs are assisted by their classmates in lessons	3.56	.71
7	The student with special needs are supported by their mainstream peers in their classwork	3.48	.82
10	The student with special needs works together with their classmates on tasks	3.78	.69
11	The student with special needs eats together with their classmates	3.96	.60
16	The student with special needs is happy attending school	4.06	.77
	Overall Mean	3.76	

Table 4.15 shows that within the acceptance by classmates domain, the overall mean score obtained was 3.76, indicating perceived high level of acceptance by classmates. The mean scores for this variable were between 3.48 and 4.06. This range was in the moderate and high levels. Mean scores were high for item 10 (the student with special needs works together with their classmates on tasks), item 11 (the student with special needs eats together with their classmates), and item 16 (the student with special needs is happy attending school).

4.2.3 Research question three: to what extent does students' social interaction among SEN and mainstream pupils exist, as perceived by parents?

In research question three, the questionnaire items adapted from the *Social Participation Questionnaire* developed by Koster, Timmerman, Nakken, Pijl, and van Houten (2009) were used to measure students' social interaction among SEN and mainstream pupils in section C of the parents' questionnaire.

4.2.3.1 Itemized descriptive statistics for the three students' social interaction domains as perceived by parents

The mean and standard deviation obtained from the parents for each of the 15 items from the parents' questionnaire are presented in Table 4.16 to Table 4.18. There are 6 items for the friendship domain, 5 items for the interactions domain and 4 items for the acceptance by classmates domain.

Table 4.16: Mean and standard deviation for items of the friendship domain

No.	Item	Mean	Std. deviation
1	My child is able to make friends in the classroom	3.96	.89
2	My child has after school play dates	3.75	1.05
3	My child gets invitation to birthday parties	3.76	1.14
11	My child gets invitations to play during holidays	3.44	1.23
13	My child belongs to a group of friends in the class	3.79	.91
14	My child belongs to a group of friends from mainstream classes	3.47	1.11
	Overall Mean	3.70	

Table 4.16 shows that within the friendship domain, the overall mean score obtained was 3.70, indicating high level of perceptions of friendship. The mean scores for this variable were between 3.44 and 3.96. This range was in the moderate and high levels. Mean scores were high for item 1 (my child is able to make friends in the classroom), item 2 (my child has after school play dates), item 3 (my child gets invitation to birthday parties), and item 13 (my child belongs to a group of friends in the class).

Table 4.17: Mean and standard deviation for items of the interactions domain

No.	Item	Mean	Std. deviation
4	My child is included in activities by fellow classmates	4.07	.83
7	My child are asked to play by fellow classmates	3.88	.82
8	My child are asked to play by mainstream peers	3.64	1.04

No.	Item		
9	My child are teased by fellow classmates	3.76	.90
10	My child are teased by fellow mainstream peers	3.71	.93
	Overall Mean	3.81	

Table 4.17 shows that within the interactions domain, the overall mean score obtained was 3.81, indicating the strength of feeling about positive and high level of interactions. The mean scores for this variable were between 3.64 and 4.07. This range was in the moderate and high levels. Mean scores were high for item 4 (my child is included in activities by fellow classmates), item 7 (my child are asked to play by fellow classmates), item 9 (my child are teased by fellow classmates), and item 10 (my child are teased by fellow mainstream peers).

Table 4.18: Mean and standard deviation for items of the acceptance by classmates domain

No.	Item	Mean	Std. deviation
5	My child are assisted by their classmates in lessons	3.84	.857
6	My child are supported by fellow mainstream peers in classwork	3.56	1.138
12	My child eats together with their classmates	4.04	.818
15	My child is happy attending school	4.24	.813
	Overall Mean	3.92	

Table 4.18 shows that within the acceptance by classmates domain, the overall mean score obtained was 3.92, indicating high level of acceptance by classmates. The mean scores for this variable were between 3.56 and 4.24. This range was in the moderate and high levels. Mean scores were high for item 5 (my child are assisted by their classmates in lessons), item 12 (my child eats together with their classmates), and item 15 (my child is happy attending school).

4.2.4 Research question four: What is the relationship between teacher-parent collaboration and students' social interaction as perceived by the teachers?

In research question four, the relationship between teacher-parent collaboration and students' social interaction as perceived by teachers was studied.

Table 4.19: Correlation for friendship, interactions and acceptance by classmates with the four teacher-parent collaboration domains

Students' social interaction	Understanding about SEN	Willingness to communicate in matters pertaining to SEN	Perceived roles in the implementation of SEN	Expectations of each other's role in the implementation of SEN
Friendship	.16	.16	.06	.04
Interactions	.23[*]	.07	.11	.04
Acceptance by classmates	.23[*]	.11	.13	.05

Note: * p < 0.05

Table 4.19 presents the results of the Pearson's R Correlation Test for friendship, interactions and acceptance by classmates with the four teacher-parent collaboration domains as rated by the teachers.

From the results, significant correlation exist for the category 'Interactions' (r = .23, p < .05) with the understanding about SEN domain, and 'acceptance by classmates' category (r = .23, p < .05) was also significantly correlated with the understanding about SEN domain. This finding indicates that students' interactions are more likely to develop with teachers' better understanding of SEN. Findings also indicate that students' acceptance by classmates

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is more likely to develop with teachers' greater understanding of SEN. As such, the strength of the correlation is very weak as the r values fall within the range of .23.

4.2.5 Research question five: What is the relationship between teacher-parent collaboration and students' social interaction as perceived by the parents?

In research question five, the relationship between teacher-parent collaboration and students' social interaction as perceived by parents was studied.

Table 4.20: Correlation for friendship, interactions and acceptance by classmates with the four teacher-parent collaboration domains

Students' social interaction	Understanding about SEN	Willingness to communicate in matters pertaining to SEN	Perceived roles in the implementation of SEN	Expectations of each other's role in the implementation of SEN
Friendship	.77**	.62**	.61**	.69**
Interactions	.64**	.58**	.65**	.68**
Acceptance by classmates	.68**	.75**	.68**	.78**

Note: * p < 0.05
      ** p < 0.01

Table 4.20 presents the results of the Pearson's R Correlation Test for friendship, interactions and acceptance by classmates with the four teacher-parent collaboration domains as rated by the parents.

From the results, a significant correlation existed for the category 'Friendship' (r = .77, p < .01) with the understanding about SEN domain, 'Friendship' (r = .62, p < .01) with the

willingness to communicate in matters pertaining to SEN domain, 'Friendship' ($r = .61$, $p < .01$) with the perceived roles in the implementation of SEN domain, 'Friendship' ($r = .69$, $p < .01$) with the expectations of each other's role in the implementation of SEN domain. 'Interactions' category ($r = .64$, $p < .05$) was significantly correlated with understanding about SEN domain. 'Interactions' ($r = .58$, $p < .01$) with the willingness to communicate in matters pertaining to SEN domain, 'Interactions' ($r = .65$, $p < .01$) with the perceived roles in the implementation of SEN domain, 'Interactions' ($r = .68$, $p < .01$) with the expectations of each other's role in the implementation of SEN domain. The 'Acceptance by classmates' category ($r = .68$, $p < .05$) was also significantly correlated with the understanding about SEN domain. 'Acceptance by classmates' ($r = .75$, $p < .01$) with the willingness to communicate in matters pertaining to SEN domain, 'Acceptance by classmates' ($r = .68$, $p < .01$) with the perceived roles in the implementation of SEN domain, 'Acceptance by classmates' ($r = .78$, $p < .01$) with the expectations of each other's role in the implementation of SEN domain.

These findings reinforce that friendship, interaction and acceptance by classmates is more likely to develop for the SEN student with parents' better understanding about SEN, their willingness to communicate with teachers and their expectations of teachers' role in the implementation of SEN. As such, the strength of the correlation falls within moderate to strong as the r values fall within the range of .58 to .78.

4.2.6 Research question six: to what extent and in what ways is the buddy support system effective, as perceived by teachers?

Research question six seeks to examine the extent to which and in what ways the buddy support system is effective, as perceived by teachers. To explore this, a teachers' questionnaire was administered (n=95).

4.2.6.1 Itemized descriptive statistics for the three buddy support system domains as perceived by teachers

The mean and standard deviation obtained from the teachers for each of the 13 items from the teachers' questionnaire are presented in Table 4.21 to Table 4.23. There are 5 items for the understanding of the co-curriculum domain, 4 items for the influence domain and 4 items for the benefits domain.

Table 4.21: Mean and standard deviation for items of the understanding of the co-curriculum domain

No.	Item	Mean	Std. deviation
1	The Buddy Support System is clearly understood by myself	3.62	0.70
2	The Buddy Support System is clearly understood by the peers of students with SEN	3.37	0.64
3	The Buddy Support System is clearly understood by the parents of students with SEN	3.46	0.65
11	The Buddy Support System guidelines are helpful	3.74	0.64
12	The Buddy Support System meets my expectations of supporting students with SEN	3.61	0.62
	Overall Mean	3.56	

Table 4.21 shows that within the understanding of the co-curriculum domain, the overall mean score obtained was 3.56, indicating that teachers perceived a moderate level of understanding of the co-curriculum. The mean scores for this variable were between 3.37

and 3.74. This range was in the moderate and high levels. Mean scores were high for item

11 (The Buddy Support System guidelines are helpful) with a mean of 3.74.

Table 4.22: Mean and standard deviation for items of the influence domain

No.	Item	Mean	Std. deviation
5	The Buddy Support System enables students with SEN and their peers to play together	3.78	0.64
6	The Buddy Support System has a positive effect on the student's interaction with others	3.78	0.59
7	The Buddy Support System has improved my knowledge of available resources to support SEN	3.59	0.66
13	The Buddy Support System can be recommended to others so they get support for their SEN students from such a program	3.63	0.65
	Overall Mean	3.70	

Table 4.22 shows that within the influence domain, the overall mean score obtained was

3.70, indicating that the buddy system was perceived to have a high level of influence. The

mean scores for this variable were between 3.59 and 3.78. This range was in the moderate

and high levels. Mean scores were high for item 5 (The Buddy Support System enables

students with SEN and their peers to play together), and item 6 (The Buddy Support

System has a positive effect on the students' interaction with others) with a mean of 3.78

each.

Table 4.23: Mean and standard deviation for items of the benefits domain

No.	Item	Mean	Std. deviation
4	The Buddy Support System builds positive social interaction among students with SEN and their peers	3.87	0.59
8	The Buddy Support System helps students with SEN develop friendships with their peers	3.73	0.69
9	The Buddy Support System enables me to solve problems related to SEN support	3.59	0.65
10	The Buddy Support System provides more connections and support from other people in my situation	3.62	0.66
	Overall Mean	3.70	

Table 4.23 shows that within the benefits domain, the overall mean score obtained was 3.70, indicating that the buddy system is viewed as having a high level of benefit. The mean scores for this variable were between 3.59 and 3.87. This range was in the moderate and high levels. Mean scores were high for item 4 (The Buddy Support System builds positive social interaction among students with SEN and their peers), and item 8 (The Buddy Support System helps students with SEN develop friendships with their peers) with a mean of 3.87 and 3.73.

4.2.7 Research question seven: to what extent and in what ways is the buddy support system effective, as perceived by parents?

Research question seven seeks to analyze to what extent and in what ways is the buddy support system effective, as perceived by parents. The parents' questionnaire was administered to the parents (n=68).

4.2.7.1 Itemized descriptive statistics for the three buddy support system domains as perceived by parents

The mean and standard deviation obtained from the parents for each of the 11 items from the parents' questionnaire are presented in Table 4.24 to Table 4.26. There are 3 items for the understanding of the co-curriculum domain, 4 items for the influence domain and 4 items for the benefits domain.

Table 4.24: Mean and standard deviation for items of the understanding of the co-curriculum domain

No.	Item	Mean	Std. deviation
1	The Buddy Support System is clearly understood by myself	3.66	0.93
9	The Buddy Support System guidelines are helpful	3.93	0.80
10	The Buddy Support System meets my expectations of supporting my child	3.93	0.70
	Overall Mean	3.84	

Table 4.24 shows that within the understanding of the co-curriculum domain, the overall mean score obtained was 3.84, indicating perceived high level of understanding of the co-curriculum. The mean scores for this variable were between 3.66 and 3.93. This range was in the moderate and high levels. Mean scores were high for item 9 (The Buddy Support System guidelines are helpful) and item 10 (The Buddy Support System meets my expectations of supporting my child) with a mean of 3.93 each.

Table 4.25: Mean and standard deviation for items of the influence domain

No.	Item	Mean	Std. deviation
3	The Buddy Support System enables my child and fellow peers to play together	3.99	0.90
4	The Buddy Support System has a positive effect on the child's interaction with others	4.13	0.65
5	The Buddy Support System has improved my knowledge of available resources to support my child	3.99	0.75
11	The Buddy Support System can be recommended to others so they get support for their child from such a program	4.00	0.83
	Overall Mean	4.03	

Table 4.25 shows that within the influence domain, the overall mean score obtained was 4.03, indicating a perceived high level of influence. The mean scores for this variable were between 3.99 and 4.13. This range was in the high levels. Mean scores were high for all items with item 3 (The Buddy Support System enables my child and fellow peers to play

together) and item 5 (The Buddy Support System has improved my knowledge of available resources to support my child) with a mean of 3.99 each. Item 4 (The Buddy Support System has a positive effect on the child's interaction with others) and item 11 (The Buddy Support System can be recommended to others so they get support for their child from such a program) scored a mean of 4.13 and 4.00 respectively.

Table 4.26: Mean and standard deviation for items of the benefits domain

No.	Item	Mean	Std. deviation
2	The Buddy Support System builds positive social interaction among my child and fellow peers	3.94	0.78
6	The Buddy Support System helps my child develop friendships with fellow peers	4.01	0.73
7	The Buddy Support System enables me to solve problems related to SEN support	3.79	0.77
8	The Buddy Support System provides more connections and support from other parents in my situation	3.89	0.68
	Overall Mean	3.91	

Table 4.26 shows that within the benefits domain, the overall mean score obtained was 3.91, indicating a perceived high level of benefits. The mean scores for this variable were between 3.79 and 4.01. This range was in the high levels. Mean scores were high for all items with item 2 (The Buddy Support System builds positive social interaction among my child and fellow peers), item 6 (The Buddy Support System helps my child develop friendships with fellow peers), item 7 (The Buddy Support System enables me to solve problems related to SEN support) and item 8 (The Buddy Support System provides more connections and support from other parents in my situation) mean scores of 3.94, 4.01, 3.79 and 3.89 respectively.

4.2.8 Research question eight: does the Buddy Support System significantly moderate the relationship between teacher-parent collaboration and students' social interaction in the implementation of special educational practices as perceived by teachers

PROCESS procedure for SPSS (Hayes, 2013) was used to investigate if by controlling the Buddy Support System variable (moderator), whether the teacher-parent collaboration domain (predictor variable) could significantly predict the students' social interaction domains (criterion variables). Table 4.27 presents the results of the PROCESS procedure for SPSS.

Table 4.27: Linear model of predictors of students' social interaction

	b	SE B	t	P
Constant	58.65 [57.15, 60.15]	0.75	77.98	.000
Buddy Support System (centered)	0.38 [0.03, 0.74]	0.18	2.13	.036
Teacher-parent collaboration (centered)	0.07 [-0.06, 0.19]	0.06	1.06	.293
Buddy Support System x Teacher-parent collaboration	-0.02 [-0.04,-0.00]	0.01	-2.38	.020

Note: $R^2 = .33$

Following the recommendations of Frazier, Tix, and Barron (2004), the predictor and moderator variables were centered and an interaction term between teacher-parent

collaboration b=0.07, 95% CI [-0.06, 0.19], t = 1.06, p > .05 and the Buddy Support System b=0.38, 95% CI [0.03, 0.74], t = 2.13, p < .05 was created. Table 4.27 reveals results of the interaction term between Teacher-Parent Collaboration and Buddy Support System when added to the regression model, accounted for a significant proportion of the variance in Students' Social Interaction. Moderation is shown up by a significant interaction effect, and in this case the interaction is significant, b=-0.02, 95% CI [-0.04,-0.00], t = -2.38, p < .05, indicating that the relationship between Teacher-Parent Collaboration and Students' Social Interaction is moderated by the Buddy Support System (BSS).

To understand the form of the interaction, it was necessary to explore it further. A common practice (recommended by Cohen et al., 2003) is to choose groups at the mean and at low (-1 SD from the mean) and high (1 SD from the mean) values of the continuous variable. To interpret the moderation effect, examination of the simple slopes analysis in Table 4.28 shows three different regressions of teacher-parent collaboration as a predictor of students' social interaction: (1) when the Buddy Support System is low i.e. –6.145; (2) at the mean value of Buddy Support System which is zero in this case as it is centred; and (3) when the Buddy Support System is high i.e. 6.145.

Table 4.28: Simple slope analysis of predictors (teacher-parent collaboration and buddy support system) on students' social interaction

BSS	b (Effect)	SE	t	p	LLCI	ULCI
-6.145	.185	.069	2.701	.009	.049	.321
0	.067	.063	1.059	.293	-.059	.192
6.145	-.052	.090	-.572	.569	-.232	.128

The results from the simple slopes analysis shows that:-

1) When BSS is low, there is a significant positive relationship between teacher-parent collaboration and students' social interaction, b = 0.185, 95% CI [0.049, 0.321], t = 2.70, p = 0.009.

2) At the mean value of BSS, there is a non-significant positive relationship between teacher-parent collaboration and students' social interaction, b = 0.067, 95% CI [-0.059, 0.192], t = 1.059, p = 0.293.

3) When BSS is high, there is a non-significant negative relationship between teacher-parent collaboration and students' social interaction, b = -0.052, 95% CI [-0.232, 0.128], t = -.572, p = 0.569.

Line graph complements the simple slope analysis by showing the moderating role graphically (Field, 2013). The examination of the line graph in Figure 4.1 showed that when the BSS is low (blue line) there is a significant positive relationship between teacher-parent collaboration and students' social interaction; at the mean value of BSS (orange line) there is a small positive relationship between teacher-parent collaboration and students' social interaction; however there is a non-significant negative relationship between teacher-parent collaboration and students' social interaction at high levels of BSS (grey line).
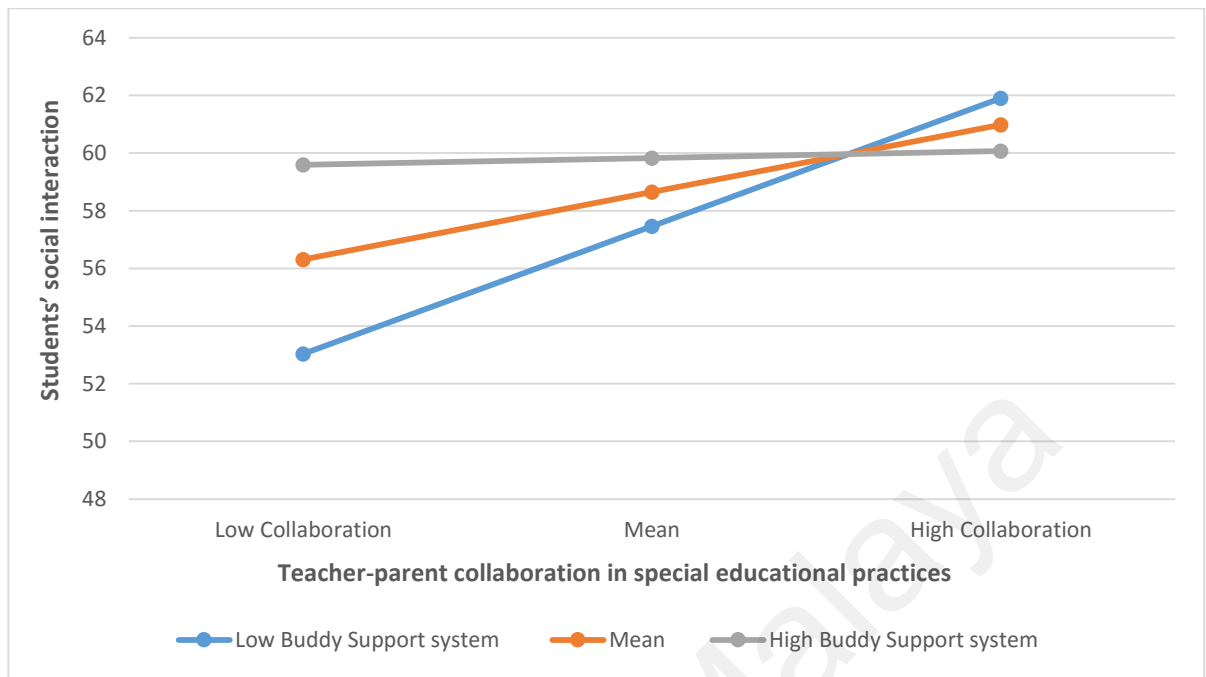
Figure 4.1: Line graph of the Buddy Support System moderation effect

In chapter 5 the results from both quantitative and qualitative data sets will be interrogated further and conclusions relating to each of the research questions will be outlined.

4.2.9 Summary of Quantitative data findings and results

The main findings from the quantitative analysis focused on four aspects of collaborative roles between teachers and parents: (i) their understanding of special educational needs; (ii) their willingness to communicate with each other; (iii) their perceived roles; (iv) their expectations of each other. The students' social interaction and how the buddy support system is a moderator in the teacher-parent relationship was also explored through the instrument.

Important themes emerging from the data are that teachers perceived themselves highest on the understanding about SEN domain meanwhile parents perceived themselves highest on the expectations of teacher's role in the implementation of SEN.

As for students' social interaction, teachers perceived the acceptance by classmates domain the highest. Similarly parents also perceived highest on the acceptance by classmates domain. This would indicate that acceptance by classmates is viewed as very important by teachers and parents.

The strongest correlation was between teachers' understanding about SEN with interactions domain and acceptance by classmates domain. Meanwhile for parents the strongest correlation was between parents' expectations of the teachers' role in the implementation of SEN domain and the acceptance by classmates domain

The effectiveness of the buddy support system consists of the understanding of the co-curriculum domain, influence domain and benefits domain. Teachers perceived the influence domain and benefit domain of the buddy support system the highest with an overall mean score of 3.70 each indicating a perceived high level of influence and benefit. Similarly parents also perceived the influence domain of the buddy support system the highest with an overall mean score of 4.03 indicating a perceived high level of influence.

A hierarchical multiple regression analysis was conducted to investigate if by controlling the Buddy Support System variable (moderator), whether teacher-parent collaboration domain (predictor variable) could significantly predict the students' social interaction domains (criterion variables). The interaction term between teacher-parent collaboration

and Buddy Support System, when added to the regression model, accounted for a significant proportion of the variance in students' social interaction.

These important emerging themes from the quantitative data will be explored further in Chapter 5.

4.3 Qualitative Data Analysis

The qualitative section of this study adopted an explanatory sequential mixed method design (Creswell & Plano Clark, 2011). Data were collected initially using a quantitative survey instrument and this was followed up with in depth, semi-structured interviews with 6 teachers and 5 parents who had also participated in the survey. This explanatory mixed-methods design involves collecting qualitative data after a quantitative phase. The rationale for this mixed method approach is that quantitative and qualitative data can combine to triangulate findings so that they may be mutually corroborated (Bryman, 2006). This approach further explains the statistical results by exploring participants' views in much more depth during the qualitative phase of data collection (Creswell, 2013; Tashakkori & Teddlie, 2003; Rossman & Wilson, 1985). Also this approach allows for a better understanding of the quantitative data by adding more depth and richness to the explanations. This constant comparative approach was used to confirm or refute the results, from both data sets, as well as strengthening the reliability and validity of the findings.

4.4 Data Collection Procedures

As outlined in detail in chapter 3, qualitative data was collected using semi-structured interviews with 6 teachers and 5 parents. These interviews allowed individuals to share their understanding regarding to what extent does teacher-parent collaboration: contributes to understanding about special educational needs, willingness to communicate in matters pertaining to special educational needs, their perceived roles in the implementation of special educational needs and expectations of each other's role in the implementation of special educational needs.

Interview questions were prepared to provide evidence about each research question in depth. In summary these were:

Research question 1 - "to what extent does teacher-parent collaboration contribute to understanding about special educational needs, willingness to communicate in matters pertaining to special educational needs, their perceived roles in the implementation of special educational needs and expectations of each other's role in the implementation of special educational needs?",

Research question 2 & 3 – "to what extent does students' social interaction among SEN and mainstream pupils exist, as perceived by teachers and parents?", and

Research question 6 & 7 – "to what extent and in what ways is the buddy support system effective, as perceived by teachers and parents?".

Interview questions contained in the instrument (refer to Appendix C & D, page 335 and 338) were used as guiding questions during the semi-structured interview process.

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Additional data collection methods included non-participative observation of a selection of buddy club activities in one primary school. This observation process provided supplementary data in the form of video recordings and photographs taken at the buddy club activities. However photographs and video were not the main data collection methods and were used only for corroboration purposes relating to the findings from the qualitative data. The photographs taken (with permission) showed visual evidence of students' social interaction between SEN and mainstream pupils. Sample photographs are included in (Appendix I, page 398) of this study. Video recordings of the visual aspects of human conduct, i.e., such as nonverbal activities (e.g., gazes) (Goodwin, 1995, 2000; Heath, 1997) was also used. Video captures a version of an event as it happens. It provides opportunities to record aspects of social activities in real-time: talk and visible conduct of students (Heath, Hindmarsh, & Luff, 2010). Video recordings are also used when conducting interactional studies of children to understand their social conduct in peer relations (Evaldsson, 2003; Sparrman, 2002; Sparrman & Aronsson, 2003).

4.5 Data Analysis Procedures

Semi-structured interviews were conducted to explore how teachers and parents understand their collaborative roles in special educational practices. Data collected was analysed using interpretative phenomenological analysis (IPA). IPA was used as the researcher wanted this approach to explore the participants' personal experiences and responses to the questions asked during the interview sessions (Smith & Eatough, 2007).

Three main levels of data analysis were employed. At the first level of analysis, all the interviews were recorded with permission and were transcribed verbatim. Transcribing the

interviews verbatim provided a complete database for analysis (Merriam, 2001). A sample interview session with one of the teachers' is included (Appendix E, page 340). A sample interview session with one of the parents is also included (refer to Appendix F, page 362).

At the second level of analysis, the data obtained were analyzed using a constant comparative method, where data from the interviews, documents collected and observations were compared. Coding was done manually as the sample size was small. Specifically, the researcher assigned open codes and memos to the transcribed interviews, documents and photographs. 6 teachers' interviews, 5 parents' interviews, three buddy club activities observations and photographs were documented. Deductive coding was used by identifying parts of the transcripts that resonated with the four teacher-parent collaboration domains – understanding about special educational needs, willingness to communicate in matters pertaining to special educational needs, their perceived roles in the implementation of special educational needs and expectations of each other's role in the implementation of special educational needs, the students' social interaction domains and the buddy support system domains.

At the third level of analysis, a matrix was compiled (see Appendix G & Appendix H, page 381 and 391), consisting of examples of quotes from interviews, documents and observations with the four teacher-parent collaboration domains, students' social interaction domains and buddy support system domains. This allowed the researcher to determine whether there was a pattern amongst the interview responses from the teachers' interview participants 1 to 6, interview with the parents from 1 to 5.

Additional data collection methods included observation of a selection of the buddy club activities in one primary school. Video recordings and photographs were taken as part of the observations process at a buddy club activity. The photographs taken (with permission) showed evidence of the nature of students' social interaction between SEN and mainstream pupils. Sample photographs are included in (Appendix I, page 398) of this study.

Three main levels of data analysis were employed. At the first level of analysis, a preliminary review of the data was undertaken to catalogue some basic aspects of the activities and events that have been recorded (Heath, Hindmarsh, & Luff, 2010). It was advisable to do this review as soon as possible after data collection. Preliminary reviews should involve no more than a simple description and classification of the materials (Heath, Hindmarsh, & Luff, 2010). This provides useful a vehicle when returning to the corpus to identify where events occur or when looking for particular phenomena.

The second level of analysis, a substantive review of the data corpus was undertaken to find further instances of events or phenomena, so as to enable comparison and to delineate aspects of interactional organisation (Heath, Hindmarsh, & Luff, 2010).

The third level of analysis was undertaken to perform an analytic search of the data corpus. As the study progressed, it became necessary to refine the analysis. Repeated searches of the data were performed. This involved the review of related data sets in order to find examples of actions that appear to reflect similar characteristics (Heath, Hindmarsh, & Luff, 2010).

Descriptions of the five parents and the characteristics of their children are provided below to contextualise the qualitative data that follows.

i) Parents 1

Parent 1 is an Indian and an accountant. She is a mother of two children and her second child, her son, has a learning disability. She looks after her son with the help of her husband at home. Her son is 12 years old. Parent 1 has been actively involved in her son's education as well as in his school activities. She never failed to come to school meetings or discussions whenever invited. She and her husband often meet the teachers to find out about her son's progress in school. She ensures that her son learns to be independent. She shows high commitment in her son's development especially in the area of reading and writing.

Student 1 has learning disability and is slow to catch up on his studies. He's a hyperactive child although there is no limitation in his speech ability and he communicates well with hand gestures. He has very short attention span thus needs close guidance in his work. Although he has been in the school for a while, he does interact only with the friends he knows well. He is rather reserved and takes a while to warm-up to strangers. He enjoys swimming, playing games on the hand phone, and a game of football.

ii) Parent 2

Parent 2 is Malay and a mother who runs her own business. She has four children and her fourth child, has a learning disability, he's a slow learner. Her son is 11 years old. Although Parent 2 has her own business, she able to involve herself in her son's education and school activities often tagging along for schools field trips. His school is close to her business and

she fetches him to school every day. She's able to attend to his needs at his school at any time and attends IEP meetings or discussion. Parent 2 gets feedback about her son personally from the teachers when she fetches her son and shows high commitment in her son's development especially in the area of fine-motor skills.

Student 2 has some physical disabilities especially his hands. He has limited fine-motor skills as his fingers do not function well. Student 2 also shows marked impairment in nonverbal behaviours such as eye contact and facial expression. He does interact with his peers and sometimes plays on his own. Student 2 shows a passion for objects and environment around him. His mother mentions that he is often preoccupied with parts of different objects.

iii) Parent 3

Parent 3 is Malay and a mother who also runs her own business. She is in her 50s and has three children. Her first and second children are in their 30s and married, while her third child, her daughter is 10 years old. Her daughter also has learning disability. Parent 3 has a busy schedule and has to juggle with her work commitments as well as managing her daughter. She has a helper who is her sister at home to help her with house work as well as keeping an eye on her daughter. Parent 3 gets feedback about her daughter personally from the teachers when she sends her daughter to school and attends meetings only when it's really necessary.

Student 3 is hyper active and likes to run out of her classroom. Although she does not appear to have any physical disabilities, student 3 has difficulty in learning various skills as

compared to other children her age. Student 3 does not have language barriers however she shows a tendency to interact and mingle with children younger than her. She seldom has interactions with her peers in school unless they are younger in age. She is able to take instruction well but have a high tendency to be distracted in carrying out tasks.

iv) Parent 4

Parent 4 is a Chinese mother and a full time international pre-school teacher. She is a mother of two children whose first daughter is 8 years old and her second child, her son is 5 years old. Her daughter has mild autism. Parent 4 is a devoted and loving mother. Both she and her husband spend time with her daughter after she returns from school and tries to educate her to be independent. She carries out IEP activities with Student 4 to enhance her abilities and knowledge. Parent 4 feels that although Student 4 lacks in many abilities, she believes that she is blessed to have her. She will call the teachers to ask about Student 4's progress in IEP and never fails to attend IEP meetings or discussion. Parent 4 also takes initiatives to enrol her daughter in programs such as music therapy and speech therapy to aid her daughter's development.

Student 4 is a very lovable girl. She loves hugging people that she likes. She doesn't have many friends though because she doesn't know how to communicate well. Occasionally she gets nervous, scared, and doesn't have confidence. However she's able to interact with her peers and plays with them. Student 4 enjoys art and craft and loves music. She enjoys singing sessions and would dance to music. However, she has short attention spans.

v) Parent 5

Parent 5 is Chinese and a single mother of three children. She runs her own business and in her 50s. Her first and second children are in their 20s and are currently studying, while her third child, her daughter is 10 years old. Her daughter is diagnosed with learning disability. This parent shows high commitment in her children's education. According to her, although the student's school is very far from home, the mother want the best for her education. She makes effort to monitor her school progress and often calls the teachers for update. She cannot go to school very often to discuss with them frequently due to her business. Parent 5 also takes initiatives to enrol her daughter in programs such as mental therapy to aid her daughter's development.

Student 5 is a chatty and joyful girl. She has a slim physique and is tall compared to other children her age. She has limited fine-motor skills as her wrists are slightly bent. Student 5 has language impairment but is able to speak a few indistinct words. She is friendly and approachable however shy towards strangers. She has a very short attention span and her mother has to find suitable time to teach her at home. She also requires interesting teaching materials and activities to get her attention. Student 5 enjoys fine motor activities and able to put on her clothes independently.

The next section outlines the qualitative data that has been selected to address each research question. Direct quotations are used to illustrate how the interview data enhances the study and addresses each question. The verbatim quotations are included with no corrections to grammar or syntax.

4.5.1 Teachers' understanding about special educational needs

Teachers' understanding about special educational needs is outlined in Table 4.29.

Table 4.29: Teachers' understanding about special educational needs

Identification	Interview excerpts
Teacher 1	A special educational needs teacher needs a lot of patience and need a lot of learning from the student, and the parents too. I observe these kids needs a lot of guidance and help, they are not learning as a normal kid, they are slower than a normal kid. We need to guide them in one to one learning. We need to use the strategies and methods that are suitable for them.
Teacher 2	Special education, in my opinion are students with different abilities, uniqueness given an opportunity to learn the same as mainstream students. These students have their specialities, their differences and have all kinds of talents. SEN must exist to help them so in future they will have an opportunity to sit the same level as other people, with the society at the same level. SEN student has low self-esteem and needs help from the mainstream students, normal people around them so they are able to increase their self-confidence.
Teacher 3	Special needs education is important because it's for children who are drop-out. We will focus on kids who needs guidance, teach them how to manage their everyday living. If you go outside to communicate, socialize with other people, be able to greet, if other people ask, they're able to give a feedback. That is one of the importance of special needs education for these kids. When they are not clever, can't communicate, people will seclude them.
Teacher 4	These students are different from normal students and has specific problems like syndrome down, autism and all that. They need a different learning style than mainstream education. SEN students' needs more attention from the teacher and every lesson needs to be repeated so they always remember and master in an activity. I feel a play method is the one which attracts students' interest. Normal la this primary kids loves to play, so we integrate every lesson using play method. So they'll be more excited and it's easy for them to remember what we are teaching, what they need to master in terms of skills. As long they can manage themselves is sufficient already, clever to be independent, don't trouble other people is sufficient for this special needs kids.
Teacher 5	The special needs kids well firstly, these kids' needs are not the same as normal kids. We want them to be like normal kids. They should receive the same needs as the normal kids. We need to use few techniques. We want people to accept them. If in school they're not accepted, how will the society accept them? In this school, it's like a small society. If the small society don't look at them, don't accept them, don't appreciate them, how will they be when they go out later. We want in this school as

	much as possible they're accepted. If they don't play together, how are they going to know each other?
Teacher 6	It's an education that is divided into three that is special needs education for the blind, special needs education on hearing and special needs education on learning difficulties. Interacting with special kids is more challenging and needs a lot of patience. In SEN, they will be able to learn firstly how to manage themselves correctly. The best SEN intervention is through interaction. Interaction within their peers, the SEN friends or together with the mainstream students encourages self confidence among the SEN students.

Teachers were also asked to share their views on their understanding about special educational needs. The interview excerpts in Table 4.29 reveal that all teachers had similar views on their understanding about special educational needs. They mentioned that it was a programme catered to the individual needs of the students, the need for a different learning style than mainstream education and the basic needs to guide the students to manage their everyday living. Teachers also emphasized the importance of learning from the parents too and the need for interaction between the SEN and mainstream students so that they're accepted in school and later on in the society.

4.5.2 Parents' understanding about special educational needs

Parents' understanding about special educational needs is outlined in Table 4.30.

Table 4.30: Parents' understanding about special educational needs

Identification	Interview excerpts
Parent 1	I want her to improve. Because the golden age they say is within 0 to 6 years old. A special child can't concentrate. This special child needs a house wife you know for whole day to guide her. She cannot communicate with other children, she needs a friend. Like this special child, they need more time and then need a therapy for them.
Parent 2	She was a bit different compared to all other kids. She has autistic, she didn't communicate well with all the other kids. We really want her to be independent, more on the life skills rather than education. Through all the routine she will actually improve a lot I believe.

Parent 3	My child is a special needs child. He can follow, but sometimes, he don't understand what the teacher is teaching. I send him to school so he can mix around. But for kids like this, we can't just follow what they want you know. We must be strict a bit. His world is mainly an imagination world. Sometimes, he will wash teacher's car. That is a step forward for him you know. His hands movement will help him write. We as parents need to understand this. All this are like training for him. Horse-riding, swimming, bowling. All have their own specialities.
Parent 4	I don't want to compare with other students, what he can do, let him do. He's slow to catch up, we understand. What is important I want my child to go to school, he learn, there is improvement. Now my child has problem, now only I know how important special needs education to children say like problem in studying. Give them lessons at the level they can learn.
Parent 5	She is a slow learner. If we let her know something, she knows. She can answer. After 5 minutes when we ask again, she forgets already. My child is already like this. Let it be when she grows up, it's with these people. I don't want her to be left behind by her friends when she grows up later.

Parents were asked to share their views on their understanding about special educational needs. The interview excerpts in Table 4.30 reveal a range of views on parental understanding about special educational needs. Parents understood for example, that special educational needs was meant to be individualized learning. They recognized that individual attention was required for their children. Some commended on the benefits that could be gained from the programme. Parents knew that since there were many students in the class, individualized attention would not always be possible. However, they also believed that under such circumstances, the chances for their children to progress in their development would be higher due to interactions with other peers.

Parents tended to understand that special educational needs focuses on the various aspects of development of their children prioritizing their immediate need to acquire certain skills to become independent. Parents also understood that their children have limitations in their

learning abilities and thus stressed on the need for them to learn to become independent adults instead of drilling them to read and write.

4.5.3 Teachers' willingness to communicate in matters pertaining to special educational needs

Teachers' willingness to communicate with parents in matters pertaining to special educational needs is outlined in Table 4.31.

Table 4.31: Teachers' willingness to communicate in matters pertaining to special educational needs

Identification	Interview excerpts
Teacher 1	It's difficult for us to talk to the parents. In this school it's the language of communication. Also the parent teachers' association meeting is not held often. So the only time we meet parents is the time students are going home or when they're sending their kids to school. That is the only opportunity, which we meet only for one to two minutes. So it's very rare. Sometimes not the student's parents come to school, it's the grandfather or grandmother. So sometimes we don't meet the parents, they will come at the end of the year only.
Teacher 2	We share our views about SEN to parents. We will have a program with the parents for example a gotong royong and then while we are doing the gotong royong, we will talk about their children. From there we're able to inform what is happening to their children in school.
Teacher 3	If there is anything to share, I will usually call the parents' hand phone. Usually if we give a letter, out of 100%, only 40% will reply. Not everyone will give the feedback. Here we form a WhatsApp group for parents. Whatever info, we will place it there. If can, we talk to them when they come to school, to fetch their children back in the afternoon, that time we will discuss what we need.
Teacher 4	We communicate with parents to monitor their child at home. Sometimes there is no time to meet, but this school so far its ok. Because we have set appointments everything, so far parents are giving good respond. Communication with parents is important because parents know their child best compared to teachers. I want to get to know the parents first. Once we know the parents, then we'll know their child. So we need to understand the parents first then only the child.
Teacher 5	When we're discussing, parents actually will feel low-self-esteem as their child is a SEN child. The communication is important. It's needed. We can help them. That is what we tell to the parents. In the beginning,

	there is communication barrier in terms of language. But praise to God we have teachers who can communicate in Tamil. Some parents when we call them to come to see our presentation, they didn't come. They're busy. Usually we will meet parents when they sent their child to school, so we can talk to them. The most effective way is when we do a meeting with them.
Teacher 6	Usually we'll call the parents and we'll start with a topic like what's needed to be done for their child. The scenario is usually twice a year. We discuss with parents if they agree, then we will proceed. If there are challenges or problems, we will solve it together. The school also have a parent WhatsApp group where all the information can be directly sent there, which is very effective. We also have a communication book where all activities in school are written in this book including homework. So for information, that book is important. This book is also where we paste letters from the school.

The interview excerpts in Table 4.31 reveal teachers' views on their willingness to communicate with parents in matters pertaining to special educational needs. Teachers indicated that they made efforts to enhance communication with parents but noted that often it is difficult for them to communicate effectively with parents due to factors such as language of communication and frequency of meetings. Teachers also expressed their willingness to give feedback to parents on their child's development as they believed that it is fundamental for them to communicate with parents. They were willing to share with parents' appropriate information about their child's development in school.

Teachers realized that they had to establish good relationships with parents in order to encourage sharing of information and ideas. Teachers mentioned that their preferred method of communication was face to face and via a WhatsApp group for parents. All the teachers felt that communication was an important component in special educational needs practices especially in determining the success of the program.

4.5.4 Parents' willingness to communicate in matters pertaining to special educational needs

Parents' willingness to communicate with teachers in matters pertaining to special educational needs is outlined in Table 4.32.

Table 4.32: Parents' willingness to communicate in matters pertaining to special educational needs

Identification	Interview excerpts
Parent 1	I seldom go to meet the teacher because the school not allow parents in. So very seldom. Never talk about sharing info. They are special education teachers, they know how to teach this kind of children. I don't talk about this, scared people don't like.
Parent 2	I have that open communication with teachers and they have that open communication with me also. So I don't feel scared to share with them my ideas or how I do things at home. I don't feel ashamed also to talk to them about my negative side, how I do things. I normally talk to them via WhatsApp and whenever I meet them also, that's when they will communicate with me. So there's always that daily progress report they will give me and about this IEP also they will tell me. So whenever I meet them, there's always a communication. It's not on a specific time of the year where I meet them or anything.
Parent 3	Parents will need to approach the teachers at school. We need to go and meet them. We go and see the teacher and suggest this and that. We need cooperation. When parents and teachers communicate, there won't be a problem. I actually feel comfortable. We need to be transparent in the way we speak. Don't scold the teachers, we need to relax.
Parent 4	We just attend the meeting and parent's day. Anything we ask the teachers, they will answer. Every morning my husband goes to see the teachers.
Parent 5	Sometimes I go for the meeting, sometimes I don't. Yes teachers call twice. I just went for one only. That's all. I don't communicate often with the teachers. Only if needed I will call, like when my child is sick I will call. It's just that. I feel I'm not good to talk on SEN aspect, I feel low self-esteem. But teachers are good towards me.

Parents were asked to share their views on their willingness to communicate with teachers in matters pertaining to special educational needs. The interview excerpts in Table 4.32 reveal parents' attitudes were mostly were positive about communication with teachers. Parents mentioned that they made the effort to communicate with teachers and often asked

about their children's progress whenever they had the opportunity. Parents would approach the teachers at school, discussing during IEP meetings and call teachers at times to get feedback about their children's IEP or their progress in school. They also took the opportunity to communicate when they send or fetched their children. Some parents preferred to discuss with teachers personally in school when they were invited to attend meetings or school functions.

Parents also indicated that they have open communication with teachers and welcomed sharing of ideas and would take initiatives to communicate with teachers. Most of the parents were able to accept teachers' ideas and feedback on their children's progress whenever they could, either by calling teachers or discussing with them in person.

4.5.5 Teachers' perceived roles in the implementation of special educational needs

Teachers' perceived roles in the implementation of special educational needs is outlined in Table 4.33.

Table 4.33: Teachers' perceived roles in the implementation of special educational needs

Identification	Interview excerpts
Teacher 1	In terms of ideas, when we give an idea, half of the parents will listen, the other half still stick with their own opinion. So over here for teacher and parents it's really difficult to collaborate you know. So it's really difficult for us to share ideas with parents. Teachers will suggest what they have observed and forward to parents for them to view it. If they feel ok, they will say go on. If they feel it's not ok, they can add-on what they need.
Teacher 2	We as adults, we need to help our children. Help the SEN students and also their parents for them to participate in the society.
Teacher 3	When we want to organize a meeting, here parents give less response. There is information that we want to deliver, is not delivered. We need to always follow-up with the parents, need to make them understand.

Teacher 4	Teachers need to play a role in letting parents know what is taught in school, needs to be done at home too. It's good to actually share ideas with parents because parents know their child better. The IEP I'll do it with parents. I ask what the parents' opinion are.
Teacher 5	We do a video, or power point, you insert photographs of the places we visit, and we show and explain to the parents, what is the use of these visits. In the beginning there were parents that do not really understand, we explain to them everything. We will record a video and show to parents how their child is in school. Maybe their character at home is like this, outside like this.
Teacher 6	From the aspect of language, there are some parents who are Indonesian, so we need to explain really clearly so they'll understand.

The interview excerpts in Table 4.33 reveal that teachers' hold similar views on their perceived roles in the implementation of special educational needs. Teachers felt they carried out their roles as required to discuss and share ideas with parents but sometimes this is a challenging process due to parents' commitments. Teachers also expressed their willingness to organise meetings so information to help the child could be conveyed to the parents and parents could understand the process in helping their child. They believed that they needed to ensure that parents had really understood what was going on in IEP meetings. While teachers understood that parents' should be involved in IEP implementation and decision-making, they also knew that that parents' involvement was necessary in order to gain their cooperation.

4.5.6 Parents' perceived roles in the implementation of special educational needs

Parents' perceived roles in the implementation of special educational needs is outlined in Table 4.34.

Table 4.34: Parents' perceived roles in the implementation of special educational needs

Identification	Interview excerpts
Parent	I want to push her to improve in academics. Saturday I send her go to

1	speech therapy and other therapy. What the school needs, we want to help. What I can help, I help.
Parent 2	I and my husband find some place for her interest in music. I mean to help her in music. We also send her to speech development and occupation therapy. I've met teachers about IEP.
Parent 3	I did give him physiotherapy and mental therapy outside. After that, I teach him to ride a bicycle using focus and balance. As parents we should be more involved in the school. Ask teacher, get yourself involved. When we are involved in the school, we will know our child's problems. As mothers we play our role to our kids. I say we need to be involved in the school. When we're involved in the school, indirectly we have drawn closer to the teachers. We need to be together. Teacher's role and parent's role needs to be close.
Parent 4	I'll have to focus in teaching him. My responsibility is to teach him. I need to push him to study. When teachers give lesson, parents also needs to push at home. We need to collaborate together to help these children then we can see their future is good, support in their studies.

The data revealed parental views on their perceived roles in the implementation of special educational needs. The interview excerpts in Table 4.34 reveal that parents seemed to make discerning efforts to carry out their roles in IEP implementation. They understood their responsibilities as they were explained by teachers during IEP meetings. Parents revealed that they made every effort to do their best in performing their roles in IEP implementation.

The data revealed that parents felt that they should follow up with IEP activities at home and try their best to practice them with their children. Parents believed that they should carry out their responsibilities to help their children to improve further in their learning. Parents felt obligated to carry out their roles accordingly. Parents showed their determination and enthusiasm in helping their children improve further in their abilities by personally teaching and sending them for therapy sessions. They wanted to see their children becoming independent individuals thus were willing to make sacrifices in providing time and attention for their children.

4.5.7 Teachers' expectations of parents' role in the implementation of special educational needs

Teachers' expectations of parents' role in the implementation of special educational needs is outlined in Table 4.35.

Table 4.35: Teachers' expectations of parents' role in the implementation of special educational needs

Identification	Interview excerpts
Teacher 1	Parents need to really know about their child's development, they need to give full support. Don't be too protective over the child. Give an opportunity for the child to be with another person. Also in the teacher parent association, we inform the parents what's happening, what are the students' problems. We expect them to let us know what they would like the IEP objective be for their child.
Teacher 2	Parents are as advisors. Parents are example to their children. So parents needs to show an attitude they can mingle. It's very important because when kids observe their parents can interact with people, they will follow suit. I'm confident they'll see the parents as an example. Parents here is very open minded and they are very concern towards SEN students. They emphasize on special needs education. They're very supportive.
Teacher 3	Parents needs to give an opportunity, to create a situation where the student can socialize. It's an encouragement. If you just hide the child at home, the student will not develop. The parents maybe are working, yes, but they need to spend time. Even how busy they are also, they need to spend time.
Teacher 4	Parents play the most important role because these students' time mostly are at home compared to in school. Parents can play a role like observation. When there is communication with teachers, it will assist us. We will receive the information that we can't gain in the school.
Teacher 5	The most important is the mother. Mother has to be fully responsible, she should learn ways on how to tackle the child. Parents play an important role. Parents needs to give cooperation, these SEN kids have allowance, use the money to help them and their child. We request them to do home based activities that will improve the child.
Teacher 6	Parents play a very important role in encouraging the relationship among children or their child. For example, from the home itself they need to communicate with their children. Parents needs to see and check the children's homework, has the child done it? Not yet done it? So this things are important for us to monitor our child's development. When the child goes home, check if there are homework for the child. It's all written in the communication book.

The interview excerpts in Table 4.35 reveal teachers' views on their expectations of parents' role in the implementation of special educational needs. Teachers voiced their concerns and hope that more could be done to get parents involved in their child's learning and education. Teachers expected parents to cooperate with them and to provide home support for their child's education.

Teachers agreed that they welcomed parents' cooperation as this would instil mutual understanding between them to enhance SEN practices rendered. When the teachers were asked what they expected from parents to collaborate effectively in SEN practices, all of them reiterated cooperation and home support. Teachers really hoped that parents could play their part in SEN support at home by continuing with the programme so that there would be continuation in the child's activities. They felt that this could further boost the child's skill and their abilities.

Teachers also expressed some concern, based on their observation; that some parents tended to neglect their responsibilities in playing a supportive role. Teachers felt that sometimes parents sent their child to school but would not even bother to check their child's homework. Sometimes some parents gave all kinds of excuses when they were invited to come to school for meeting or discussion with teachers. Teachers felt that only parents who really care about their children's education showed genuine interest and got involved.

4.5.8 Parents' expectations of teachers' role in the implementation of special educational needs

Parents' expectations of teachers' role in the implementation of special educational needs is outlined in Table 4.36.

Table 4.36: Parents' expectations of teachers' role in the implementation of special educational needs

Identification	Interview excerpts
Parent 1	This special children needs one teacher to 3 children only in a class. When teachers see me when I'm sending my child to school, they will come to talk to me. What they need, what they want.
Parent 2	I don't want the teachers to isolate my child. I don't want them to see my child as a different living thing you know. I really want them treat her as all the other kids like how they treat all the other normal kids. Treat her the same way, it's just that she has a different way of learning. I want the teachers to learn her way and teach her and guide according to her way. You feel safe and secure when the teacher come and talk to you rather than taking it on their own hands and scolding my child. Teachers here will attempt to come and talk to me even the negative side of my child. So it's really good. They'll give me better suggestion to improve what I've done. They also tell me what they do in school so that I'll implement it at home with my child. So it has the same balance with the school activity.
Parent 3	We mix with the normal kids. The teacher categorise them you know. This kid, in this class. That kid, in that class. Like they do camping. They mix together. Mix with the normal kids. Like sports also mix with the normal kids. From that aspect, the interaction has no problem. Teacher gives a lot of cooperation. Teachers will inform the parents the school program, any activity via WhatsApp. From that aspect we are more knowledgeable you know. Usually once a year they will give a talk. They will call a guest speaker for the parents. Regarding teaching styles also we ask for teachers' opinion. We would like it that way.
Parent 4	We improve in the child's academic, like now they go on an outing, concentrate on reading. Teachers usually will write a letter and pass to my child for me to attend meetings. Every meeting it's like this. Teachers will sometime inform they will teach something different like do some cakes, do some biscuits, something else students have to learn. If there is any problem, teacher will inform me. So far no problem. Teachers also explain everything to my husband like pushing my child to study at home.
Parent	At the special educational needs school here there is no problem. Teachers give a letter for events or anything, they will invite. If there is

5	anything, the teacher will call.

Parents were asked to share their views on their expectations of the teachers' role in the implementation of special educational needs. The interview excerpts in Table 4.36 reveal that unlike teachers, parents seemed to be rather contented with the service that teachers gave in SEN implementation. They voiced their satisfaction in the services rendered by the teachers like frequent attempts in communicating with parents and suggestions for home activities. Parents felt that teachers had explained well on all matters that they were required to know. They acknowledged teachers' efforts in guiding and educating their children.

4.5.9 Students' social interaction among SEN and mainstream pupils as perceived by teachers

Teachers' view on students' social interaction among SEN and mainstream pupils is outlined in Table 4.37.

Table 4.37: Teachers' view on students' social interaction among SEN and mainstream pupils

Identification	Interview excerpts
Teacher 2	The mainstream students and the SEN students do interact with one another. So far there is no problem, the mainstream students can accept the SEN students. Students are able to mingle with each other and there exist a positive interaction among them. They've become close, communicates with one another. Even during recess, they talk and there are SEN students placed at the mainstream classes for them to learn and they can help each other in their studies for example.
Teacher 3	They have become friends, they know each other so well. This is because of some activities they are involved together. They can play together, they can mingle. For example, a mainstream student helped to tie the shoelace of the SEN student who can't do it. Meaning the student

	can accept the SEN student wholeheartedly. If they can accept each other, it's easy for them to mingle.
Teacher 4	They've become friends. So the SEN student that joins the inclusive class will not feel isolated because they have friends, they can mingle easily and talk. They are more comfortable in their friendship and interaction. That day I got them to play futsal, there was a student not very good in kicking, and coincidently I saw a mainstream student approach this SEN student and showed him how to kick the ball. He helped this student, taught the way to kick the ball.
Teacher 5	If they play football, they will kick the ball towards each other. I kick to you, you kick to me. So that is the time there is laughter and smile. There's joy and fun. Now they can play together. Mainstream students don't look down on the SEN students anymore.
Teacher 6	Within themselves when we're training together at the field, they are cheerful and mingling with each other. Mainstream students started socializing with the SEN kids. We also see a close cooperation in class.

Teachers were asked to share their views on the students' social interaction among SEN and mainstream pupils. The interview excerpts in Table 4.37 reveal that there seems to be active social interaction between mainstream students and the SEN students. There is a strong bond of friendship where active participation is seen and a sense of acceptance between them. Teachers also observed that SEN and mainstream pupils are more comfortable in their friendship and interaction in the buddy sessions. This is also noticeable in the regular classroom where close cooperation exist.

4.5.10 Students' social interaction among SEN and mainstream pupils as perceived by parents

Parents' view on students' social interaction among SEN and mainstream pupils is outlined in Table 4.38.

Table 4.38: Parents' view on students' social interaction among SEN and mainstream pupils

Identification	Interview excerpts
Parent 1	She can mix together. She can have other friends. She's not alone but normal kids don't want to talk to her you know. She doesn't know how to communicate yet.
Parent 2	There was once her friend invited for a birthday party, it was a normal child. She was telling us about this normal friend that she had who was so nice to call her to come for a birthday function.
Parent 3	If we're late in fetching him, he will play with the normal kids. He interacts, no problem. He joins with the normal kids. When we fetch him, he doesn't even notice us. He's playing with them right.
Parent 4	He has no problem in interaction. If he interacts with the kids also, he is a bit naughty, he is hyperactive right. He likes the school, he won't cry. Every day he goes to school.
Parent 5	If students of similar age, she can't, she'll fight. She's clever looking for friends that are younger than her. All the normal kids are her friends. She has 50 over friends. She feels comfortable and happy to go to school. Morning she gets up to go to school very fast. It's not difficult to wake her up. When she comes back home also she's happy. She always says her teacher and friends is good Mom.

Parents were asked to share their views on students' social interaction among SEN and mainstream pupils. The interview excerpts in Table 4.38 reveal that parents generally agree that their child has no problem in building friendships e.g. like receiving invitations to birthday parties. Also active social interaction exists between their child and the mainstream students with minimal communication barriers. Parents also shared that their child is also now accepted by their peers and are assisted by their classmates in lessons. Some of these children also look forward to school every morning.

4.5.11 The effectiveness of the buddy support system as perceived by teachers

Teachers' understanding of the co-curriculum of the buddy support system is outlined in Table 4.39.

Table 4.39: Teachers' understanding of the co-curriculum of the buddy support system

Identification	Interview excerpts
Teacher 1	SEN children even though their thinking level is lower than peers of similar age, they are supposed to be placed among these normal kids so they're more motivated to interact. We encourage them to meet people, enter into co-curriculum activities with the mainstream students of similar age. The objectives of the buddy club are to create awareness of special needs. They want to form a social inclusion between mainstream students and SEN students.
Teacher 2	The buddy club was formed to involve the SEN students and the mainstream students. For example I will merge students with SEN and students from mainstream, they need to communicate and work together. Mostly through play because it's the children's instinct. They really love play. They will do a lot of activities together. So in there, we get to strengthen the relationship between themselves. I will involve them equally and I will instil moral values there. I felt over here SEN students will be able to show their talents in sports. The buddy club's objectives are to create a space for SEN students and the mainstream students to interact with one another and to provide opportunity to the SEN students to be accepted among mainstream students and for equality.
Teacher 3	We can interact and do activities with them. If possible, the students who love to communicate we can involve together with those who don't communicate. Maybe once they've known that student, next time it's easy for them. Even though they can't speak, using sign language also is a form of interaction. If we seclude ourselves, don't do a program together, they won't know their self and their friends. We do activity in groups with the mainstream students. Sharing and socialization will form interaction among the two group of students. Mainstream kids are like a mentor-mentee for this program. We can also see the student's potential and teacher's participation as well. What's important is the interaction here in this program. We don't place barrier saying this is SEN students, we give all equal opportunity.
Teacher 4	Before they play football, they need to divide into groups first. I will ask the students first which group they want to be together in. So here communication happens. Apart from that they will also cooperate. It's better to have groups. When learning in groups, we need to merge all levels of the students. We need to merge the weak and the strong so they will work together, and help each other. I always use group technique. The buddy club wants to further improve the social interaction between mainstream students and SEN students so the SEN students are not isolated. It's also to instil good cooperation between these students and improve their psychomotor skills. The students that were previously weak in walking, now they can walk slowly. When the training is repeated many times, it will strengthen their legs more.
Teacher 5	We include 12 kids with the normal kids in camping and sports. We also teach them to eat together in the canteen. If they eat together in the canteen, they're accepted. That's important. They will also play

	together. They will have their confidence, they will have their ways to be independent. All these actually can form a student who is holistic. From the co-curriculum they can start in academics. Because when they can interact, they have their self-confidence, when they enter into the inclusive class to learn together with the normal kids, they won't have a problem. The objective of the buddy is the tagline 'We play together, we grow together'. If they can play together, they can grow together so they can be accepted by the society later.
Teacher 6	I do an indoor activity mixing the mainstream and SEN students in the same group. Children really love sports and games. It helps create cooperation between mainstream and SEN students. The buddy club's objectives are mainly to socialize the mainstream students and the SEN students.

Teachers were asked to share their understanding of the co-curriculum of the buddy support system. The interview excerpts in Table 4.39 reveal that all teachers clearly understood the objectives of the buddy support system which is to encourage interaction among SEN students and mainstream students. Techniques such as grouping SEN and mainstream students together are often use to achieve the aims of the buddy club program and this was mentioned by teachers and parents in this study. This is done mainly to encourage communication and cooperation between the students. Two teachers also mentioned the equal opportunity afforded to SEN students through the buddy club program and its long term goals of SEN students being accepted by society.

All six teachers added comments regarding the influence of the buddy support system. Table 4.40 provides outlines their perspectives.

Table 4.40: Influence of the buddy support system

Identification	Interview excerpts
Teacher 1	It encourages the SEN students to play with other normal people. They will gain more confidence. The last time we saw they can't, don't want to kick the ball, and don't want to play. But when there is buddy club program, they are motivated in watching others play, they also want to join in the activity even though they can't kick.

Teacher 2	The buddy club should be expended throughout Malaysia, not only here because it's here the mainstream students can accept the SEN students, and the SEN students can accept the mainstream students.
Teacher 3	Once they're comfortable in a group, the SEN students can interact. They can follow together to play. Most schools doesn't have a program that involves both these groups together. Every school needs to do this program. If they have communication with mainstreams students in their school, it's easy for them to have communication with people outside. They will have confidence and their self-esteem will increase. They will feel easy to communicate. The Buddy club is also inclusive and we can achieve 23-25% (inclusion) this year. Because one of the ways the buddy club can help us achieve this target is that the SEN students here mostly know the mainstream students over there. So when we place them there, they won't feel secluded or excluded.
Teacher 4	I see the SEN students gave a good response. There is some who don't talk much, now talks a lot. From those who always sits alone, when there's play, they will participate. So it's good also this buddy club actually.
Teacher 5	In year 2013, since the buddy club was established, I can see improvement in their interaction. The mainstream students come here to play together. They don't see the kids here is different now. There is no gap. They can be together. There is no more fear towards SEN kids. Parents also when they send their child, they're not afraid of the SEN kids already.
Teacher 6	When they join the buddy club, they will play football together at the field, after that they will also play indoor games together in the recreation room, so it really helps. As an inclusive school, the buddy club really helps prepare the SEN student to go to mainstream classes.

Teachers also shared the influence of the buddy support system. The interview excerpts in Table 4.40 reveal that the buddy support system encourages play between SEN students and their peers. It shows that through the Buddy system SEN students are now able to interact with the mainstream students. If they have communication with mainstream students in their school, it's easy for them to communicate with society. Teachers also observe that the SEN students are now more confident and this has increased their self-esteem. Teachers were also pleased with the buddy club program and expressed their desire for this program to be recommended to others so they get support for their SEN students from such a program. One of the primary reasons for this is that the program

assists in the acceptance process between the mainstream students and their SEN peers.

This helps in the inclusion process as SEN students who have gone to mainstream classes

won't feel secluded or excluded.

Five out of six teachers added comments regarding the benefit of the buddy support system.

Table 4.41 provides their perspectives.

Table 4.41: Benefit of the buddy support system

Identification	Interview excerpts
Teacher 1	It's successful in creating social interaction between mainstream student and the SEN students. They can walk together and chit-chat. The SEN students' legs are also getting stronger, they can walk faster. Their psychomotor skills are now much better. Their focus in listening to orders has increased also.
Teacher 2	If there is the buddy club, they might be able to interact at least once a week. So it's a bond for them. When there is buddy club, the relationship among SEN students and mainstream students, the meetings among them are more often and they know each other well. Not only they recognise the appearance, they recognise their names too. So I feel it's really good this buddy club.
Teacher 3	There is opportunity for them, to create a space where they can mingle with the mainstream students. They know each other better. Before that we were in the classrooms. Each of us follow respective syllabus. After its inception, we have interaction with ten students from the mainstream education. When they are there, they know the student there, because we have the buddy club program. Buddy club is like an ice-breaking for inclusive education. They can help the children as when they enter the mainstream class they recognise already the buddy club member. We created a healthy environment where the interaction is not blocked, there is no barriers there.
Teacher 5	Now there is none saying special educational needs is separate, when there are buddy club programs, we're together with the normal school. So now they don't feel we're separate. In the beginning I saw my kids walking slowly but after the buddy club training, we can see the way they walk, the way they kick the ball, already can play football. When the buddy is there, they play and grow together. Its integration, we are together. It's not limited to studies only, but from the aspect of inclusive co-curriculum, it will be a start for inclusive academic.
Teacher 6	These games and sports enables them to interact with the mainstream students. Through the games they are able to interact with each other exchanging ideas. Students also have a close cooperation and tolerance

| | where the mainstream will help the SEN kids. Apart from that, the mainstream students are able to recognise the characteristics and problems of the SEN students. The SEN and the mainstream are able to interact between themselves and we can see the self-confidence especially at the field when they are playing football together. The SEN students sometimes in class, when we ask them to come to the front of the class, they are shy. So now when they have joined the buddy club, they're more confident. |

The interview excerpts in Table 4.41 reveal the buddy support system is successful in creating social interaction between mainstream students and the SEN students. Students now know each other much better not only in appearance, but in their names too. Teachers also shared the benefits of the buddy club in creating a space for SEN students to mingle with the mainstream students compared to their previous situation where they were in their respective classrooms and follow their respective syllabus. The data showed that the buddy club creates a healthy environment where student interaction is not blocked and there are no barriers. Two teachers also expressed their views on the importance of physical development of SEN students through the buddy club program. They also mentioned that the students' psychomotor skills are now much better as a result of participating in the programme.

Supplementary data collection methods for the purpose of corroboration included observation of a selection of the buddy club activity. Video recordings and photographs were taken as part of the observations process. Appendix I (page 398) features a sequence of images taken from a video recording of a buddy club activity. There are 5 participants in view - 4 students and 1 teacher. The teacher is on the left. Within this short sequence, lasting 15 seconds, the activities of the students include: sitting in a small group in close proximity (Picture 1), active verbal communication on the task at hand (picture 2 to picture 4), various face and hand gestures at each other (picture 2 to picture 4), close cooperation

(picture 1 to picture 8) and high interest on the activity at hand with a closer body posture to the activity sheet (picture 5 to picture 8).

The video recording taken (with permission) showed evidence of the buddy activities done in groups with the presence of 3 SEN students and 1 mainstream student in the group. Cooperation, active communication and learning were evident in the group work. Observations also confirm that students are comfortable with each other's company in a small group and focused on completing the task at hand.

4.5.12 The effectiveness of the buddy support system as perceived by parents

Parents' understanding of the co-curriculum of the buddy support system is outlined in Table 4.42.

Table 4.42: Parents' understanding of the co-curriculum of the buddy support system (BSS)

Identification	Interview excerpts
Parent 1	I just know that she goes for exercise only.
Parent 2	Their aim is mainly to help my daughter more in terms of her physical development. What they normally do is that they have extra time slot, say like football activities with the kids. One thing good is that the football activity also includes the normal kids.
Parent 3	They have football with kids from the normal classroom. These SEN children they want to make them same as the mainstream students.
Parent 4	Buddy club is about football activity.

Parents were asked to share their understanding of the co-curriculum of the buddy support system. The interview excerpts in Table 4.42 reveal 2 out of 4 parents clearly understood the objectives of the buddy support system that is to encourage interaction among SEN

students and mainstream students. Other parents only knew it's about a football club. Two parents understood part of the co-curriculum is to help the child's physical development via exercise.

Two parents added comments regarding the influence of the buddy support system. Table 4.43 provides their perspectives.

Table 4.43: Influence of the buddy support system

Identification	Interview excerpts
Parent 1	My daughter has got used to a lot of people. She found confidence, when she see people she say "Hello", "Hi".
Parent 2	My daughter learns the skills and qualities from the normal kid through the game. Buddy club is actually a topic for me to start-up a conversation with the teachers, then they talk to me on SEN matters.

Parents also shared on the influence of the buddy support system. The interview excerpts in Table 4.43 reveal the buddy support system has a positive effect on the child's interaction with their peers. The child now has more confidence and skills. A parent also revealed the buddy club has enabled her to communicate better with the teachers on SEN matters.

Four parents added comments regarding the benefit of the buddy support system. Table 4.44 provides their views.

Table 4.44: Benefit of the buddy support system

Identification	Interview excerpts
Parent 1	My child has improved. She's not quiet now, she's very active and healthy.
Parent 2	My daughter actually gets to mix with the normal kids, which is really good. Before she joins the buddy club, she was weak, she gets tired very fast. Now she's improved a lot in her development. She's become so active. The buddy club has also helped her hand eye coordination.

| Parent 3 | I see improvements. We can see his hands movements have improved. Definitely it helps. |
| Parent 5 | She is now brave, no longer afraid. She's clever in making friends now. |

The interview excerpts in Table 4.44 reveal parents' view on the buddy support system. It's successful in providing SEN support such as physical development to the child. Parents' also gave feedback their child is now more active and their physical development have improved. A parent also added the buddy club helped in the social interaction between their child and her peers. She is now more brave and able to make friends.

4.6 Overall Summary

In this next section, the quantitative and qualitative data are now combined to shed light upon and to address each research question. A summary of the results from the study also follow.

Research question one: To what extent does teacher-parent collaboration contribute to (i) understanding about special educational needs; (ii) willingness to communicate in matters pertaining to special educational needs; (iii) their perceived roles in the implementation of special educational needs; and (iv) expectations of each other's role in the implementation of special educational needs?

This section summarizes the teacher-parent collaboration in special educational practices based on the results of section B of the teachers' and parents' questionnaire. Table 4.45, Figure 4.2 and Figure 4.3 presents the results of the teacher-parent collaboration by teachers and parents.

Table 4.45: Summary on the level of teacher-parent collaboration by teachers and parents

Domain	Teachers' mean	Parents' mean
Understanding about SEN	3.65	3.69
Willingness to communicate in matters pertaining to SEN	3.43	3.77
Their perceived roles in the implementation of SEN	3.56	3.73
Expectations of each other's role in the implementation of SEN	3.57	3.86
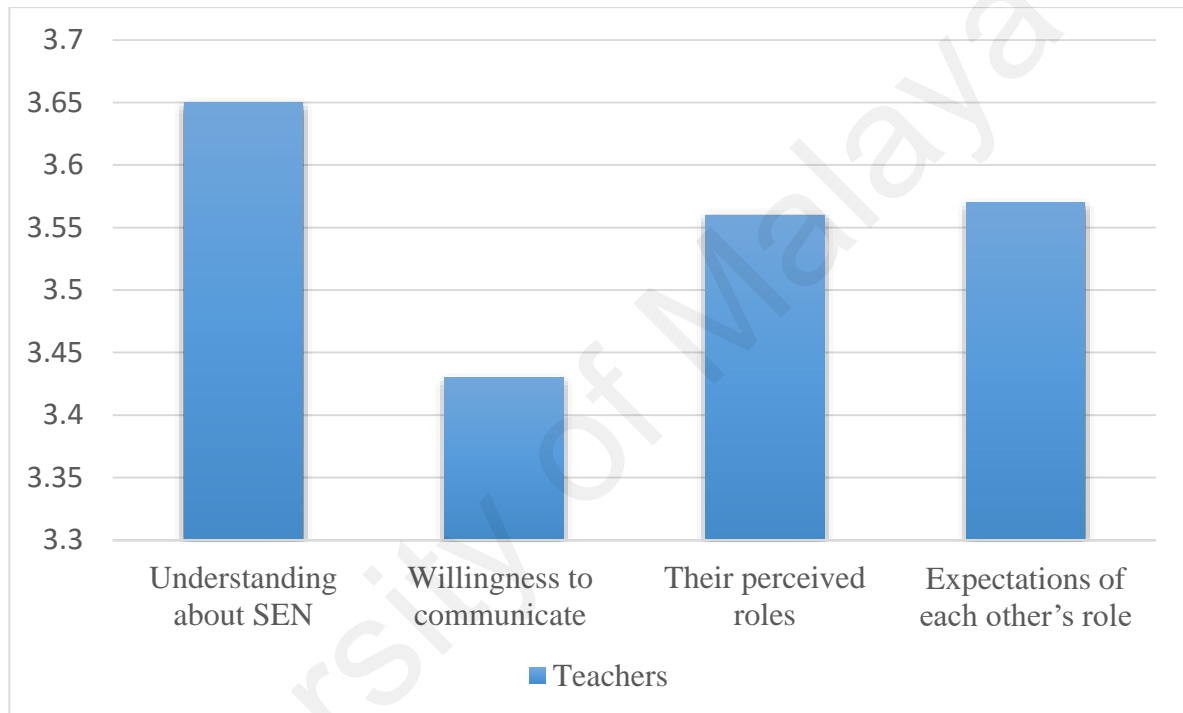
Figure 4.2: Mean of teachers' collaboration with parents in special educational practices

As seen in Table 4.45 and Figure 4.2, teachers (n=95) rated themselves highest on the understanding about SEN domain (3.65) compared to their willingness to communicate in matters pertaining to SEN (3.43), their perceived roles in the implementation of SEN (3.56) and their expectations of parents' role in the implementation of SEN (3.57). This implies teachers see understanding about SEN as vital in a collaboration process with parents.
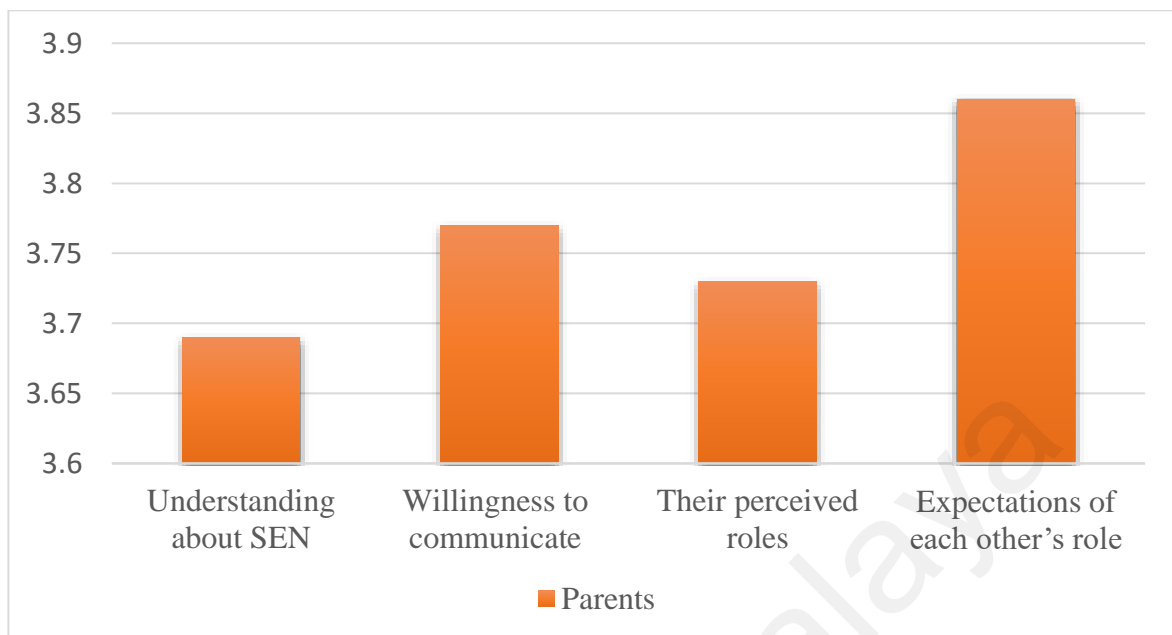
Figure 4.3: Mean of parents' collaboration with teachers' in special educational practices

As seen in Table 4.45 and Figure 4.3, parents (n=68) rated themselves highest on the expectations of teachers' role in the implementation of SEN (3.86) compared to their understanding about SEN (3.69), their willingness to communicate in matters pertaining to SEN (3.77), their perceived roles in the implementation of SEN (3.73). This implies parents' expectations of the teachers' role in the implementation of SEN is vital in a collaboration process with teachers.

These findings match the emerging themes in the interview data and allow the researcher to conclude that teachers' understanding about SEN is important to ensure that effective collaboration with parents occurs. Parents' expectations of the teachers' roles in the implementation of SEN shows that parents are content with the SEN implementation for their child's social interaction development and they voiced their expectations to teachers that activities done in school could be mixed with the normal kids. They state that they are

satisfied with teachers' cooperation in the SEN services rendered in guiding and educating their children.

Research question two: To what extent does students' social interaction among SEN and mainstream pupils exist, as perceived by teachers?

Research question three: To what extent does students' social interaction among SEN and mainstream pupils exist, as perceived by parents?

Table 4.46, Figure 4.4 and Figure 4.5 presents the results of students' social interaction among SEN and mainstream pupils as perceived by teachers and parents.
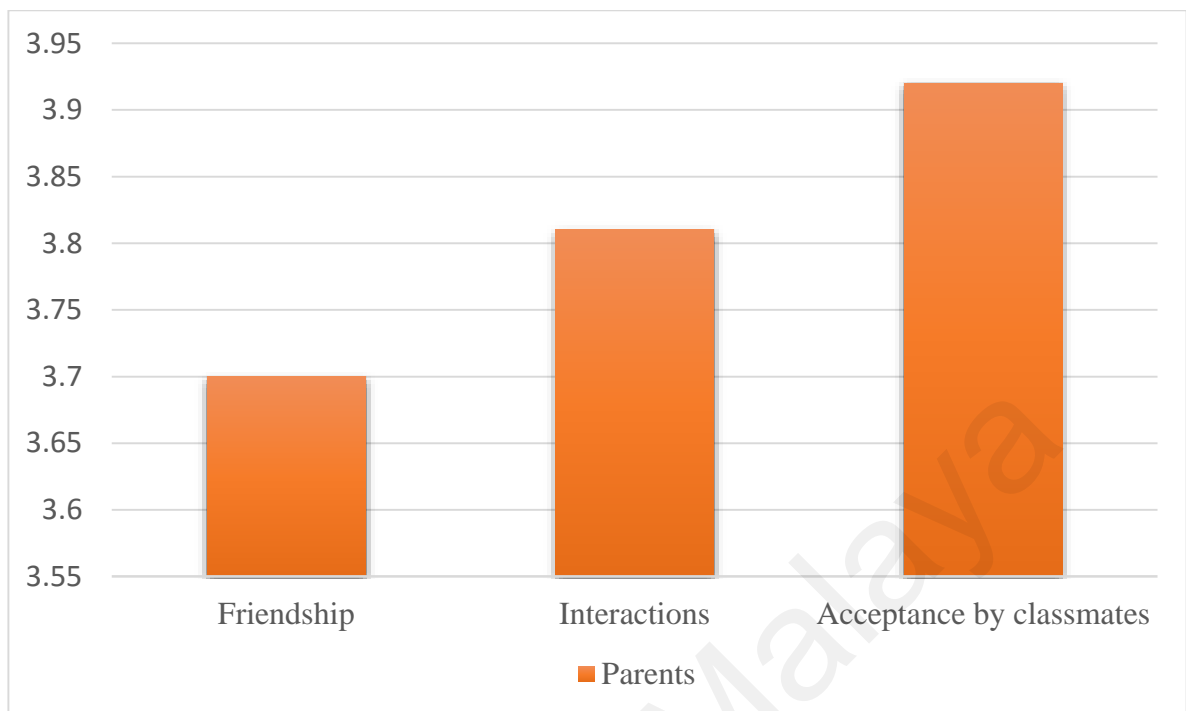
Table 4.46: Overall students' social interaction among SEN and mainstream pupils as

perceived by teachers and parents

Domain	Teachers' mean	Parents' mean
Friendship	3.57	3.70
Interactions	3.56	3.81
Acceptance by classmates	3.76	3.92
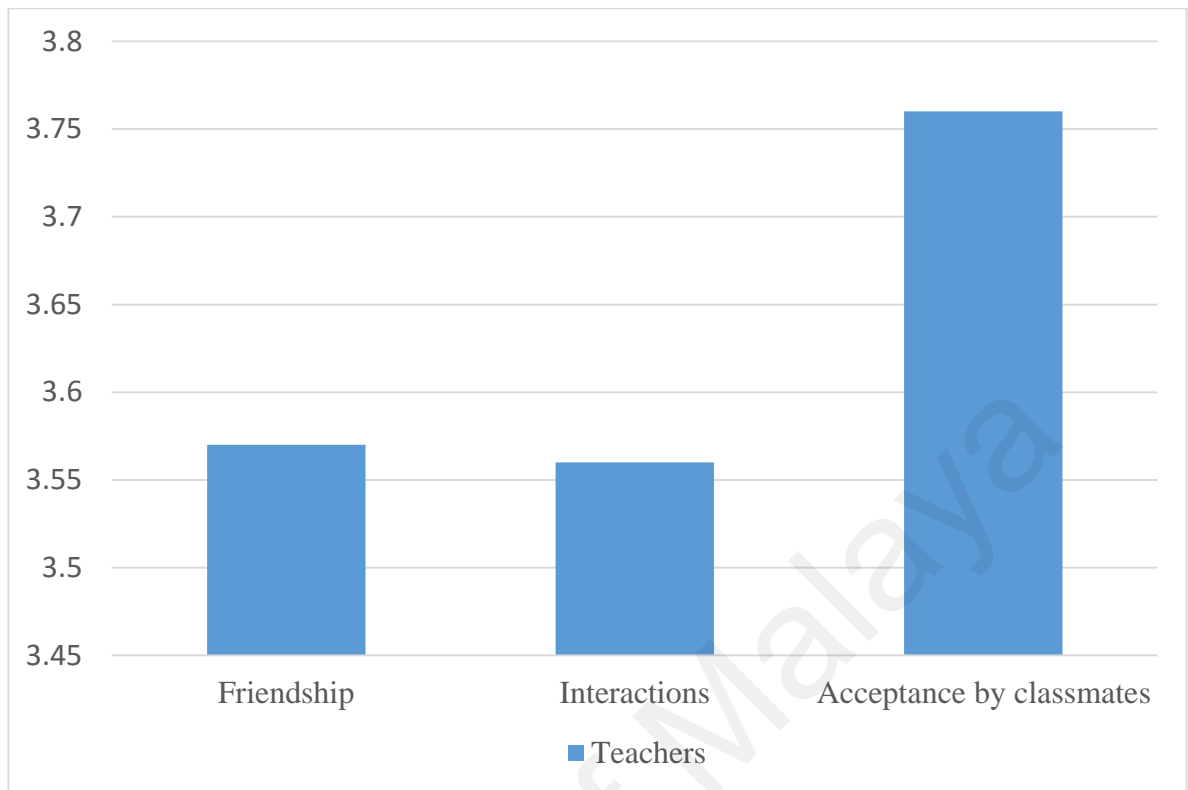
Figure 4.4: Mean of students' social interaction among SEN and mainstream pupils as

perceived by teachers

As seen in Table 4.46 and Figure 4.4, teachers (n=95) rated the acceptance by classmates domain (3.76) the highest compared to the friendship domain (3.57) and the interactions domain (3.56). This implies that teachers' view acceptance by classmates as important in generating better students' social interaction i.e. among SEN and mainstream pupils.

Figure 4.5: Mean of students' social interaction among SEN and mainstream pupils as

perceived by parents

As seen in Table 4.46 and Figure 4.5, parents (n=68) rated the acceptance by classmates domain (3.92) the highest compared to the friendship domain (3.70) and the interactions domain (3.81). This implies parents' also view acceptance by classmates as important in securing students' social interaction among SEN and mainstream pupils.

These findings match the emerging themes in the interview data and allow the researcher to conclude that students' acceptance by classmates, as perceived by teachers, is an important contributor to the better performance of SEN students. Close cooperation is noticeable in the classroom as the teachers note. Parents in the study also shared how their child is now more accepted by peers and is able to look forward to school every morning. Parents

generally agreed that their child has no problem in building friendships and active social interaction exist with the mainstream students.

Research question four: What is the relationship between teacher-parent collaboration and students' social interaction as perceived by the teachers?

Pearson's R Correlation Test was carried out to examine the correlation between teacher-parent collaboration and students' social interaction as perceived by the teachers.

Teachers' understanding about SEN domain correlated in a positive manner with the interactions domain and acceptance by classmates domain of the students' social interaction construct. A significant correlation was obtained between teachers' understanding about SEN domain with the interactions domain. Teachers' understanding about SEN domain was also significantly correlated with the acceptance by classmates domain.

The strongest correlation was between teachers' understanding about SEN domain with interactions domain and acceptance by classmates domain. This finding indicates that students' interactions and their acceptance by classmates is more likely to develop with teachers' better understanding about SEN.

Research question five: What is the relationship between teacher-parent collaboration and students' social interaction as perceived by the parents?

Pearson's R Correlation Test was carried out to study the correlation between teacher-parent collaboration and students' social interaction as perceived by the parents. A

significant correlation was obtained for all four teacher-parent collaboration domains with the friendship domain, interactions domains and the acceptance by classmates domains.

The strongest correlation was between the parents' expectations of the teachers' role in the implementation of SEN domain and the acceptance by classmates domain. This finding indicates that students' acceptance by classmates is more likely to develop with clearer parents' expectations of the teachers' role in the implementation of SEN.

This finding indicates that students' friendship, interaction and acceptance by classmates is more likely to develop with parents' understanding, their willingness to communicate with teachers, their perceived roles and expectations of the teachers' role in the implementation of SEN.

Research question six: To what extent and in what ways is the buddy support system effective, as perceived by teachers?

Research question seven: To what extent and in what ways is the buddy support system effective, as perceived by parents?

Table 4.47, Figure 4.6 and Figure 4.7 presents the results of the effectiveness of the buddy support system as perceived by teachers and parents.

Table 4.47: Effectiveness of the buddy support system as perceived by teachers and parents

Domain	Teachers' mean	Parents' mean
Understanding of the co-curriculum	3.56	3.84
Influence	3.70	4.03
Benefit	3.70	3.91
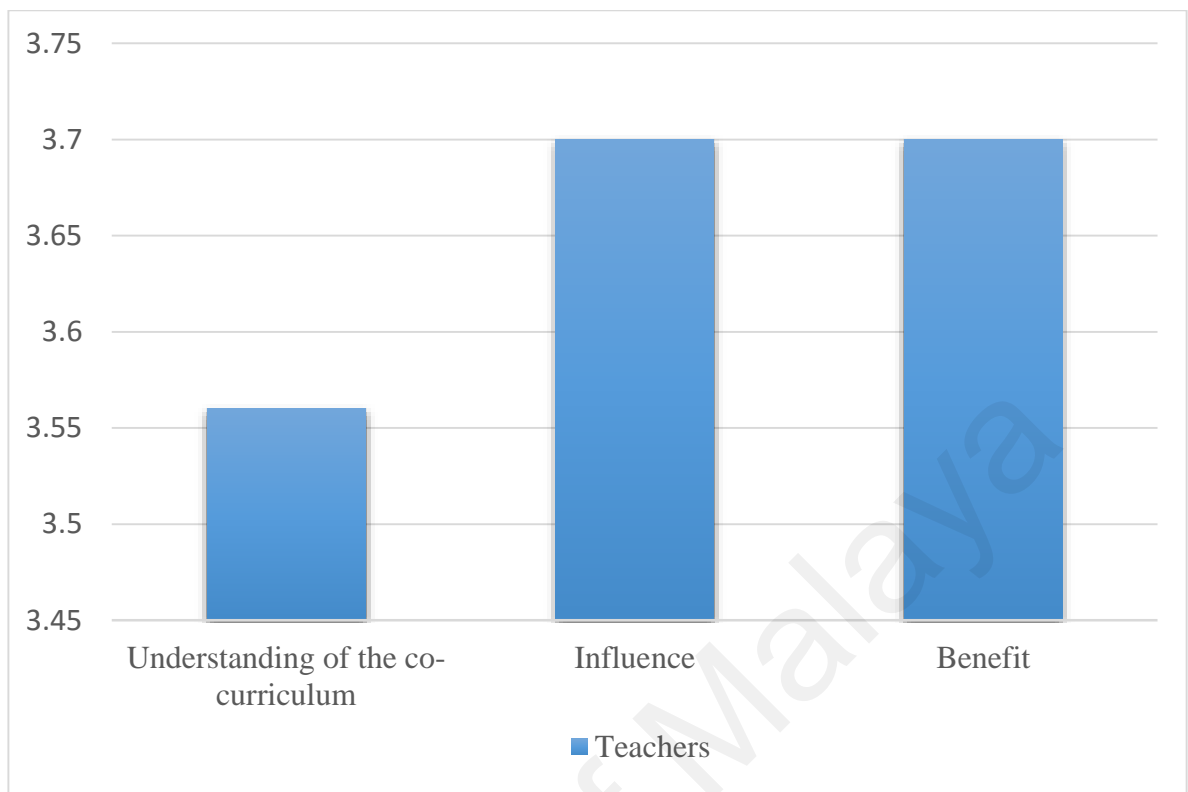
Figure 4.6: Mean of the effectiveness of the buddy support system as perceived by teachers

As seen in Table 4.47 and Figure 4.6, teachers (n=95) rated the influence and benefit domain of the buddy support system (3.70) the highest compared to the understanding of the co-curriculum at (3.56). This implies teachers' perceived the influence domain and benefit domain to be the highest in the effectiveness of the buddy support system.
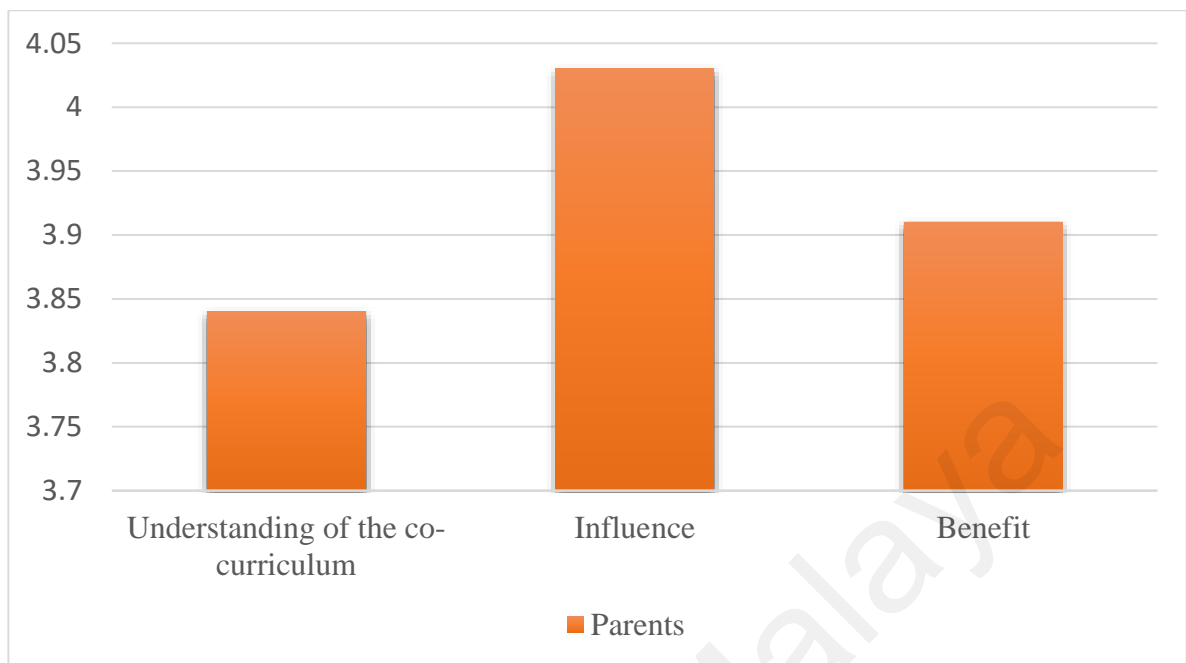
Figure 4.7: Mean of the effectiveness of the buddy support system as perceived by parents

As seen in Table 4.47 and Figure 4.7, parents (n=68) rated highest on the influence domain (4.03) compared to the understanding of the co-curriculum at (3.84) and benefit (3.91). This implies parents' perceived the influence domain the highest in the effectiveness of the buddy support system.

These findings match the emerging themes in the interview data that allows the researcher to conclude that the effectiveness of the buddy support system, as perceived by teachers, is most influential in encouraging better relationships between SEN students and their peers. Teachers expressed their desire for this program to be recommended to others primarily because it helped in the acceptance process between the mainstream students and their SEN peers. Teachers also highlighted the benefits of the buddy support system such as creating social interaction between mainstream students and the SEN students. The teachers also noted that the buddy club also creates a space for SEN students to mingle with the mainstream students and creates a healthy environment where the interaction is not blocked

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and there is no barrier. Teachers expressed their views on the positive physical development of the SEN students through the buddy club program.

Observations by the researcher on the video recordings of a selection of the buddy club activity showed evidence that the buddy activities are normally done in groups with the presence of 3 SEN students and 1 mainstream student in the group. Also cooperation and active communication and learning were very evident in the group work. Observations also confirmed that students seem comfortable with each other's company in a small group and are focused on completing the task at hand.

Parents also shared in greater detail the influential effects of the buddy support system has on their child's interaction development with their peers and how the buddy support system has helped their child in developing more confidence and skills. Parents also added the buddy support system helps in the psychomotor learning of their child.

Research question eight: Does the Buddy Support System significantly moderate the relationship between teacher-parent collaboration and students' social interaction in the implementation of special educational practices?

Results of the interaction term between Teacher-Parent Collaboration and Buddy Support System when added to the regression model, accounted for a significant proportion of the variance in Students' Social Interaction. Moderation is shown up by a significant interaction effect, and in this case the interaction is significant, b=-0.02, 95% CI [-0.04,-0.00], t = -2.38, p < .05, indicating that the relationship between Teacher-Parent

Collaboration and Students' Social Interaction is moderated by the Buddy Support System (BSS).

To interpret the moderation effect, examination of the simple slopes analysis in Table 4.28 shows three different regressions of teacher-parent collaboration as a predictor of students' social interaction: (1) when the Buddy Support System is low i.e. –6.145; (2) at the mean value of Buddy Support System which is zero in this case as it is centred; and (3) when the Buddy Support System is high i.e. 6.145.

The examination of the line graph in Figure 4.1 (page 173) showed that when the BSS is low (blue line) there is a significant positive relationship between teacher-parent collaboration and students' social interaction; at the mean value of BSS (orange line) there is a small positive relationship between teacher-parent collaboration and students' social interaction; however there is a non-significant negative relationship between teacher-parent collaboration and students' social interaction at high levels of BSS (grey line).

This chapter outlined the data collection methods, analysis and the results from the quantitative and qualitative data sets. In the next chapter the results from both the data sets will be combined and integrated to address each of the research questions. This chapter will provide a summary and discussion of the research findings.

CHAPTER 5: DISCUSSION

This chapter provides a summary and discussion of the research findings. It highlights the importance of collaborative roles between teachers and parents to encourage students' social interaction and the effectiveness of the Buddy Support System.

5.1 Summary of the study

Collaborative work enables the exchange of knowledge and reflection of practice. Collaboration has proved to be the main contemporary strategy to feed innovation and creativity for effective educational programs (Guerrero, Mejías, Collazos, Pino & Ochoa, 2003).

The underlying assumption of parent-teacher collaboration in special educational practices is that everyone who has a stake in a child's life, including the parents and teachers, should work together to give that child the best education possible. In reality, however, key stakeholders in a child's life may have many different ideas and beliefs, and, as a result, disconnection in communication and relationships among them can arise. In such situations, fluid partnerships between these stakeholders can be challenging and resulting tensions can emerge which, in turn, can affect a child's educational experience (Staples & Diliberto, 2010).

This research examined the effectiveness of the buddy support system on teachers-parent collaboration and students' social interaction. This study examined the four aspects of collaborative roles between teachers' and parents' understanding of special educational

needs, their willingness to communicate with each other, their perceived roles as well as their expectations of each other. It also examined the relationship between teacher-parent collaboration and students' social interaction as perceived by the teachers and parents.

5.2 Discussion of Research Findings

In the following sections, the research findings are outlined in respect to each of the research questions.

5.2.1 Research question one: To what extent does teacher-parent collaboration contribute to (i) understanding about special educational needs; (ii) willingness to communicate in matters pertaining to special educational needs; (iii) their perceived roles in the implementation of special educational needs; and (iv) expectations of each other's role in the implementation of special educational practices?

5.2.1.1 Teacher-parent collaboration in understanding about special educational needs

Mislan et al. (2010) investigated four aspects of collaborative roles between teachers and parents who were involved in IEP in the school through a combination of both qualitative and quantitative methods. Results revealed that teachers had a firm belief that they did not feel burdened in understanding the need of IEP and parents could not become active participants in the program due to other commitments.

In this study, the summary of the quantitative data (refer to Table 4.45, page 207) analysis from the teachers' questionnaire showed that teachers (n=95) rated themselves highest on

the understanding about SEN domain (3.65) which implies that teachers rated understanding about SEN as the most vital in a collaboration process with parents. These findings showed that the teachers involved believed in equipping themselves with the necessary skills and knowledge to carry out special educational practices. These findings support the emerging themes in this doctoral research study.

In this mixed methods study the quantitative and qualitative data were triangulated to maximise the validity of the findings. The questionnaire items and related data were matched to the corresponding themes from the qualitative output. This comparison showed a number of key things. Firstly, teachers stated in both the questionnaires and the interview similar views about their understanding of special educational needs. Excerpts from the interview with teachers clearly showed special educational needs was a practice catered to the individual needs of the students with specific strategies and methods that are suitable for them. This was supported in Table 4.5 (page 148), item 19 (IEP allows me to review the support given to students based on their needs), and item 23 (I need to modify my instructions and teaching style in the classroom to meet the needs of students with SEN) in the questionnaire with a high mean of 3.68 and 3.91 respectively. Excerpts from the interview with teachers 1, 4 and 5 supports the quantitative data findings:

Teacher 1: *"I observe these kids needs a lot of guidance and help. We need to guide them in one to one learning. We need to use the strategies and methods that are suitable for them."*
Teacher 4: *"These students are different from normal students. They need a different learning style than mainstream education. SEN students' needs more attention from the teacher and every lesson needs to be repeated so they always remember and master in an activity."*

Teacher 5: *"We need to use few techniques."*

The findings showed that teachers believed that SEN activities needed to be custom made to meet the objectives determined for each student. This finding from this study is consistent with Huefner (2000) which showed that as IEP is a program for individualized learning, this means it should also be developed and written based on students' individual needs. Teachers needed to establish measurable goals that allow them to recognize the achievements of the students in their performance (Bateman & Herr, 2006).

Secondly, the interview data showed that teachers emphasized the need to understand the child better and suggested that this is done by meeting parents in school. This finding was supported in Table 4.5, by item 18c (I improve my understanding of SEN education by meeting with parents in school to discuss the student's progress) in the questionnaire with a high mean of 3.71. Excerpts from the interview with teacher 1 support the quantitative data findings:

Teacher 1: *"A special educational needs teacher needs a lot of patience and need a lot of learning from the student, and the parents too."*

These findings showed teachers' willingness to learn from parents on the best practices and strategies to guide the SEN students. As Shea & Bauer (2003) and Yell (1998) suggest, teachers need to develop appropriate activities after gathering information about the child from their parents. This modification in instruction to best guide the SEN students is also a thrust in the Individuals with Disabilities Education Act (IDEA) Amendments of 1997 (IDEA, 1997) highlighting similar views as this study. The findings from this study also

support Gerber's (2000) claims that understanding special education program services could be improved with information being provided to the teachers.

Finally, the interview data showed that teachers understanding of SEN emphasized the need for interaction between the SEN students and mainstream students so that SEN students may increase in self-confidence. This findings was supported in (Table 4.5, page 148), by item 22 (Positive role models for students with SEN are needed) in the questionnaire with a high mean of 3.88. Excerpts from the interview with teachers 2, 5 and 6 supports the quantitative data findings:

Teacher 2: *"SEN student has low self-esteem and needs help from the mainstream students, normal people around them so they are able to increase their self-confidence."*

Teacher 5: *"We want in this school as much as possible they're accepted. If they don't play together, how are they going to know each other?"*

Teacher 6: *"The best SEN intervention is through interaction. Interaction within their peers, the SEN friends or together with the mainstream students encourages self confidence among the SEN students."*

The findings showed an inclusive approach towards SEN provided students with and without disabilities major social interaction benefits. Hwang and Evans (2011) similarly revealed that teachers demonstrated an understanding of the social function of inclusion by indicating that students without disabilities learned to accept and understand people who were different from them. Teachers in this study also understand the difference between integrating and truly including students with disability as they would want students with SEN to be accepted among their peers as much as possible (Camargo, Pimentel, & Bosa,

2012; Sanini, Sifuentes, & Bosa, 2013). Desforges, Abouchaar, and Britain (2003) also asserted that pupils' social development is influenced by parents, family, and their peer groups. The goal towards inclusion involves learning with others and collaborating with others' learning which leads the students to be socially accepted, recognized, and valued by what he or she is.

The summary of the quantitative data analysis from the parents' questionnaire showed that parents (n=68) rated themselves with an overall mean score of 3.69 for the understanding about SEN domain indicating a high level of parents understanding about SEN. The interview data also highlighted a number of key things about parents' understanding of their child's needs. Firstly, all parents in the study understood that IEP meant as an individualized learning program. They were able to recognize their child's special needs and that through IEP individual attention is required for their children which was supported in (Table 4.6, page 149), item 18 (I can identify the strengths and weaknesses of my child from IEP), item 20 (IEP allows me to review the support given based on my child's needs) and item 21 (IEP is an effective document to determine the support required for my child) in the questionnaire with a high and moderate mean of 3.76, 3.68 and 3.62 respectively. Excerpts from the interview with parents 1 and 4 supports the quantitative data findings:

Parent 1: "*A special child can't concentrate. They need more time and then need a therapy for them.*"
Parent 4: *"Give them lessons at the level they can learn."*

Villa et al. (1990) reinforce these findings by noting that parents' involvement in programmes such as IEP is essential and that teachers need to constantly be sensitive to

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families' needs. The Individuals with Disabilities Education Improvement Act (2003) highlights that parents need to be aware that they could voice their concerns in their child's development and discuss them with the teachers based on their child's IEP.

Secondly, the interview data showed that parents understood that special educational needs focuses on the IEP objectives, and the various aspects of development of their children, prioritizing their immediate needs to acquire certain skills to become independent. This finding was supported in (Table 4.6, page 149), item 17a (I refer to the goals and objectives that have been determined when reviewing my child's IEP), item 17c (I refer to the goals and objectives that have been determined when receiving progress reports) and item 22 (IEP is required to ensure the services provided by teachers are sufficient in developing my child's potential) in the questionnaire with a moderate and high mean of 3.64, 3.74 and 3.72 respectively. Excerpts from the interview with parents 2 and 3 supports the quantitative data findings and showed parents understood that IEP was an effective special educational practise to determine the services and attention required by their child:

Parent 2: *"She is autistic. We really want her to be independent, more on the life skills rather than education. Through all the routine she will actually improve a lot I believe."*
Parent 3: *"His world is mainly an imagination world. We as parents need to understand this. All this are like training for him. Horse-riding, swimming, bowling. All have their own specialities."*

These findings reinforce those outlined by Mislan et al. (2011) which showed that parents understood that IEP was meant to cater to individual needs of their children and that they needed to be actively involved with the activities with their children at home. However,

other research by Rainforth and York-Barr's (1997), found that parents were usually left with little understanding on IEP implementation as well as the contents of the documents involved.

Thirdly, the interview data showed that parents seemed to understand the process of supporting their child in the school setting. This finding was supported in item 6 (I truly understand the process in supporting my child) with a high mean of 3.88. Excerpts from the interview with parents 1, 3, 4 and 5 supports the quantitative data findings:

Parent 1: *"I want her to improve. Because the golden age they say is within 0 to 6 years old. This special child needs a house wife you know for whole day to guide her."*

Parent 3: *"I send him to school so he can mix around. But for kids like this, we can't just follow what they want you know. We must be strict a bit. Sometimes, he will wash teacher's car. That is a step forward for him you know. His hands movement will help him write."*

Parent 4: "*I don't want to compare with other students, what he can do, let him do. He's slow to catch up, we understand. What is important I want my child to go to school, he learn, there is improvement."*

Parent 5: *"Let it be when she grows up, it's with these people. I don't want her to be left behind by her friends when she grows up later."*

Bauer & Shea (2003) suggest that school needs to encourage parents' participation in SEN and this will enhance their competencies. The next section focuses upon teacher-parent collaboration in willingness to communicate in matters pertaining to special educational needs.

5.2.1.2 Teacher-parent collaboration in willingness to communicate in matters pertaining to special educational needs

The overall mean score for teachers' willingness to communicate with parents was 3.43, indicating from teachers' perception, a moderate level of teachers' willingness to communicate with parents in matters pertaining to special educational needs. This quantitative finding supports that teachers' willingness to communicate with parents to encourage an exchange of information about the student's progress and development. It shows that both parties were keen to monitor the progress of the student at home and in school. These findings match the emerging themes in the interview data on teachers' willingness to communicate with parents in matters pertaining to SEN in this study.

The quantitative and qualitative data output were compared to confirm validity of findings. The questionnaire items and related data were matched to the corresponding themes from the qualitative output. This comparison showed a number of key themes. Firstly, teachers stated in both the questionnaires and the interviews that it was difficult for them to communicate effectively with parents due to factors such as the language of communication and the sheer frequency of meetings. This was supported in (Table 4.7, page 150), item 3 (My ideas on SEN practices for the students are accepted by their parents) and item 25 (It is easy to communicate effectively with parents about their child's SEN support) in the questionnaire with a moderate mean of 3.46 and 3.24 respectively. Excerpts from the interview with teachers 1, 3, 4 and 5 showed that teachers' believed it is important that they explain to parents about the SEN support in a clear manner so that parents would be able to understand. They also noted however that the language of communication and frequency of meetings was a challenge:

Teacher 1: *"It's difficult for us to talk to the parents. In this school it's the language of communication. Also the parent teachers' association meeting is not held often. So the only time we meet parents is the time students are going home or when they're sending their kids to school. That is the only opportunity, which we meet only one to two minutes. So it's very rare. Sometimes not the student's parents come to school, they will come at the end of the year only."*

Teacher 3: *"If can, we talk to them when they come to school, to fetch their children back in the afternoon, that time we will discuss what we need."*

Teacher 4: *"We communicate with parents to monitor their child at home. Sometimes there is no time to meet. Communication with parents is important because parents know their child best compared to teachers."*

Teacher 5: *"The communication is important. It's needed. We can help them. In the beginning, there was communication barrier in terms of language. But praise to God we have teachers who can communicate in Tamil. Some parents when we call them to come to see our presentation, they didn't come. They're busy. Usually we will meet parents when they sent their child to school, so we can talk to them."*

One of the main findings from this study is that communication between parents and teachers is an important pre-requisite of supporting the SEN student. As Collings (2007) notes, understanding and listening to parents is not easy. These results from this research are consistent with Barrett's (2005) study which noted that teachers felt communication was an important component in special education programmes in order to implement them efficiently. A survey by Johnson & Duffett (2002) revealed an overwhelming 70% of parents of children in special education reported the belief that children lose out if parents

are unaware of what their children are entitled to. Choudry (2014) similarly identified teachers and parents had open lines of communication and had agreed on the child needs.

Teachers in this research expressed their willingness to give feedback to parents on their child's development as teachers believed that it was fundamental for them to communicate with parents. This finding was supported in Table 4.7, by item 14 (I give feedback to parents on their child's development) and item 16b (I refer to the goals and objectives that have been determined when discussing with parents their children's progress) in the questionnaire with a high and moderate mean of 3.78 and 3.58 respectively. Excerpts from the interview with parents 2 and 6 supports the quantitative data findings:

Teacher 2: *"We share our views about SEN to parents. We will have a program with the parents, we will talk about their children. From there we're able to inform what is happening to their children in school."*
Teacher 6: *"Usually we'll call the parents and we'll start with a topic like what's needed to be done for their child. If there are challenges or problems, we will solve it together."*

Findings from this study are also in line with Lawson's (2003) research in which he showed that teachers and parents established meaningful relationships to allow better collaboration. Teachers emphasized they had to establish good relationship with parents in order to encourage the sharing of information and ideas. The data showed that teachers needed to 'teach' parents how to assist with their children's social development and academic performance at home (Bosi, 2004). Barriers in communication should be avoided as it might hinder openness and sincerity between teachers and parents. Exchange of information allows both parties to monitor the progress of the students at home and in

school (Christenson & Sheridan, 2001; Hendersen & Mapp, 2002; Serrano & Pereira, 2011; Lee and Low, 2013).

This doctoral study shows that communication is an essential component of effective teacher-parent collaboration. Teachers mentioned that their preferred method of communication was face to face and via a WhatsApp group chat for parents. This was supported in (Table 4.7, page 150), by item 9a (I invite parents to attend the meeting by personally calling them), item 9b (I invite parents to attend the meeting by sending the invitation letters to them by post) and item 9c (I invite parents to attend the meeting by sending the invitation letters to them via their child) in the questionnaire with a moderate mean of 3.23, 3.22 and 3.66 respectively. The interview data showed that teachers believed that the best way for them to enhance communication was through meeting personally with parents and discussing with them face to face. Teachers also mentioned a preference for a WhatsApp group chat for parents:

Teacher 3: *"If there is anything to share, I will usually call the parents' hand phone. Usually if we give a letter, out of 100%, only 40% will reply. Not everyone will give the feedback. Here we form a WhatsApp group for parents. Whatever info, we will place it there."*
Teacher 5: *"The most effective way is when we do a meeting with them."*
Teacher 6: *"The school also have a parent WhatsApp group where all the information can be directly sent there, which is very effective."*

These findings are consistent with Lee and Low (2013) which showed that all the teachers recognize the importance of teacher–parent communication. In another study, Lloyd &

Hallahan (2005) added that teachers need to initiate interaction and communication with parents or otherwise they may have little opportunities to be able to meet and discuss.

The quantitative data overall mean score for parents' willingness to communicate with teachers was 3.77, indicating that parents' perceived a high level of willingness to communicate with teachers in matters pertaining to special educational needs. The interview data from the study also highlighted a number of key things about parents' willingness to communicate in matters pertaining to special educational needs. Firstly, parents showed their genuine attempt to share information and progress of their children's through the efforts they took to communicate with teachers. The data showed that they needed to communicate with teachers to get feedback on their child's progress at school.

Also parents would respond accordingly by giving teachers information on their child's progress at home. This was supported in (Table 4.8, page 152), item 15 (I give feedback to teachers on my child's development) item 17b (I refer to the goals and objectives that have been determined when discussing with teachers my child's progress) and item 26 (It is easy to communicate effectively with teachers about my child's SEN support) in the questionnaire with a high mean of 3.82, 3.90 and 3.98 respectively. Excerpts from the interview with parents 2, 3 and 4 supports the quantitative data findings:

Parent 2: "*I have that open communication with teachers and they have that open communication with me also. So I don't feel scared to share with them my ideas or how I do things at home. I don't feel ashamed also to talk to them about my negative side, how I do things. So there's always that daily progress report they will give me and bout this IEP also they will tell me.*"

Parent 3: *"Parents will need to approach the teachers at school. We need to go and meet them. We go and see the teacher and suggest this and that. We need cooperation. We need to be transparent in the way we speak. When parents and teachers communicate, there won't be a problem. I actually feel comfortable."*

Parent 4: *"We just attend the meeting and parent's day. Anything we ask the teachers, they will answer."*

These findings highlighted parents' genuine attempt to share information and progress of their children through the efforts they took to communicate with teachers. This is consistent with Salembier & Furney (1997) who found that apart from parents' willingness to attend formal meeting, they also look forward to communication in other forms such memos, telephone calls, and casual conversations when they meet.

The data shows that parents have open communication with teachers and welcomed the sharing of ideas with teachers; they still felt challenged when communicating with teachers regarding the SEN practices and the proposed IEP for their child. There are some parents who expect teachers to do more in enhancing communication (Nast, 2001). This was supported in items 2a (*I feel challenged in SEN practices when I have to communicate with teachers) and item 2b (*I feel challenged in SEN practices when listening to the proposed Individualized Education Plan (IEP) with teachers) in the questionnaire with a high mean of 3.88 and 3.76 respectively. Excerpts from the interview with parents 1 and 5 supports the quantitative data findings:

Parent 1: *"I seldom go to meet the teacher. Never talk about sharing info. They are special education teachers, they know how to teach this kind of children."*

Parent 5: *"I don't communicate often with the teachers. Only if needed I will call, like when my child is sick I will call. It's just that. I feel I'm not good to talk on SEN aspect."*

Secondly, the interview data showed that parents would phone-call teachers to keep themselves updated if they could not attend IEP meetings. This was also reflected in item 9b (If I cannot attend the IEP meeting I call to get explanation and feedback from teachers about my child's progress) with a high mean score of 3.79. Excerpts from the interview with parent 2 supports these quantitative data findings:

Parent 2: *"I normally talk to them via WhatsApp. That's when they will communicate with me. There's always a communication. It's not on a specific time of the year where I meet them or anything."*

The findings of parents calling teachers to keep themselves updated if they could not attend IEP meetings are supported by McCoy (2000) who showed that informal interaction such as phone calls sometimes leads to more meaningful communication. Braley (2012) also indicates parents request for more open lines of communication and wished for more collaboration and communication with teachers. The next section in this chapter focuses specifically upon teacher-parent collaboration in their support of the implementation of special educational needs.

5.2.1.3 Teacher-parent collaboration in their perceived roles in the implementation of special educational needs

The quantitative data showed that the overall mean score for teachers' perceived roles in the implementation of special educational needs was at a moderate level of 3.56. Teachers play a major role in SEN practices at the school such as preparation of documentation work and reporting of IEP activities as well as to carrying them out accordingly for each student (Friend, Cook, Hurley-Chamberlain & Shamberger, 2010).

The quantitative and qualitative data were compared to secure reliability and validity of interpretations and findings. The interview data showed that firstly, teachers emphasized that it was important for them to meet the parents so that they could discuss and explain further to parents on SEN support. This was supported by (Table 4.9, page 153), item 5 (I make sure parents really understand what happens in the SEN support meeting(s)) with a moderate mean of 3.61, and item 10 (I make sure parents are given information which explain the content and goals for the meeting that is held) in the questionnaire with a moderate mean of 3.66 respectively. Excerpts from the interview with Teachers 1 and 3 showed once again the efforts that teachers made to get parents to be involved in their child's SEN by attending IEP meetings so parents are well informed, however few challenges exist explaining the moderate mean score:

Teacher 1: *"In terms of ideas, when we give an idea, half of the parents will listen, the other half still stick with their own opinion. So over here for teacher and parents it's really difficult to collaborate you know. So it's really difficult for us to share ideas with parents."*

Teacher 3: *"When we want to organize a meeting, here parents give less response. There is information that we want to deliver, is not delivered."*

As highlighted by Shapiro and Sayers (2003), teachers play an important role in informing parents about their children's learning outcomes as well the processes that they embedded to develop students' abilities. Teachers in this study said that they ensure parents truly understand the process in supporting their child. This was supported by item 6 (I make sure parents truly understand the process in supporting their child) with a high mean of 3.79. Excerpts from the interview with Teachers 2 to 6 support the quantitative data findings:

Teacher 2: *"We as adults, we need to help our children. Help the SEN students and also their parents for them to participate in the society."*

Teacher 3: "*We need to always follow-up with the parents, need to make them understand."*

Teacher 4: *"Teachers need to play a role in letting parents know what is taught in school, needs to be done at home too."*

Teacher 5: *"In the beginning there was parents that do not really understand, we explain to them everything. We will record a video and show to parents how their child is in school."*

Teacher 6: *"We need to explain really clearly so they'll understand."*

Eptein (1995) and Galinsky (1990) highlight that teacher-parent collaboration could be enhanced when teachers illustrate positive approaches to attracting parents to participate in their children's education.

Secondly, in the interviews, teachers expressed their willingness to organise meetings so information to help the child could be conveyed to the parents and a discussion could be

held by both sides to determine the child's IEP. Teachers interviewed in the study stressed that they determined students' objectives in IEP in which parents' agreement was sought during discussion. The data showed that teachers noted that they needed to respect parents' views and necessary changes could be made once both parties had agreed on the students' IEP activities. This finding was supported in Table 4.9, by item 11 (I determine the short term IEP objectives for student's SEN support) and item 12 (I determine the long term IEP objectives for students' SEN goals) and item 13 (I prepare all the IEP documentation needed to be presented to parents) in the questionnaire with a moderate mean of 3.46, 3.50 and 3.49 respectively. Excerpts from the interview with Teachers 1 and 4 supports the quantitative data findings:

Teacher 1: *"Teachers will suggest what they have observed and forward to parents for them to view it. If they feel ok, they will say go on. If they feel it's not ok, they can add-on what they need."*

Teacher 4: *"It's good to actually share ideas with parents because parents know their child better. The IEP I'll do it with parents. I ask what the parents' opinion are."*

The interview data showed that teachers believed that they should respect parents' views with regards to IEP. Cashman's (2006) study similarly suggests that parents feel offended when teachers do not communicate with them or ignored their suggestions. This finding was also supported by Soodak and Erwin (2000) who found that all parents wanted regular feedback from teachers to feel respected and valued. The study showed that the majority of the teachers agreed that the objectives of IEP should be prepared by them before presenting them to the parents, during IEP meetings which parents were strongly encouraged to attend. In these meetings parents would decide whether they agreed on the objectives set for their

children. If they did, they were required to sign an agreement. Otherwise, teachers would then consider parents' suggestions and then make necessary amendments to students' IEP after discussing with parents again.

It has been posited that such positive interaction should be encouraged because when teachers find ways to help parents they are encouraged to dedicate themselves in their child's development (Lynch & Hanson, 1992). Teachers' views in this doctoral study was in contrast to Steinberg (1996) where teachers were hesitant in sharing their proposed ideas as they did not want parents to have bearings on their thinking and work. Gartin et al, (2002) and Cramer (2006) added that teachers may feel pressured in taking up these responsibilities but they cannot avoid the fact that parents have the right to make decisions in their child's education.

The quantitative data about parents' perceived roles in the implementation of special educational needs showed that the overall mean score was at 3.73. The interview data about parents' perception of their roles also highlighted a number of key findings. Firstly, parents shared teachers' attempts to explain the IEP process and they agreed to play their role in its implementation. Secondly, parents take pride in carrying out their responsibilities to help their own children. They were able to see that they need to be involved in their children's education to help them improve further. This finding was supported in (Table 4.10, page 154), item 5 (I make sure that I really understand what happens in the SEN support meeting(s)) and item 8 (I make sure that I attend my child's IEP meetings whenever I am invited) with a high mean of 3.75 and 3.70 respectively. Excerpts from the interview with Parents 1 to 4 showed that they are keen to carry out their roles in IEP. Parents' viewed that

they should also play their part in their child's learning. They mentioned that they would try to follow up with IEP activities taught to their child at home:

Parent 1: *"What the school needs, we want to help. What I can help, I help. I want to push her improve in academic. Saturday I send her go to speech therapy and other therapy."*

Parent 2: *"I've met teachers about IEP. We also send her to speech development and occupation therapy."*

Parent 3: *"I did give him physiotherapy and mental therapy outside. As parents we should be more involved in the school. Ask teacher, get yourself involved. When we are involved in the school, we will know our child's problems. Indirectly we have drawn closer to the teachers. We need to be together. Teacher's role and parent's role needs to be close."*

Parent 4: *"I need to push him to study. Teachers give lesson, parents also needs to push at home. We need to collaborate together to help these children then we can see their future is good, support in their studies."*

Findings in this doctoral study showed parents were keen to carry out their roles in IEP implementation. This findings are contrary to Wanat (2010) where parents were frustrated with constant miscommunications in helping the special child because there were no defined roles between teachers and parents. Fish (2004) findings added to this by noting that the majority of parents thought they were not given the opportunity to express their concerns. A study by Noraini (2004) on parents' roles in special education had found that parents needed to understand the need for them to improve on their roles in programmes such as IEP to keep abreast with their children's education. Parents in this doctoral study believed that they could have a say and could give suggestions to teachers if they wanted.

Orentlicher (2003) noted that as decision makers, parents needed to be involved in the evaluation process and intervention planning to further support their child's school development. However there may be other factors that may impede their roles include high working demands and thus having less time with family as well as lacking in skills to carry out the activities effectively (Christenson & Coloney, 1992). The next section focuses on teacher-parent collaboration in their expectations of each other's role in the implementation of special educational practices.

5.2.1.4 Teacher-parent collaboration in their expectations of each other's role in the implementation of special educational practices

The quantitative data about teachers' expectations of the parents' role in the implementation of special educational practices showed the overall mean score was at a moderate level of 3.57. Teachers' expectations of the parents' role was focused more on parents' involvement and support in special educational needs practices at home and the process in assisting them at the IEP meetings. Teachers strongly believed that much more could be achieved if parents showed more concern and willingness to be involved. This might explain why their overall mean score was not in the high range.

The quantitative and qualitative data were compared to secure reliability and validity of findings. The interview data of teachers' expectations of parents' role in the implementation of special educational practices showed that firstly, all teachers agreed that they welcomed parents' active participation, cooperation and would appreciate home activities to supplement SEN practices rendered in school. This was supported in (Table 4.11, page 154), item 7 (I welcome parents' cooperation to enhance the SEN practices being

offered) in the questionnaire with a high mean of 3.88. Excerpts from the interview with Teachers 1, 4, and 5 states teachers hoped parents could participate more actively in their children's IEP. Among other things, teachers hoped that parents could cooperate, participate and carry out the special educational needs practices at home to further enhance students' abilities:

Teacher 1: *"In the teacher parent association, we inform the parents what's happening, what are the student's problems. We expect them to let us know what they would like the IEP objective be for their child."*

Teacher 4: *"Parents play the most important role because these student's time mostly are at home compared to in school. Parents can play a role like observation. When there is communication with teachers, it will assist us. We will receive the information that we can't gain in the school."*

Teacher 5: *"Parents play an important role. Parents needs to give cooperation. We request them to do home based activities that will improve the child."*

According to Ralabate (2002), concerns such as parents' active participation in their children's IEP and their cooperation in carrying out the special educational practices at home are common as it involves teachers' understanding parents' problems as well as their feelings towards SEN practices. The research evidence would suggest that it is important to look at ways to help parents overcome their problems rather them forcing them to carry out the activities when there were barriers that prevent parents from giving their support (Payne, 2001; Fiedler, 2000). Swap (1992) reiterated in his model that although parents were encouraged to provide home support in their children's education, it was important that they were equipped with skills that allowed them to do so. Research evidence shows

that teachers need to involve parents in all aspects relating to the development of their children (Dunst & Trivette, 2001, 2009; Sameroff & Fiese, 2000; Sameroff, 2010).

Secondly, in the interview data, teachers also expressed their concern that some parents tended to neglect their responsibilities in playing their roles such as providing full support by attending meetings, and checking on the child's homework. This was supported in Table 4.11, by item 8b (If the parents cannot attend the meeting they call to get explanation and feedback from me about the student's progress) in the questionnaire with a moderate mean of 3.25. Teachers felt that parents sent their child to school but at the end of the day, they involvement is worrying as their children's homework is neglected and there is no follow-up to the IEP meetings scheduled if they were to miss the meetings. Excerpts from the interview with Teachers 1, 3 and 6 supports the quantitative data findings:

Teacher 1: *"Parents need to really know about their child's development, they need to give full support."*

Teacher 3: *"The parents maybe are working, yes, but we need to spend time. Even how busy they are also, they need to spend time."*

Teacher 6: *"Parents needs to see and check the children's homework, has the child done it? Not yet done it? So these things are important for us to monitor our child's development. When the child goes home, check if there are homework for the child."*

Spinelli (1999) emphasized that teachers' negatives views of the parents could impede cooperation efforts. It was noted that teachers should take a more proactive approach, avoid feeling frustrated when teachers' initiatives did not work out as expected (Hoover-Dempesy, Walker & Sandler, 2005), they should address all obstacles and explore into

ways to solve the problems (Bauer & Shea, 2003). Parental involvement should be encouraged by teachers and services that deal with them to support their children (Correia, 2010).

The summary of the quantitative data (refer to Table 4.45, page 207) analysis from the parent questionnaire showed that parents (n=68) rated themselves highest on the expectations of teachers' role in the implementation of special educational practices (3.86) which implies that parents rated expectations of teachers' role in the implementation of special educational practices as the most vital in a collaboration process with teachers. These findings support the emerging themes in this doctoral research study.

In this mixed methods study, the quantitative and qualitative data were compared to secure reliability and validity of findings. Firstly from the interview data, parents expressed that teachers had explained all the necessary information that they needed to know on their child. Parents appreciated teachers' efforts and thus would be more considerate in their expectations towards teachers. This was supported in (Table 4.12, page 156), item 4 (The teacher explains to me in detail about SEN support before the IEP meeting), item 11 (I am given information which explain the contents and goals for the meeting that is held), item 14 (The teacher prepares all the IEP documentation needed to be presented to me) and item 23 (I am satisfied with the cooperation given by teachers involved in the IEP process) with a high mean of 3.81, 3.81, 4.01 and 3.89 respectively. Parents seemed to be rather contented with the service that teachers gave and showed in SEN implementation:

Parent 3: *"The teacher categorise them you know. This kid, in this class. That kid, in that class. Like they do camping. They mix together. Mix with the normal kids. Like sports also*

mix with the normal kids. From that aspect, the interaction has no problem. Teacher gives a lot of cooperation."

Parent 4: *"Teachers will sometime inform they will teach something different like do some cakes, do some biscuits, something else students have to learn."*

Parent 5: *"At the special educational needs school here there is no problem."*

Fernandes et al. (2014), also observed that parents have high expectations of teachers towards their child's education. They expressed the way in which parents' positive expectations has direct relation with the participation of SEN students in school activities.

Secondly from the interview data, parents also voiced their satisfaction in the frequent attempts by teachers to communicate with parents through face to face meetings, WhatsApp and letters rather than just limit the communication attempt to just a phone call. This explains item 9a (If I cannot attend the IEP meeting the teacher calls and discusses my child's progress with me over the phone) moderate mean of 3.55. Excerpts from the interview with Parents 1 to 5 support the quantitative data findings:

Parent 1: *"When teachers see me when I'm sending my child to school, they will come to talk to me. What they need, what they want."*

Parent 2: *"You feel safe and secure when the teacher come and talk to you. Teachers here will attempt to come and talk to me even the negative side of my child."*

Parent 3: *"Teachers will inform the parents the school program, any activity via WhatsApp."*

Parent 4: *"Teachers usually will write a letter and pass to my child for me to attend meetings. Every meeting it's like this."*

Parent 5: *"Teachers give a letter for events or anything, they will invite. If there is anything, the teacher will call."*

Parents in the study also acknowledged teachers' effort in guiding and educating their children by their confidence in allowing teachers prepare their child's IEP learning objectives. This is reflected in item 12 (I expect the teacher to determine the short term IEP objectives for my child's SEN support), item 13 (I expect the teacher to determine the long term IEP objectives for my child's SEN goals) with a high mean of 3.75 and 3.93. Item 16 (In preparing for lessons, the teachers use the guidelines set by the school in determining the short and long term IEP objectives for my child) with a high mean of 3.94 further supported high regards of parents on teachers' and school' capability in determining what was required in their child. Parents also welcomed teachers' suggestions for home activities with item 7 (I welcome teachers' cooperation to enhance the SEN practices being offered to my child) showing a high mean of 4.04. Excerpts from the interview with parents 2 and 3 supports the quantitative data findings:

Parent 2: *"They'll give me better suggestion to improve what I've done. They also tell me what they do in school so that I'll implement it at home with my child. So it has the same balance with the school activity."*

Parent 3: *"Regarding teaching styles also we ask for teachers' opinion. We would like it that way."*

Research confirms this finding by showing that where understanding and good relations has been established, sharing of ideas and problems would be more possible, thus avoiding any disagreement (Salend, 2005).

5.2.2 Research question two: To what extent does students' social interaction among SEN and mainstream pupils exist, as perceived by teachers?

Social interaction is often a major obstacle for students with special needs (Wendelborg & Tøssebro, 2011). These students are often incapable of expressing their thoughts and feelings leading to hindered social interaction development (Wendelborg & Tøssebro, 2011). Interpersonal relations have been the focus of interest in various studies in the field of human and social sciences. Integration of children with special needs became, and still is, a current theme and an important aim (Koster et al., 2007). Apart from complying with children's right to be educated with their typical peers in public schools and improving academic performance, increasing the social inclusion of students with special needs is a major initiative towards total inclusion. Parents often report the latter as being their first motive for sending their child with special needs to a regular school (Sloper & Tyler, 1992; Strayhorn & Strain, 1986). They wish their child to build positive relationships with mainstream students. Research confirms that SEN children can learn a tremendous amount from listening to peer interactions and peers providing assistance (Simmons, Fuchs, Fuchs, Mathes, & Hodge, 1995).

In the doctoral study, teachers were asked to share their views on to what extent does students' social interaction among SEN and mainstream pupils exist. The quantitative and qualitative data were compared to secure reliability and validity of findings. The mean score for the friendship domain among SEN and mainstream pupils as perceived by teachers was at a moderate level of 3.57. From the interview data, teachers expressed that there exists a bond of friendship between mainstream students and the SEN students. Students are able to mingle with each other. This finding was supported in (Table 4.13,

page 157), item 1 (the students with special needs is able to make friends in the classroom), item 12 (the student with special needs belongs to a group of friends in their class) and item 13 (the student with special needs belongs to a group of friends from mainstream classes) with mean range of moderate to high 3.67, 3.80 and 3.28 respectively. Excerpts from the interview with Teachers 2 to 4 support the quantitative data findings:

Teacher 2: "*Students are able to mingle with each other. There are SEN students placed at the mainstream classes for them to learn and they can help each other in their studies.*"

Teacher 3: *"They have become friends, they know each other so well. This is because of some activities they are involved together."*

Teacher 4: *"They've become friends. So the SEN student that joins the inclusive class will not feel isolated because they have friends, they can mingle easily and talk. They are more comfortable in their friendship."*

In their research, Davis et al. (2002) emphasize the importance of peer relations and friendships between students with special needs and their typical peers. It is advocated that inclusion helps develops social, language, communication skills (Irmsher, 1995). However, children with special needs in regular schools have relatively more difficulty in participating socially in regular education. (Bramston, Bruggerman, & Pretty, 2002; Kuhne & Wiener, 2000; Le Mare & de la Ronde, 2000; Pijl, Frostad, & Flem, 2008; Soresi & Nota, 2000). More often, research shows, SEN students also lack the knowledge about how to join in group activities effectively (Jackson & Bracken, 1998; Ollendick, Weist, Borden & Greene, 1992). These findings are consistent with De Monchy et al. (2004) who showed that the social position of the pupils is described in terms of being liked, performing a task

together and having a number of friends. In his study, Harper et al. (1999) indicated the benefits of inclusion included improved friendship patterns within the classroom.

The mean score for the interactions domain among SEN and mainstream pupils as perceived by teachers was at a moderate level of 3.56. Interview data highlighted teachers' comments on active social interaction between mainstream students and the SEN students. They are able to play and have fun together in activities. This was supported by the quantitative data in (Table 4.14, page 158), item 3 (the student with special needs regularly has fun with their classmates), item 4 (the student with special needs are involved in activities with their classmates), and item 8 (the student with special needs are asked to play by their classmates) with a high mean of 3.87, 3.73 and 3.68 respectively. Excerpts from the interview with Teachers 2, 3, 5 and 6 supports the quantitative data findings:

Teacher 2: *"The mainstream students and the SEN students do interact with one another. So far there is no problem. There exist a positive interaction among them."*

Teacher 3: *"They can play together."*

Teacher 5: *"If they play football, they will kick the ball towards each other. I kick to you, you kick to me. So that is the time there is laughter and smile. There's joy and fun. Now they can play together."*

Teacher 6: *"Within themselves when we're training together at the field, they are cheerful and mingling with each other. Mainstream students started socializing with the SEN kids."*

Teachers' comments on active social interaction between mainstream students and the SEN students could possibly explain reasons why item 2 (the student with special needs are teased by their classmates) and item 5 (the student with special needs are teased by their

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mainstream peers) recorded a moderate mean score of 3.38 and 3.28. This finding is also reinforced in three case studies conducted by Cushing and Kennedy (1997) where they documented improvements in academic engagement, assignment completion, and participation for students without disabilities in the class who served as peer supports for students with moderate-to severe disabilities.

The mean score for acceptance by classmates domain was the highest rated by teachers at a high level of 3.76. Teachers expressed that there is a sense of acceptance between mainstream students and the SEN students as active interaction also happens during school recess time as supported in (Table 4.15, page 159), item 11 (the student with special needs eats together with their classmates) with a high mean of 3.96. Teachers also stated that there was close cooperation between mainstream students and SEN students in classroom activities as supported in item 10 (the student with special needs works together with their classmates on tasks) with a high mean 3.78. Excerpts from the interview with Teachers 2, 3, 5 and 6 supports the quantitative data findings:

Teacher 2: *"The mainstream students can accept the SEN students. They've become close, communicates with one another. Even during recess, they talk."*

Teacher 3: *"A mainstream student helped to tie the shoelace of the SEN student who can't do it. Meaning the student can accept the SEN student wholeheartedly. If they can accept each other, it's easy for them to mingle."*

Teacher 5: *"Mainstream students don't look down on the SEN students anymore."*

Teacher 6: *"We also see a close cooperation in class."*

This finding is contrary to research on social acceptance where results consistently shows that students with special needs are less accepted than their classmates without special needs (Freeman & Alkin, 2000).

5.2.3 Research question three: To what extent does students' social interaction among SEN and mainstream pupils exist, as perceived by parents?

Parents were asked to share their views on to what extent does students' social interaction among SEN and mainstream pupils exist. The qualitative and quantitative data are compared and discussed below.

The mean score for the friendship domain among SEN and mainstream pupils as perceived by parents was at high level of 3.70. From the interview data, parents generally observed that their child with special needs had no problem in building friendship. Parents also shared the fact that their child gets invitation to birthday parties by their mainstream peers. This was supported in (Table 4.16, page 160), item 1 (My child is able to make friends in the classroom), item 2 (My child has after school play dates), item 3 (My child gets invitation to birthday parties), and item 13 (My child belongs to a group of friends in the class) with a high level mean of 3.96, 3.75, 3.76 and 3.79 respectively. Excerpts from the interview with parents 1, 2 and 5 supports the quantitative data findings:

Parent 1: *"She can mix together. She can have other friends. She's not alone."*

Parent 2: *"There was once her friend invited for a birthday party, it was a normal child. She was telling us about this normal friend that she had who was so nice to call her to come for a birthday function."*

Parent 5: *"All the normal kids are her friends. She has 50 over friends."*

Research has repeatedly shown that inclusion of students with special needs does not automatically lead to an increase of positive contacts and friendships between these students and their typical counterparts (Guralnick, Connor, Hammond, Gottman, & Kinnish, 1996; Guralnick, Hammond, Connor, & Neville, 2006; Guralnick, Neville, Hammond, & Connor, 2007; Lee, Yoo, & Bak, 2003; Monchy, Pijl, & Zandberg, 2004; Scheepstra et al., 1999). Parents expect integration will increase the opportunity for their child to learn how to handle social situations, make friends and integrate into the local community (DeMonchy et al., 2004).

The mean score for the interactions domain among SEN and mainstream pupils as perceived by parents was at high level of 3.81. From the interview data, parents shared their observations on active interaction between their child with special needs and the mainstream students and noted that often they mingle, interact and play together. Items 4 (My child is included in activities by fellow classmates), and item 7 (My child are asked to play by fellow classmates) in (Table 4.17, page 160) supports this views with all indicating a high mean of 4.07 and 3.88. Excerpts from the interview with parents 3 and 4 supports the quantitative data findings:

Parent 3: *"He will play with the normal kids. He interacts, no problem. He joins with the normal kids."*

Parent 4: "*He has no problem in interaction.*"

Many parents of children with special needs hope and expect that the physical presence of their children with other children will lead to their social interaction with others (Sloper & Tyler, 1992; Strayhorn & Strain, 1986). Parents generally wish for their child to build positive relationships with mainstream students.

Cartledge and Johnson (1996) define social integration as: being an accepted member of a group, having at least one mutual friendship and participating actively and equivalently in group activities. The mean score for acceptance by classmates domain was the highest rated by parents with a high level of 3.92. From the interview data, parents expressed their joy in their child now being accepted by their peers. A positive sign about this aspect from every parents was the fact that their children now look forward to school every morning as reflected in item 15 (My child is happy attending school) in the questionnaire with a high mean of 4.26. Excerpts from the interview with parents 4 and 5 supports the quantitative data findings:

Parent 4: *"He likes the school, he won't cry. Every day he goes to school."*
Parent 5: *"She feels comfortable and happy to go to school. Morning she gets up to go to school very fast. It's not difficult to wake her up. When she comes back home also she's happy. She always says her teacher and friends is good Mom."*

Stinson and Antia (1999) emphasise the importance of peer acceptance and friendship and consider peer interaction to be important for social integration. They emphasise the ability to connect with their peers, with and without special needs, constitutes an important index of social integration. They define the latter as the ability to interact with peers, make friends

with peers and be accepted by peers. This is a positive sign about the student's growing confidence, acceptance and interaction among themselves and their mainstream peers.

According to Cambra and Silvestre (2003), one of the factors which plays an important role in social integration is 'peer group socialisation'. They consider social acceptance to be the essence of social integration. The approach presents both a challenge and opportunity for many educators (Ali, Mustapha, & Jelas, 2006; Barr, Schultz, Doyle, Kronberg, & Crossett, 1996).

5.2.4 Research question four: What is the relationship between teacher-parent collaboration and students' social interaction as perceived by the teachers?

In this study, teacher-parent collaboration was demonstrated to be vital to encourage students' social interaction that indicated an active social inclusion process. The relationship of teacher-parent collaboration on students' social interaction was investigated by analyzing the correlation between teacher-parent collaboration and the students' social interaction, in the ten buddy support system pilot schools.

Teachers' understanding about the SEN domain had a positive correlation with all two students' social interaction domains of interactions and acceptance by classmates. This indicates that teachers in this study understood collaboration as a vital component in a social inclusion process. Many studies showed that an inclusive school emphasizes the professional expertise of working as a team (Ainscow & Sandill, 2010). This findings are contrary to Mousouli, Kokaridas, Angelopoulou-Sakadami, and Aristotelous (2009) study who show that sometimes teachers have a limited understanding of disability and special

education, they are unfamiliar with the idea of inclusion. Camargo, Pimentel, & Bosa (2012) and Sanini, Sifuentes, & Bosa (2013) highlights the importance of teachers understanding the difference between integrating and truly including the student with a disability.

According to Brownell, Sindelar, Kiely, & Danielson (2010), special education teachers work in broad learning environments – which also include children without special needs, other professionals, parents, and members of the community. They have to relate to the general environment of the child, and the broader circles of life, they need broad and innovative disciplinary knowledge, and must have an in- depth organizational understanding, the ability to cooperate in a team, and also the ability to lead work teams. Ali, Mustapha and Jelas (2006) study show that special education teachers understood that collaboration is important on the implementation of special educational needs.

According to Olufemi & Oluwadami, (2014), for Malaysia to realize its special education goals, there are a number of factors that must be taken into account. These range from family and school partnerships, well-structured and constructed individualized education programme plans, and parental involvement. A process of collaboration between teachers and parents should be focused on understanding a child's potential and resources in the contexts of his or her education, involving the sharing of information and observations as well as organization centered on the family (Serrano & Pereira, 2011).

5.2.5 Research question five: What is the relationship between teacher-parent collaboration and students' social interaction as perceived by the parents?

The relationship of teacher-parent collaboration on the students' social interaction was investigated by analyzing the correlation between teacher-parent collaboration and the students' social interaction in the ten buddy support system pilot schools as perceived by the parents.

The results showed that there was significant correlation obtained for all four aspects of parents collaborative roles on their understanding of special educational practices, their willingness to communicate with each other, their perceived roles as well as their expectations of teachers with all three of students' social interaction domains on friendship, interactions, and acceptance by classmates. Parents in this study realized the importance of collaboration for the successful implementation of special educational practices to encourage students' social interaction. Jelas (2000) in his study explains that parents preferred their disabled children to be in mainstream schools, mainly for the opportunities it provides in terms of developing communication and social skills, and friendship ties with 'normal' children. Also, the stigma attached to disability is less apparent because 'in normal classrooms [students with special needs] are treated like any other students (Jelas, 2000, p. 192).

The strongest correlation in the quantitative data was between parents' expectations of teachers' role in the implementation of SEN domain with the acceptance by classmates domain. This finding indicates that students' acceptance by classmates is more likely to develop with parents' expectations of teachers' role in the implementation of SEN. Parents

hope and expect from teachers that physical integration – 'being there' – will lead to their child participating socially with their peer group (Scheepstra, Nakken, & Pijl, 1999). In a study by Fernandes et al. (2014), parents were observed to have high expectation of teachers towards their children's education. They expressed their positive expectations regarding the impaired teenagers.

Team work is a necessary factor of change required in school and it must include the principles of cooperation and collaboration as key, so the expectations does not lie in the work of the special education teachers (Tonini et al., 2014). As is reflective of practices throughout Malaysia, the expectations of the special education teachers in terms of inclusion is to get the student *ready* to be placed in regular classes. This interpretation of inclusive practice is described in literature as integration, the more traditional form of including students with special needs (Lee, 2010).

Parental support and involvement, moreover, is regarded as being greatly important in facilitating an inclusive education environment (Palmer, Fuller, Arora, & Nelson, 2001). Furthermore, Desforges, Abouchaar, and Britain (2003) asserted that pupils' achievement and social development are influenced by parents, family, peer groups and their neighbourhood.

5.2.6 Research question six: To what extent and in what ways is the buddy support system effective, as perceived by teachers?

It's often a challenge for students with special educational needs (SEN) to develop ongoing, positive social relationships with mainstream education students. Much of the interaction

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among students with SEN and mainstream education students is centered in an academic setting. One of the most important aspects of the school experience is the social and emotional life of the child.

The objective of the buddy club is to build positive peer relationships through play & sports between students with special needs and their mainstream education counterparts in a socially-inclusive environment (Calabrese et al., 2008), allowing them to enrich their experience (Balqis, 2013) and achieve their full potential in the game while at the same time boosting their physical well-being. This is also an important initiative to encourage mainstream students to have more empathy for those with disabilities. The goal of the buddy support system is to provide a pathway for students with disabilities to enter into and become accepted into the school's social networks (Miller, Cooke, Test, & White, 2003, Schlein, Green, & Stone, 1999).

Teachers were asked to share their views on to what extent and in what ways is the buddy support system effective. The qualitative and quantitative data are compared and discussed below. Teachers (n=95) rated the understanding of the co-curriculum domain at the moderate level of 3.56. From the interview data, teachers generally understood the objectives of the buddy support system i.e. to encourage interaction among SEN students and mainstream students and to boost their physical well-being. This was supported in (Table 4.21, page 165), item 1 (The Buddy Support System is clearly understood by myself) with a moderate mean of 3.62. Excerpts from the interview with teachers 1 to 6 supports the quantitative data findings:

Teacher 1: "*SEN children even though their level is lower than peers of similar age, they are supposed to be placed among these normal kids so they're more motivated to interact. The objectives of the buddy club are to create awareness of special needs. They want to form a social inclusion between mainstream students and SEN students. We encourage them to meet people, enter into co-curriculum activities with the mainstream students of similar age.*"

Teacher 2: *"The buddy club was formed to involve the SEN students and the mainstream students. The buddy club's objectives are to create a space for SEN students and the mainstream students to interact with one another and to provide opportunity to the SEN students to be accepted among mainstream students and for equality."*

Teacher 3: *"What's important is the interaction here in this program. We don't place barrier saying this is SEN student, we give all equal opportunity."*

Teacher 4: *"The buddy club wants to further improve the social interaction between mainstream students and SEN students so the SEN students are not isolated. It's also to instil good cooperation between these students and improve their psychomotor skills. The students that were previously weak in walking, now they can walk slowly. When the training is repeated many times, it will strengthen their legs more."*

Teacher 5: *"The objective of the buddy is the tagline 'We play together, we grow together'. If they can play together, they can grow together so they can be accepted by the society later."*

Teacher 6: *"The buddy club's objective are mainly is to socialize the mainstream students and the SEN students."*

From the interview data, teachers also mentioned they used techniques such as grouping SEN and mainstream students together to achieve the aims of the buddy club program. This

is done mainly to encourage communication and cooperation between the students. This could possibly explain the high mean of 3.74 for item 11 (The Buddy Support System guidelines are helpful). Excerpts from the interview with teachers 2 to 6 supports the quantitative data findings:

Teacher 2: *"I will merge students with SEN and students from mainstream, they need to communicate and work together. Mostly through play because it's the children's instinct. They really love play. They will do a lot of activities together. So in there, we get strengthen the relationship between themselves. I will involve them equally and I will instil moral values there."*

Teacher 3: *"We do activity in groups with the mainstream students. Sharing and socialization will form interaction among the two groups of students. Mainstream kids are like a mentor-mentee for this program."*

Teacher 4: *"Before they play football, they need to divide into groups first. I will ask the student first which group they want to be together in. So here communication happens. Apart from that they will also cooperate. It's better to have groups. When learning in groups, we need to merge all levels of the students. We need to merge the weak and the strong so they will work together, and help each other. I always use group technique."*

Teacher 5: *"We include 12 kids with the normal kids in camping and sports. We also teach them to eat together in the canteen. If they eat together in the canteen, they're accepted. That's important. They will also play together."*

Teacher 6: *"I do an indoor activity mixing the mainstream and SEN students in the same group. Children really love sports and games. It helps create cooperation between mainstream and SEN students."*

Observation of a video recording on a buddy club activity also showed evidence the buddy activities are done in groups with the presence of 3 SEN students and 1 mainstream student. Also cooperation and active communication and learning were evident in the group work. Observations also confirm students are comfortable with each other's company in a small group and focused on completing the task at hand.

From the interview data, teachers also mentioned the equal opportunity afforded to SEN students through the buddy club program and its long term goals of SEN students being accepted by society in the interview data. This could explain the moderate mean score of 3.61 for item 12 (The Buddy Support System meets my expectations of supporting students with SEN) in (Table 4.21, page 165) as the buddy club program is viewed as a long term goal and a developing process:

Teacher 3: *"Once they've known that student, next time it's easy for them. If we seclude ourselves, don't do a program together, they won't know their self and their friends."*
Teacher 5: *"They will have their confidence, they will have their ways to be independent. All these actually can form a student who is holistic. From the co-curriculum they can start in academics. Because when they can interact, they have their self-confidence, when they enter into the inclusive class to learn together with the normal kids, they won't have a problem."*

The goal of the buddy support system is to provide a pathway for students with disabilities to enter into and become accepted into the school's social networks (Miller, Cooke, Test, & White, 2003, Schlein, Green, & Stone, 1999).

Teachers (n=95) rated the influence domain of the buddy support system the highest at the mean score of 3.70. The mean score was rated at a high effectiveness level. The interview data also revealed teachers mentioned the buddy support system encourages play between SEN students and their peers. SEN students, they said, were now more confident and are able to interact. Their confidence and their self-esteem had also increased. This was supported in Table 4.22 (page 166), item 5 (The Buddy Support System enables students with SEN and their peers to play together) and item 6 (The Buddy Support System has a positive effect on the student's interaction with others) with a high mean of 3.78 each. Excerpts from the interview with teachers 1, 3, 4, 5 and 6 supports the quantitative data findings:

Teacher 1: *"It encourages the SEN students to play with other normal people. They will gain more confidence. When there is buddy club program, they are motivated in watching others play, they also want to join in the activity even though they can't kick."*

Teacher 3: *"They're comfortable in a group. The SEN students can interact. They can follow together to play. They will have confidence and their self-esteem will increase. They will feel easy to communicate."*

Teacher 4: *"I see the SEN students gave a good response. There is some who don't talk much, now talks a lot. From those who always sits alone, when there's play, they will participate. So it's good also this buddy club actually."*

Teacher 5: *"Since the buddy club was established, I can see improvement in their interaction. The mainstream students come here to play together. They don't see the kids here is different now."*

Teacher 6: *"When they join the buddy club, they will play football together at the field, after that they will also play indoor games together in the recreation room, so it really helps."*

This findings matches Miller et al. (2003) research on the effects of Friendship Circles where a higher percentage of appropriate interactions were recorded for all three of the target students and their peers following introduction of the intervention. The findings also matches Frederickson and Turner (2003), Kalyva and Avramidis (2005) research showed that students with special needs who participate in a buddy support system increased their communication and social interaction skills.

The interview data also revealed teachers were pleased with the buddy club program and expressed their desire for this program to be recommended to others. This is supported with item 13 (The Buddy Support System can be recommended to others so they get support for their SEN students from such a program) with a moderate mean of 3.63. Teachers said that the program helps in the inclusion and acceptance process between the mainstream students and their SEN peers. They noted that SEN students who have gone to mainstream classes won't feel secluded or excluded:

Teacher 2: *"The buddy club should be expended throughout Malaysia, not only here because it's here the mainstream students can accept the SEN students, and the SEN students can accept the mainstream students."*

Teacher 3: "*Most schools don't have a program that involves both these groups together. Every school needs to do this program. Buddy club is also inclusive and we can achieve 23-25% (inclusion) this year. Because one of the ways the buddy club can help us achieve this*

target is that the students here mostly know the mainstream students over there. So when

we place them there, they won't feel secluded or excluded."

Teacher 6: *"As an inclusive school, the buddy club really helps prepare the SEN students to*

go to mainstream classes."

Teachers (n=95) also rated the benefit domain of the buddy support system the highest at

the mean score of 3.70. The mean score was rated at a high effectiveness level. Teachers

also shared on the benefits of the buddy support system. Interview data revealed among the

benefits that they noted were its success in creating social interaction between mainstream

students and the SEN students. They noted that students now know each other better not

only in appearance, but in their names too. This was supported in (Table 4.23, page 166),

item 4 (The Buddy Support System builds positive social interaction among students with

SEN and their peers) with a high mean of 3.87. Teachers also mentioned in the interview

that the buddy club creates a space for SEN students to mingle with the mainstream

students compared to their previous situation where they were in their respective

classrooms and follows their respective syllabus. This was supported by item 8 (The Buddy

Support System helps students with SEN develop friendships with their peers) with a high

mean of 3.73. The interview data showed that the buddy club creates a healthy environment

where the interaction is not blocked and there are no barriers:

Teacher 1: *"It's successful in creating social interaction between mainstream students and*

the SEN students. They can walk together and chit-chat."

Teacher 2: *"If there is the buddy club, they might be able to interact at least once a week.*

So its bond for them. When there is buddy club, the relationship among SEN students and

mainstream students, the meetings among them are more often and they know each other. Not only they recognise the appearance, they recognise their names too."

Teacher 3: *"There is opportunity for them, to create a space where they can mingle with the mainstream students. They know each other better. Before that we were in the classrooms. Each of us follow respective syllabus. After its inception, we have interaction with ten students from the mainstream education. When they are there, they know the student there, because we have the buddy club program. Buddy club is like an ice-breaking for inclusive education. They can help the children as when they enter the mainstream class they recognise already the buddy club member. We created a healthy environment where the interaction is not blocked, there are no barriers there."*

Teacher 5: *"When the buddy is there, they play and grow together. Its integration, we are together. It's not limited to studies only, but from the aspect of inclusive co-curriculum, it will be a start for inclusive academic."*

Teacher 6: *"These games and sports enables them to interact with each other and with the mainstream students. Through the games they are able to interact with each other exchanging ideas. Apart from that, the mainstream students are able to recognise the characteristics and problems of the SEN students. The SEN and the mainstream are able to interact between themselves and we can see the self-confidence especially at the field when they are playing football together."*

It is understood that human learning occurs based on social relationships (Bronfenbrenner, 1977, 1979, 1995). The aim of inclusion is to enable students with special educational needs (SEN) to benefit from the upbringing and socialization processes at regular mainstream schools (Lo, 2007). This doctoral study found that the buddy club was a space for SEN students to mingle and develop relationship with the mainstream students. This

matches Newcomb and Bagwell (1996) and Bagwell (2004) which show that relationships provide the contexts of support for development, thereby facilitating social, emotional, and cognitive growth. The establishment of peer relationships and friendships between students with special needs and their peers without disabilities is viewed as an important outcome of school integration efforts (Cavallaro, Haney, & Cabello, 1993; Clunies-Ross & O'meara, 1989; Frostad & Pijl, 2007; Haring & Breen, 1992; Miller, Rynders, & Schleien, 1993; Miller, Cooke, Test, & White, 2003; Roberts & Smith, 1999).

5.2.7 Research question seven: To what extent and in what ways is the buddy support system effective, as perceived by parents?

Parents were asked to share their views on to what extent and in what ways is the buddy support system effective. The qualitative and quantitative data are compared and discussed below.

Parents (n=68) rated the understanding of the co-curriculum domain at a high mean level of 3.84. From the interview data, parents understood the objectives of the buddy support system and knew that it was to encourage interaction among SEN students and mainstream students. These findings indicate the importance of social integration, rather than physical integration alone, as a necessary component of educational programming for students with special needs (Miller et al., 2003). However, some parents only saw it as a football club. This difference in views could possibly explain the moderate mean of 3.66 for item 1 (The Buddy Support System is clearly understood by myself) in (Table 4.24, page 168). Excerpts from the interview with parents 1, 3 and 4 supports the quantitative data findings:

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Parent 1: *"I just know that she goes for exercise only."*

Parent 3: *"They have football with kids from the normal classroom. These SEN children they want to make them same as the mainstream students."*

Parent 4: *"Buddy club it's about football activity."*

Parents also understood part of the co-curriculum guideline is to help the child's social and physical development via sports and exercise and it meets their expectations. This was supported in (Table 4.24, page 168), item 9 (The Buddy Support System guidelines are helpful) and item 10 (The Buddy Support System meets my expectations of supporting my child) with a high mean of 3.93 each. Excerpts from the interview with parent 2 supports the quantitative data findings:

Parent 2: *"Their aims is mainly to help my daughter more in terms of her physical development. One thing good is that the football activity also includes the normal kids."*

Lindquist and Altemueller (2014) share this sentiment that students are helping each other learn instead of relying on the teachers as the exclusive disseminator of knowledge.

Parents (n=68) rated the influence domain of the buddy support system the highest at the mean score of 4.03. The mean score was rated at a high effectiveness level. The interview data also revealed parents positive views on the influence of the buddy support system. Parents mentioned the buddy support system has a positive effect on the child's interaction with their peers. The child now has more confidence and skills. This was supported in (Table 4.25, page 168), item 3 (The Buddy Support System enables my child and fellow peers to play together) and item 4 (The Buddy Support System has a positive effect on the

child's interaction with others) with a high mean of 3.99 and 4.13. Excerpts from the interview with parent 1 supports the quantitative data findings:

Parent 1: *"My daughter has got used to a lot of people. She found confidence, when she see people she say "Hello", "Hi".*

This finding matches Bunch and Valeo (2004) study where they found students in inclusive schools developed friendships with peers with disabilities. In the interview session, one parent also revealed the buddy club has enabled her to communicate better with the teachers on SEN matters.

Parent 2: *"Buddy club is actually a topic for me to start-up a conversation with the teachers, then they talk to me on SEN matters."*

This could indicate this parent has possibly improved her knowledge on SEN matters with this increased communication with teachers. This was supported in (Table 4.25, page 168), item 5 (The Buddy Support System has improved my knowledge of available resources to support my child) with a high mean of 3.99.

Parents (n=68) rated the benefits of the buddy support system with a high mean level of 3.91. In the interview data, parents shared on the benefits of the buddy support system. Among the benefits are the fact that it is successful in providing SEN support such as physical development to the child. Parents' also gave feedback that their child is now more active and their physical development has improved. This was supported in (Table 4.26, page 169), item 7 (The Buddy Support System enables me to solve problems related to

SEN support) with a high mean of 3.79. Excerpts from the interview with parents 1 to 3 supports the quantitative data findings:

Parent 1: *"My child has improved. She's very active and healthy."*
Parent 2: *"Before she joins the buddy club, she was weak, she gets tired very fast. Now she's improved a lot in her development. She's become so active. The buddy club has also helped her hand eye coordination."*
Parent 3: *"I see improvements. We can see his hands movements have improved. Definitely it helps."*

In the interview data, a parent also added the buddy club helped in the social interaction between their child and her peers. "She is now more brave and able to make friends". This was supported in (Table 4.26, page 169), item 2 (The Buddy Support System builds positive social interaction among my child and fellow peers), and item 6 (The Buddy Support System helps my child develop friendships with fellow peers) with a high mean of 3.94 and 4.01 respectively. Excerpts from the interview with parents 2 and 5 supports the quantitative data findings:

Parent 2: *"My daughter actually gets to mix with the normal kids, which is really good."*
Parent 5: *"She is now brave, no longer afraid. She's clever in making friends now."*

These findings are consistent with Calabrese et al. (2008) study where there exist positive peer relationships through play & sports between students with special needs and their able counterparts in a socially-inclusive environment. Solish et al. (2010) also documented typically developing children engaged in more social and recreational activities, had a

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higher number of reciprocal friends, and were more likely to have a best friend. Collins, Ault, Hemmeter, and Doyle (1996) study also reported peer buddy programs and peer networks have demonstrated increases in the establishment of friendships between students with disabilities and their more able peers.

5.2.8 Research question eight: Does the Buddy Support System significantly moderate the relationship between teacher-parent collaboration and students' social interaction in the implementation of special educational practices?

PROCESS procedure for SPSS (Hayes, 2013) was used to investigate whether by controlling the Buddy Support System variable (moderator), could teacher-parent collaboration domain (predictor variable) significantly predict the students' social interaction domains (criterion variables). Results of the interaction term between teacher-parent collaboration and Buddy Support System when added to the regression model, accounted for a significant proportion of the variance in students' social interaction. Moderation is shown up by a significant interaction effect, and in this case the interaction is significant, b=-0.02, 95% CI [-0.04,-0.00], t = -2.38, p < .05, indicating that the relationship between Teacher-Parent Collaboration and Students' Social Interaction is moderated by the Buddy Support System (BSS).

Examination of the simple slopes analysis in Table 4.28 shows three different regressions of teacher-parent collaboration as a predictor of students' social interaction: (1) when the Buddy Support System is low i.e. –6.145; (2) at the mean value of Buddy Support System which is zero in this case as it is centred; and (3) when the Buddy Support System is high i.e. 6.145. The examination of the line graph in Figure 4.1 (page 173) showed that when the

BSS is low (blue line) there is a significant positive relationship between teacher-parent collaboration and students' social interaction; at the mean value of BSS (orange line) there is a small positive relationship between teacher-parent collaboration and students' social interaction; however there is a non-significant negative relationship between teacher-parent collaboration and students' social interaction at high levels of BSS (grey line). Therefore this implies that low levels of the BSS increases the relationship between teacher-parent collaboration and students' social interaction.

Research shows that building a common understanding between educators and families can be significantly enhanced by creating communities that meet the needs of all students and one that supports the opportunity for every single member of the community to learn and succeed (Worthington, 2014). The Buddy support system or better known as 'Buddy Club Programme' aims to encourage opportunities for students with special needs to interact socially with more able peers through fitness and football sessions (The Star Online, 2013). The objective is to build positive peer relationships through play & sports between students with special needs and their more able peers in a socially-inclusive environment (Calabrese et al., 2008), allowing them to enrich their experience (Balqis, 2013) and achieve their full potential in the game while at the same time boosting their physical well-being. This is also an important initiative to encourage mainstream students to have more empathy for those with disabilities.

Special education programmes geared towards social inclusion of students with SEN and their able peers requires more than modifying teaching methodologies in an inclusive classroom (Wang, McCart, & Turnbull, 2007; Cook et al., 2010; de Boer, Pijl, & Minnaert, 2011; Maria, 2013). Special educational practices also need to be modified to include all

stakeholders in the collaborative team. The development of teacher-parent collaboration in special education practices should be taken seriously. Teachers and parents needs assistance within that professional collaboration to adjust quicker to their responsibilities, their roles and their actions to continuously improve students' outcomes (Bateman & Herr, 2006).

The development of students' social interaction requires effective teacher-parent collaboration as constant support and feedback are needed. Collaboration between teachers and parents optimizes student's monitoring and learning which leads them to achieve their full potential and achievement (Corsello, 2005; Lee et. al., 2008; Reed, Osborne, & Waddington, 2012).

5.3 Summary

Chapter 5 presented a discussion of the research findings on the four aspects of collaborative roles between teachers' and parents' understanding of special educational needs, their willingness to communicate with each other, their perceived roles as well as their expectations of each other. It also examined the effectiveness of the Buddy Support System as rated by the teachers and parents. The findings of this study were presented according to the research objectives that guided this study.

In this study, the summary of the quantitative data (refer to Table 4.45, page 207) analysis from the teachers' questionnaire showed that teachers (n=95) rated themselves highest on the understanding about SEN domain (3.65) which implies that teachers rated understanding about SEN as the most vital in a collaboration process with parents. Excerpts from the interview with teachers clearly showed special educational needs was a practice

catered to the individual needs of the students with specific strategies and methods that are suitable for them. Teachers emphasized the need to understand the child better and suggested that this is done by meeting parents in school. The interview data also showed that teachers understanding of SEN emphasized the need for interaction between the SEN students and mainstream students so that SEN students may increase in self-confidence.

The summary of the quantitative data (refer to Table 4.45, page 207) analysis from the parent questionnaire showed that parents (n=68) rated themselves highest on the expectations of teachers' role in the implementation of special educational practices (3.86) which implies that parents rated expectations of teachers' role in the implementation of special educational practices as the most vital in a collaboration process with teachers. From the interview data, parents expressed that teachers had explained all the necessary information that they needed to know on their child. Parents appreciated teachers' efforts and thus would be more considerate in their expectations towards teachers. Parents seemed to be rather contented with the service that teachers gave and showed in SEN implementation. Parents in the study also acknowledged teachers' effort in guiding and educating their children by their confidence in allowing teachers prepare their child's IEP learning objectives.

In the study, teachers and parents were asked to share their views on to what extent does students' social interaction among SEN and mainstream pupils exist. The mean score for acceptance by classmates domain was the highest rated by teachers at a high level of 3.76. Interview excerpts indicate teachers' expression on a sense of acceptance between mainstream students and the SEN students as active interaction also happens during school recess time. Teachers also stated that there was close cooperation between mainstream

students and SEN students in classroom activities. Parents too rated highest on the mean score for acceptance by classmates domain with a high level of 3.92. From the interview data, parents expressed their joy in their child now being accepted by their peers. A positive sign about this aspect from every parent was the fact that their children now look forward to school every morning.

Teachers were asked to share their views on the extent to which the buddy support system was effective. Teachers (n=95) rated the influence domain and benefit domain of the buddy support system at the highest mean score of 3.70. The interview data also revealed teachers mentioned the influence of the buddy support system in encouraging play between SEN students and their peers. SEN students, they said, were now more confident and are able to interact. It also showed that students' confidence and their self-esteem had also increased. Teachers also shared on the benefits of the buddy support system in its success in creating social interaction between mainstream students and the SEN students. They noted that students now know each other better not only in appearance, but in their names too. Teachers also mentioned in the interview that the buddy club creates a space for SEN students to mingle with the mainstream students.

Parents (n=68) rated the influence domain of the buddy support system the highest at the mean score of 4.03. The mean score was rated at a high effectiveness level. The interview data also revealed parents positive views on the influence of the buddy support system. Parents mentioned the buddy support system has a positive effect on the child's interaction with their peers and the fact that their child now has more confidence and skills.

The following chapter is the final chapter of this thesis and it closes with a general summary of this study, the limitations, implications and recommendations for future research.

CHAPTER 6: CONCLUSION

6.1 Summary of the Study

This research study set out to examine the effectiveness of the buddy support system in terms of its impact on teacher-parent collaboration and students' social interaction. The intention of the study was to explore this relationship and to provide contemporary information about current special educational practices among teachers and parents. This research is a first of its kind in Malaysia as it examines the effectiveness of the Buddy Support System on Teacher-Parent Collaboration and Students' Social Interaction. This chapter proposes possible areas for further research and draws some implications from this study.

The MOE in Malaysia is determined to increase the enrolment of students with SEN towards an inclusion process highlighted in the recent 2013 - 2015 Malaysia Education Blueprint. Based on current national policy and international best practices, the MOE aspires to Wave 3 of its education blueprint that by year 2021 to 2025, 75% of students with SEN will be enrolled in inclusive programs, all teachers will be equipped with basic understanding and knowledge of SEN, and high-quality education provided to every child with special needs. This study therefore highlights what is required for this goal to be practically achieved and points towards the importance of collaborative relationships between teachers and parents.

This study provides data that establishes the importance of a positive relationship between teachers and parents for the development of students' social interaction. It also highlights

the effectiveness of the Buddy Support System as a platform for effective inclusion processes. The findings from this study serve as a point of reference for educators and policy-makers interested in enhancing special educational practices and inclusion. This study is also the first evaluation of the implementation of the buddy support system in ten Malaysian government funded upper primary and secondary schools. Hence it provides unique evidence about the process and impact of the Buddy Club.

The following sub-sections present the limitations of this study, followed by its recommendations for policy, practical and future research and ends with a conclusion section.

6.2 Limitations of the Study

This research study acknowledges a number of limitations:

i. The study was limited to only 10 schools that were involved in the pilot of the buddy support system, this number is relatively small. Respondents were limited to a group of teachers, parents, and students from these participating schools in Malaysia. Therefore, the results from this study will not be generalizable to other schools or special education centers without the buddy support system although it is generalizable to those schools operating the buddy support system.

ii. Psychometric testing can use Likert Scale questions to measure respondent's beliefs, attitudes, opinion and perception. The questionnaire data from this study is based on the teachers' and parents' perceptions of their collaborative roles, the extent students' social interaction among SEN and mainstream pupils exist, and to what extent and in

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what ways is the buddy support system effective within their respective schools. Inevitably this is perception data and may not represent an accurate portrayal. The Likert Scale in this study is uni-dimensional and only gives 5 options of choice, and the space between each choice cannot possibly be equidistant. Intervals between points on the scale do not present equal changes in perception for all individuals (i.e., the differences between "strongly agree" and "agree" may be slight for one individual and great for another) (Sumintono & Widhiarso, 2014; pg. 12). Such inconsistencies reflect the psychometric limitations of the Likert scales (Sumintono & Widhiarso, 2014; Blaikie, 2003; Kieruj & Moors, 2010). Interview data gathered provide some insights into the context behind the ratings on the Likert scale and illuminate the ways in which the Likert scales were completed by the teachers and parents.

iii. Data collection with parents was particularly difficult as it relied on voluntary engagement and therefore many follow ups were needed due to parents' work commitment and tight schedule on their daily chores.

iv. While transcribing audio recorded interviews into text, one of the limitations faced was trying to translate the Malay responses to English and also ensure that the exact meanings of these responses are retained. In this study, data was analysed according to the Researcher's interpretative framework, although inevitably any data can be subject to different interpretations.

v. The implementation time of the buddy support system was found to be an issue as it has only been implemented since 2013. The implementation of any new programs is prone to difficult challenges. Thus, the evidence would suggest that more time may be

required to improve the implementation of the buddy support system provided for students with SEN and the mainstream students. With more time, teachers and parents will be more competent in understanding the co-curriculum, its influence and the benefits of the buddy support system as they gain more experience in its implementation and process thus strengthening their collaboration.

vi. Teachers were involved in the buddy support system since the programme was introduced and were involved in implementing the buddy support system. Parents on the other hand, were introduced to the buddy support system only as their children were involved in the programme. Therefore the dynamics of parents' participation in special educational practices is not as co-ordinated as for teachers. Therefore, it is proposed that more time is needed for the buddy system to be properly embedded so that teachers and parents feel confident in working together to support the development of students with SEN.

6.3 Implications

This study has a number of implications relating to the pilot implementation of the buddy support system aimed to support more regular social interactions between students with SEN and their able peers through fitness and sports sessions. The MOE is pushing for a more inclusive education with 75% of students with special needs integrated into mainstream classrooms by 2020 (Kulasagaran, 2013). The implications of this study are threefold: practical implications, policy implications and implications for future research.

6.3.1 Practical Implications

Teachers play a crucial role in determining the success of special educational practices. In this study, it has been shown that effective teachers not only need to have considerable knowledge in understanding about SEN but they also attract parents' participation. It shows that effective teachers of SEN share knowledge, information and bring parents to a common understanding about special educational practices. This study showed that teachers involved in SEN were equipped with the necessary skills and were able to explain to parents what they needed to know about their child and they also sought parents' opinion on the learning objectives for the child's IEP. Parents in this study also had high expectations of teachers to guide them and understood they were able to support SEN at home. The central implication is that effective SEN and inclusion requires close teacher parent collaboration, sharing of problems and discussing ways to overcome them.

The main implication here is that teachers should encourage parents to communicate more by making them feel important and their ideas respected. The other implication is that parents should address the reasons why they did not feel comfortable initiating conversations with the teachers. Possibly, they should think of ways or engaging in open communication with the teachers. This study showed that parents seemed to be more comfortable when approached by teachers through various means such as WhatsApp.

Another implication is that teachers should encourage open and two way communication as a platform for collaboration. Home learning and follow up activities on IEP would be made more possible if support could be provided to the families on how they could be effective

instructors. Teachers could be involved in preparing the materials that are suitable for students to do at home.

A further implication is that the school should create more opportunities for dialogue sessions between teachers and parents in order to create greater communication flow. This will enhance collaboration thus allowing both parties to meet each other's expectations and offer the support required. Although both teachers and parents claimed that they were willing to communicate through the efforts that they made, they need to be able to connect their roles and expectations in the collaborative structures with the child's IEP objectives as the main goal.

The buddy support system in this study also is proven to encourage able peers to develop respect for students with SEN, learn how to form friendship with these children and to value human differences. The data shows that through the Buddy Club, SEN students are not secluded as a special group, their peers do not view them differently, and they feel more comfortable relating to people their own age group and the feeling of belonging in a community increases the student's self-esteem and self-confidence. The core implication is that the involvement of the students' with more able peers may bring a whole new dimension of social inclusion and acceptance in mainstream classroom learning.

6.3.2 Policy Implications

More systematic information about the impact of peer intervention programs on different aspects of SEN students' social interaction is needed; so far, few evaluations have been conducted (Bossaert, et. al., 2013; de Boer, Pijl, & Minnaert, 2012; Frederickson, Warren

& Turner, 2005). Currently, no empirical data is available on the peer intervention program or buddy support system intervention in Malaysia. This doctoral research is intended to fill the empirical gap in evaluating the impact of the buddy support system on different aspects of teacher-parent collaboration and students' social interaction in the context of Malaysia, which falls under the purview of these Ministry of Education policymakers: 1) Ministry of Women, Family and Community Development; 2) Ministry of Health and; 3) the Performance Management and Delivery Unit of the Prime Minister's Department (Pemandu).

The research findings provide contemporary information on the effectiveness of the buddy support system as perceived by teachers and parents. Findings indicate that the buddy support system activities clearly promote teachers' and parent collaboration and involvement. However, it also shows that parents need to feel welcome and comfortable participating in the buddy support system programmes. For policy makers, the implication is that future investment should be made in establishing better relationships between teachers and parents through a vehicle like the buddy support system.

Education systems that perform exceptionally well have policy coherence, policy alignment, and policy connection (Harris et. al., 2014). However, in the pursuit of better education performance and student outcomes, policy makers largely fail to consider exactly how policy implementation influences student outcomes (Harris & Jones, 2015). Policy implementation cannot to be left to chance but needs to undergo a cautious process of monitoring, assessment, and regulation (Harris et. al., 2014).

The findings imply that the buddy support system provides an opportunity for teachers and parents to look into the physical, social as well as cognitive needs of the students. As such, this study has shown that the buddy support system is an important program to meet a range of students' social interaction development needs. Consequently, the implications for the MOE in line with the Blueprint, is that more training and support could be further provided by the MOE to help foster a strong collaboration practice between teachers and parents.

For policy makers, initiatives such as the buddy support system will yield greater returns if school leaders, teachers and parents work in partnership with one another. Twenty-first century professional learning needs should combine and integrate individual and organizational development: it needs to focus on individuals working together through professional collaboration (Jones & Harris, 2014).

It is proposed that policy makers should consider the focus of the buddy support system in an integrated special education in Malaysia. They should ensure that it focuses on achieving the goals that teachers and parents aim for students with SEN to further accelerate their social interaction development. The Buddy Support System intervention appears to be a useful means of changing other children's perception and judgement about students with SEN. The policy implication is that this intervention needs to be supplemented with the necessary support and better understanding of the mental, emotional, and physical aspect of students with SEN so that regular mainstream students can adapt to this new inclusive environment.

The establishment of peer relationships between students with special needs and their peers without disabilities is viewed as an important outcome of school integration efforts (Frostad & Pijl, 2007; Miller, Cooke, Test, & White, 2003; Roberts & Smith, 1999; Cavallaro, Haney, & Cabello, 1993; Miller, Rynders, & Schleien, 1993; Haring & Breen, 1992). As highlighted in the recent 2013 - 2015 Malaysia Education Blueprint, in Chapter 4 - inclusive education for students with SEN is advocated, based on current national policy and international best practices (Ministry of Education, 2013). The main aim now is to make this happen.

6.4 Implications and Recommendations for further research

From the findings and discussion, important aspects of teacher-parent collaboration, students' social interaction and the effectiveness of the buddy support system have been highlighted. As there are other factors involved and may contribute to the enhancement of SEN practices, the following are the implications and recommendations for future research:

(i) Policy makers heavily subscribe to the belief that school leadership is the key to system transformation and they are able to put this into practice through well designed and rigorously implemented programmes (Harris et al, 2014). Although it is difficult to identify which leadership approaches can best help principals in Malaysia navigate these new demands towards an inclusive education agenda, Bush and Glover (2012) propose that the increase in principal accountabilities has created a need for distributed or shared leadership. Distributed leadership is premised on the sharing of leadership responsibilities, where principals are defined by their ability to build strong and functional collaborative teams (Harris, 2013). Distributed leadership practice involves

stakeholders in the decision-making process, fosters teamwork and creates a collaborative work culture in order to improve school performance (Park & Ham, 2014). Future research, could explore the leadership of inclusive education and how far a more distributed leadership approach may prove to be beneficial in this aspect.

(ii) As this study only looked at 10 pilot buddy support system pilot schools, further research studies could explore other peer intervention programs in different types of schools such as primary, secondary, vocational schools. This will allow for an interesting data comparison.

(iii) In future research, it is hoped more schools including national schools that provide special education chould be involved in the implementation of the buddy support system so that findings can be generalized.

(iv) Further research is needed into effective teacher-parent collaboration in special educational practices that contribute to the development of students' social interaction and academic achievement. The involvement of more able peers may bring a whole new dimension of social inclusion and acceptance in classroom learning which is worth researching in more depth.

The impact of teacher-parent collaboration can only be achieved if each teacher and parent takes such responsibilities seriously in the effort to enhance students' social interaction development. In the future a collaborative framework therefore may be useful in helping teachers and parents to carry out their roles.

6.5 Conclusion

This study on the effectiveness of the buddy support system on teacher-parent collaboration and students' social interaction attempts to fill a gap in knowledge. Various sources of evidence were gathered to explore this topic namely interviewing teachers and parents, giving out questionnaires as well as video recording of students' social interaction during the buddy club programs. The views of teachers, parents provide interesting insights into how real collaboration had taken place at the schools.

It is hoped that these findings will not only contribute to the field of special education practices, but will also be important in shaping the field of inclusive education in Malaysia. The significance of a highly effective buddy support system cannot be overstated in terms of its benefits upon teacher-parent collaboration and students' social interaction in the school. As the buddy support system was introduced only recently, it is hoped that these findings will inform the extension of the scheme with the ultimate goal of improving its effectiveness and to further improve students with SEN social interaction development with their able peers.

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APPENDIX A

TEACHERS' QUESTIONNAIRE

TEACHERS' QUESTIONNAIRE

This survey is intended to elicit teachers' feedback on the effectiveness of the Buddy Support System on Teachers-Parent Collaboration and Student Social Interaction. The pilot buddy support system is part of the co-curriculum. Teachers are requested to respond to every questionnaire item and offer their sincere opinion about special educational needs (SEN) practices. Opinions and responses given in this survey are strictly confidential, and will be used solely for the purpose of this research project only. Individuals will not be identified in any representation of this research or any forthcoming publications.

This questionnaire has 4 Sections: Section A refers to your demographic profile, Section B refers to collaboration in SEN practices, Section C refers to student's social interaction and Section D refers to the buddy support system.

Thank you for your cooperation and your views.

SECTION A: YOUR DEMOGRAPHIC PROFILE

<u>INSTRUCTION</u>: Please respond to each item by marking *(v)* in the appropriate box and provide the required information where needed.

1. **Gender**

    Male ☐

    Female ☐

2. **Your age**

    < 30 years old ☐   **49 years old** ☐

    30 – 39 years old ☐   **50 years and older** ☐

3. **Your highest academic qualification**

    None ☐

    Diploma ☐

    Bachelor Degree ☐

    Master Degree ☐

    Doctorate Degree ☐

    Others (please specify) ☐ _____

4. **Your area of specialization**

    Special Educational Needs ☐

    Others (please specify) ☐

5. **You have worked in the Special Education Field for:**

    < 3 years ☐   **9 – 11 years** ☐

    3 – 5 years ☐   **> 12 years** ☐

    6 – 8 years ☐   **Non Applicable** ☐

6. **You have been involved in Special Education Practices in this particular school for**

    < 3 years ☐   **6 – 8 years** ☐   **> 12 years** ☐

    3 – 5 years ☐   **9 – 11 years** ☐   **Non Applicable** ☐

SECTION B: COLLABORATION IN SPECIAL EDUCATIONAL NEEDS (SEN) PRACTICES

<u>INSTRUCTION</u>: **Please read each statement carefully and TICK (√) the box that best reflects your response based on the rating shown below**

	DESCRIPTION	STRONGLY DISAGREE ⟷ STRONGLY AGREE				
1	I am knowledgeable in many aspects of SEN practices	☐	☐	☐	☐	☐
	I feel challenged in SEN practices:					
2	a) When I have to communicate with parents	☐	☐	☐	☐	☐
	b) When I have to explain the proposed IEP goals to parents	☐	☐	☐	☐	☐
	c) When I have to carry out all the IEP documentation	☐	☐	☐	☐	☐
3	My ideas on SEN practices for the students are accepted by their parents	☐	☐	☐	☐	☐
4	I explain about SEN support in detail to the parents before the IEP meeting	☐	☐	☐	☐	☐
5	I make sure parents really understand what happens in the SEN support meeting(s)	☐	☐	☐	☐	☐
6	I make sure parents truly understand the process in supporting their child	☐	☐	☐	☐	☐
7	I welcome parents' cooperation to enhance the SEN practices being offered	☐	☐	☐	☐	☐
	If the parents cannot attend the meeting:					
8	a) I call and discuss the student's progress over the phone	☐	☐	☐	☐	☐
	b) They call to get explanation and feedback from me about the student's progress	☐	☐	☐	☐	☐
	I invite parents to attend the meeting:					
9	a) By personally calling them	☐	☐	☐	☐	☐
	b) By sending the invitation letters to them by post	☐	☐	☐	☐	☐
	c) By sending the invitation letters to them via their child	☐	☐	☐	☐	☐
10	I make sure parents are given information which explain the content and goals for the meeting that is held	☐	☐	☐	☐	☐

	DESCRIPTION	STRONGLY DISAGREE ←————→ STRONGLY AGREE				
11	I determine the short term IEP objectives for student's SEN support	☐	☐	☐	☐	☐
12	I determine the long term IEP objectives for students' SEN goals	☐	☐	☐	☐	☐
13	I prepare all the IEP documentation needed to be presented to parents	☐	☐	☐	☐	☐
14	I give feedback to parents on their child's development	☐	☐	☐	☐	☐
15	In preparing for lessons, I use the guidelines set by the school in determining the short and long term IEP objectives for each student	☐	☐	☐	☐	☐
16	I refer to the goals and objectives that have been determined when: a) reviewing the student's IEP	☐	☐	☐	☐	☐
	b) discussing with parents their children's progress	☐	☐	☐	☐	☐
	c) writing progress reports	☐	☐	☐	☐	☐
17	I can identify the strengths and weaknesses of the students from IEP	☐	☐	☐	☐	☐
18	I improve my understanding of SEN Education: a) by finding and reading related materials	☐	☐	☐	☐	☐
	b) by observing my colleagues interacting with students	☐	☐	☐	☐	☐
	c) by meeting with parents in school to discuss the student's progress	☐	☐	☐	☐	☐
19	IEP allows me to review the support given to students based on their needs	☐	☐	☐	☐	☐
20	IEP is an effective document to determine the support required by students	☐	☐	☐	☐	☐
21	IEP is required to ensure the services provided by teachers are sufficient in developing students' potentials	☐	☐	☐	☐	☐
22	Positive role models for students with SEN are needed	☐	☐	☐	☐	☐
23	I need to modify my instructions and teaching style in the classroom to meet the needs of students with SEN	☐	☐	☐	☐	☐
24	Having other adults in the classroom is an asset when supporting SEN students	☐	☐	☐	☐	☐

| 25 | It is easy to communicate effectively with parents about their child's SEN support | ☐ | ☐ | ☐ | ☐ | ☐ |
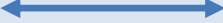
SECTION C: STUDENTS' SOCIAL INTERACTION

<u>INSTRUCTION</u>: **Please read each statement carefully and TICK (√) the box that best reflects your response based on the rating shown below.**

	The student with special needs:	STRONGLY DISAGREE ←		→		STRONGLY AGREE
1	Is able to make friends in the classroom	☐	☐	☐	☐	☐
2	Are teased by their classmates	☐	☐	☐	☐	☐
3	Regularly has fun with their classmates	☐	☐	☐	☐	☐
4	Are involved in activities with their classmates	☐	☐	☐	☐	☐
5	Are teased by their mainstream peers	☐	☐	☐	☐	☐
6	Are assisted by their classmates in lessons	☐	☐	☐	☐	☐
7	Are supported by their mainstream peers in their classwork	☐	☐	☐	☐	☐
8	Are asked to play by their classmates	☐	☐	☐	☐	☐
9	Are asked to play by mainstream peers	☐	☐	☐	☐	☐
10	Works together with their classmates on tasks	☐	☐	☐	☐	☐
11	Eats together with their classmates	☐	☐	☐	☐	☐
12	Belongs to a group of friends in their class	☐	☐	☐	☐	☐
13	Belongs to a group of friends from mainstream classes	☐	☐	☐	☐	☐
14	Willingly participates in games with their classmates	☐	☐	☐	☐	☐
15	Willingly participates in games with their mainstream peers	☐	☐	☐	☐	☐
16	Is happy attending school	☐	☐	☐	☐	☐

SECTION D: BUDDY SUPPORT SYSTEM IN SEN PRACTICES
_____

INSTRUCTION: Please read each statement carefully and TICK (√) the box that best reflects your response based on the rating shown below.

	The Buddy Support System:	STRONGLY DISAGREE ⟷ STRONGLY AGREE				
1	Is clearly understood by myself	☐	☐	☐	☐	☐
2	Is clearly understood by the peers of students with SEN	☐	☐	☐	☐	☐
3	Is clearly understood by the parents of students with SEN	☐	☐	☐	☐	☐
4	Builds positive social interaction among students with SEN and their peers	☐	☐	☐	☐	☐
5	Enables students with SEN and their peers to play together	☐	☐	☐	☐	☐
6	Has a positive effect on the student's interaction with others	☐	☐	☐	☐	☐
7	Has improved my knowledge of available resources to support SEN	☐	☐	☐	☐	☐
8	Helps students with SEN develop friendships with their peers	☐	☐	☐	☐	☐
9	Enables me to solve problems related to SEN support	☐	☐	☐	☐	☐
10	Provides more connections and support from other people in my situation	☐	☐	☐	☐	☐
11	Guidelines are helpful	☐	☐	☐	☐	☐
12	Meets my expectations of supporting students with SEN	☐	☐	☐	☐	☐
13	Can be recommended to others so they get support for their SEN students from such a program	☐	☐	☐	☐	☐

THANK YOU FOR COMPLETING THIS QUESTIONNAIRE
We truly value the information you have provided

APPENDIX B

PARENTS' QUESTIONNAIRE

Dear Sir or Madam,

I am currently conducting doctoral work in the general area of special educational needs (SEN). My supervisors are Professor Dr Alma Harris and Dr Michelle Jones. As part of this research investigation I am keen to elicit parents' feedback on the 'Buddy Support System'. The 'Buddy Support System' or better known in Malaysia as the 'Buddy Club' is an approach used with great success in the UK, USA and New Zealand. It is intended to support children and young people with special educational needs to develop meaningful friendships and interactions with their fellow peers.

I would respectfully ask you to participate in this research by completing the questionnaire below. Your opinions and responses to this survey will remain strictly confidential and will be used solely for the purpose of this research project. Some follow-up interviews with parents also will be carried out as part of the research. If you would be willing to be interviewed, please could you kindly compete the information below so we can follow up. This information will only be used for this purpose. Thank you and I appreciate your time.

Name: _____Contact Details:_____

Yours faithfully,

Donnie Adams

PARENTS' QUESTIONNAIRE

This survey is intended to elicit parents' feedback on the effectiveness of the Buddy Support System on Teachers-Parent Collaboration and Student Social Interaction. The pilot buddy support system is part of the co-curriculum. Parents are requested to respond to every questionnaire item and offer their sincere opinion about special educational needs (SEN) practices. Opinions and responses given in this survey are strictly confidential, and will be used solely for the purpose of this research project only. Individuals will not be identified in any representation of this research or any forthcoming publications.

This questionnaire has 4 Sections: Section A refers to your demographic profile, Section B refers to collaboration in SEN practices, Section C refers to students' social interaction and Section D refers to the buddy support system.

Thank you for your cooperation and your views.

SECTION A: YOUR DEMOGRAPHIC PROFILE

INSTRUCTION: Please respond to each item by marking *(v)* in the appropriate box and provide the required information where needed.

1. Gender

Male ☐

Female ☐

2. Your age

< 30 years old ☐   40 – 49 years old ☐

30 – 39 years old ☐   50 years and older ☐

3. Your highest academic qualification

None ☐

Diploma ☐

Bachelor Degree ☐

Master Degree ☐

Doctorate Degree ☐

Others (please specify) ☐ _____

4. Your child has been studying in this school for

Less than 1 year ☐   3 – 4 years ☐

1 – 2 years ☐   5 – 6 years ☐

5. Your child has been involved in a special educational needs (SEN) program for

Less than 1 year ☐   3 – 4 years ☐

1 – 2 years ☐   5 – 6 years ☐

6. You had attended the IEP meeting / discussion in the school

None ☐   3 – 4 times ☐   More than 7 times ☐

1 – 2 times ☐   5 – 6 times ☐

7. You have been involved in Special Education Practices in this particular school for

< 3 years	☐	6 – 8 years	☐	More than 12 years	☐
3 – 5 years	☐	9 – 11 years	☐		

SECTION B: COLLABORATION IN SPECIAL EDUCATIONAL NEEDS (SEN) PRACTICES

INSTRUCTION: **Please read each statement carefully and TICK (√) the box that best reflects your response based on the rating shown below**

	DESCRIPTION	STRONGLY DISAGREE ←→ STRONGLY AGREE				
1	I am knowledgeable in many aspects of SEN practices	☐	☐	☐	☐	☐
	I feel challenged in SEN practices:					
	a) When I have to communicate with teachers	☐	☐	☐	☐	☐
2	b) When listening to the proposed Individualized Education Plan (IEP) with teachers	☐	☐	☐	☐	☐
	c) When understanding all the IEP documents	☐	☐	☐	☐	☐
3	My ideas on SEN practices for my child are accepted by the teachers	☐	☐	☐	☐	☐
4	The teacher explains to me in detail about SEN support before the IEP meeting	☐	☐	☐	☐	☐
5	I make sure that I really understand what happens in the SEN support meeting(s)	☐	☐	☐	☐	☐
6	I truly understand the process in supporting my child	☐	☐	☐	☐	☐
7	I welcome teachers' cooperation to enhance the SEN practices being offered to my child	☐	☐	☐	☐	☐
8	I make sure that I attend my child's IEP meetings whenever I am invited	☐	☐	☐	☐	☐
	If I cannot attend the IEP meeting:					
9	a) The teacher calls and discusses my child's progress with me over the phone	☐	☐	☐	☐	☐
	b) I call to get explanation and feedback from teachers about my child's progress	☐	☐	☐	☐	☐

	DESCRIPTION	STRONGLY DISAGREE ← → STRONGLY AGREE				
10	I prefer an invitation to attend the IEP meeting by:					
	a) A phone call	☐	☐	☐	☐	☐
	b) A letter sent via post	☐	☐	☐	☐	☐
	c) A letter given through my child in school	☐	☐	☐	☐	☐
11	I am given information which explain the contents and goals for the meeting that is held	☐	☐	☐	☐	☐
12	I expect the teacher to determine the short term IEP objectives for my child's SEN support	☐	☐	☐	☐	☐
13	I expect the teacher to determine the long term IEP objectives for my child's SEN goals	☐	☐	☐	☐	☐
14	The teacher prepares all the IEP documentation needed to be presented to me	☐	☐	☐	☐	☐
15	I give feedback to teachers on my child's development	☐	☐	☐	☐	☐
16	In preparing for lessons, the teachers use the guidelines set by the school in determining the short and long term IEP objectives for my child	☐	☐	☐	☐	☐
17	I refer to the goals and objectives that have been determined when:					
	a) reviewing my child's IEP	☐	☐	☐	☐	☐
	b) discussing with teachers my child's progress	☐	☐	☐	☐	☐
	c) receiving progress reports	☐	☐	☐	☐	☐
18	I can identify the strengths and weaknesses of my child from IEP	☐	☐	☐	☐	☐
19	I improve my understanding of SEN Education:					
	a) by finding and reading related materials	☐	☐	☐	☐	☐
	b) by observing teachers interacting with students	☐	☐	☐	☐	☐
	c) by meeting the teachers in school to discuss my child's progress	☐	☐	☐	☐	☐

20	IEP allows me to review the support given based on my child's needs	☐	☐	☐	☐	☐
21	IEP is an effective document to determine the support required for my child	☐	☐	☐	☐	☐
22	IEP is required to ensure the services provided by teachers are sufficient in developing my child's potential	☐	☐	☐	☐	☐
23	I am satisfied with the cooperation given by teachers involved in the IEP process	☐	☐	☐	☐	☐
24	Teachers need to modify instructions and teaching style in the classroom to meet the needs of my child	☐	☐	☐	☐	☐
25	Having other adults in the classroom is an asset when supporting SEN students	☐	☐	☐	☐	☐
26	It is easy to communicate effectively with teachers about my child's SEN support	☐	☐	☐	☐	☐

SECTION C: STUDENTS' SOCIAL INTERACTION

INSTRUCTION: **Please read each statement carefully and TICK (√) the box that best reflects your response based on the rating shown below.**

	My child:	STRONGLY DISAGREE ←———→ STRONGLY AGREE				
1	Is able to make friends in the classroom	☐	☐	☐	☐	☐
2	Has after school play dates	☐	☐	☐	☐	☐
3	Gets invitation to birthday parties	☐	☐	☐	☐	☐
4	Is included in activities by fellow classmates	☐	☐	☐	☐	☐
5	Are assisted by their classmates in lessons	☐	☐	☐	☐	☐
6	Are supported by fellow mainstream peers in classwork	☐	☐	☐	☐	☐
7	Are asked to play by fellow classmates	☐	☐	☐	☐	☐
8	Are asked to play by mainstream peers	☐	☐	☐	☐	☐
9	Are teased by fellow classmates	☐	☐	☐	☐	☐
10	Are teased by fellow mainstream peers	☐	☐	☐	☐	☐
11	Gets invitations to play during holidays	☐	☐	☐	☐	☐
12	Eats together with their classmates	☐	☐	☐	☐	☐

13	Belongs to a group of friends in the class	☐	☐	☐	☐	☐
14	Belongs to a group of friends from mainstream classes	☐	☐	☐	☐	☐
15	Is happy attending school	☐	☐	☐	☐	☐

SECTION D: BUDDY SUPPORT SYSTEM IN SEN PRACTICES
_____

INSTRUCTION: Please read each statement carefully and TICK (√) the box that best reflects your response based on the rating shown below.

	The Buddy Support System:	STRONGLY DISAGREE ←	→			STRONGLY AGREE
1	Is clearly understood by myself	☐	☐	☐	☐	☐
2	Builds positive social interaction among my child and fellow peers	☐	☐	☐	☐	☐
3	Enables my child and fellow peers to play together	☐	☐	☐	☐	☐
4	Has a positive effect on the child's interaction with others	☐	☐	☐	☐	☐
5	Has improved my knowledge of available resources to support my child	☐	☐	☐	☐	☐
6	Helps my child develop friendships with fellow peers	☐	☐	☐	☐	☐
7	Enables me to solve problems related to SEN support	☐	☐	☐	☐	☐
8	Provides more connections and support from other parents in my situation	☐	☐	☐	☐	☐
9	Guidelines are helpful	☐	☐	☐	☐	☐
10	Meets my expectations of supporting my child	☐	☐	☐	☐	☐
11	Can be recommended to others so they get support for their child from such a program	☐	☐	☐	☐	☐

THANK YOU FOR COMPLETING THIS QUESTIONNAIRE
We truly value the information you have provided

APPENDIX C

TEACHERS' INTERVIEW PROTOCOL

TEACHERS' INTERVIEW PROTOCOL

This Interview is intended to elicit teachers' feedback on the effectiveness of the Buddy Support System (Buddy Club) on Teachers-Parent Collaboration and Students' Social Interaction. Teachers are kindly invited to share their sincere opinion about special educational needs (SEN) practices in the school.

Opinions and responses given in this interview are strictly confidential, and will be used solely for the purpose of this research project only. Individuals will not be identified in any representation of this research or any forthcoming publications.

Section 1 : Introduction

1) Tell me about your career as a teacher

Section 2 : Understanding about SEN.

2) Can you tell me what SEN means to you?

3) In your experience, what is an effective SEN intervention to encourage student interaction?

4) What approaches you have found work best to encourage SEN students to interact with their peers?

Section 3 : Willingness to communicate.

5) In your view, how important are parents in supporting their child's social development?

6) How do you feel about sharing your views and ideas with parents?

7) Do you feel any barriers when interacting and communicating with parents?

8) In your experience, what are the most effective ways in communicating with parents?

Section 4 : Students' Social Interaction

9) In your opinion, how important it is for children with SEN to interact with other peers of similar age?

10) How do you as a teacher support this interaction?

Section 5 : The effectiveness of the Buddy Support System (Buddy Club)

11) Why did the school want to be involved in the buddy club program?

12) Do you see any benefits from the buddy club?

13) In your opinion, what are the aims of the buddy club?

14) From your perspective, to what extend were the club activities appropriate for meeting its aims?

15) Any other views or observations about this interview that you feel we have not covered?

THANK YOU FOR YOUR KIND PARTICIPATION

APPENDIX D

PARENTS' INTERVIEW PROTOCOL

PARENTS' INTERVIEW PROTOCOL

This Interview is intended to elicit parents' feedback on the effectiveness of the Buddy Support System (Buddy Club) on Teachers-Parent Collaboration and Student's Social Interaction. Parents are kindly invited to share their sincere opinion about special educational needs (SEN) practices in the school.

Opinions and responses given in this interview are strictly confidential, and will be used solely for the purpose of this research project only. Individuals will not be identified in any representation of this research or any forthcoming publications.

Section 1 : Students' Social Interaction Development

1) Tell me about your child

2) In your opinion, how important it is for your child to interact with other students of similar age?

3) What are your expectations of teachers' concerning your child's social development?

4) How do you support your child's social development?

Section 2 : The effectiveness of the Buddy Support System (Buddy Club)

1) What information was provided to you about the Buddy Club?

2) In your opinion, how does the Buddy Club benefit your child?

Section 3 : Teachers-Parent Collaboration

1) How does the school build a positive working relationship with you as a parent?

2) How do you feel about sharing your views of SEN and ideas with teachers?

3) When and how do you communicate with teachers on matters pertaining to your child's IEP?

4) Any other views or comments about any aspect of this interview that you feel we have not covered?

THANK YOU FOR YOUR KIND PARTICIPATION

APPENDIX E

SAMPLE OF TEACHER'S INTERVIEW

File: Teacher Interview 3

Duration: 41 minutes 42 seconds

Date: 24th June 2015

Speaker Identification: Interviewer 1 – I-1
                                     Respondent 1 – R1

Special Characters:
…,   – An 'Ellipses' indicates brief or slight pauses in speech.
-                             – Hyphen is used to connect stuttered words or letters.
--   – Em Dash, double dash or a long dash is when a person trails off on a
                                   word (doesn't finish it), or changes their thoughts part way through a
                                   sentence. Also used to separate an interjected phrase or when a speaker
                                   switches direction in the middle of a sentence.
[ ]   – Unfamiliar terms or non-verbal communication are enclosed in
                                   brackets.
[pause]   – Lengthy pause
[unintelligible]   – Unable to make out the spoken words at all.
[B-Roll]   – Off topic discussion.

Time Code	Speaker ID	Verbatim Spoken Material	Researcher's Reflections / Interpretation
00:00:00		[Beginning of recorded material]	
00:00:02	**I-1**	Ok Good afternoon (Teacher's name). First of all thank you so much for agreeing for this interview. My name is Donnie from University Malaya doing a research about special needs education at (school's name) and how this program is conducted in (school's name). So I would like to ask your perceptive (Teacher's name). Maybe teacher can share about why you choose to be a teacher?	[I-1 presents business card to R:1]
00:00:38	**R1**	Ok I, (Teacher's name). A special educational needs teacher. This is the seventh year I'm teaching in this school. First posting in this school. Before this I got a posting as a teacher, I took a year's training as a teacher trainee at teaching training institute in the field of special education, learning disabilities. But if I want to say my ambition was not to be a teacher, but I was made a teacher. I came here feeling I am – I am one of the teacher among teachers who wants to give the best to my students la. Because the time when we're studying, what we've gained it's not the same as when we're teaching. Then only we can identify the product with our own eyes. When we're teaching we can see what product – we will meet what we have formed later. When I came here in the first year, maybe we can't say much. We're still in the realms of learning. Now in the seventh year, people can say an expert la. Even though there is still a little we want to update, to add ourselves with knowledge. It's because praise to God I got here, I got to work long here, got to accumulate a lot of knowledge about students, got to communicate with outsiders to help my students. I feel blessed with what I have got here, if can I'll give my best in the coming years.	

00:02:26	**I-1**	So teacher you have been a teacher for 7 years. Why did you choose the teaching profession?	
00:02:34	**R1**	The teaching profession if we see one of the reason is my parents. If we say, it's my mom who had the ambition to make a teacher. But if we see closely, my field does not include special educational needs. I have a bachelor in Information technology. I was working at private sector. My ambition was not to be a teacher, but I tried to apply, I got it and then I continue. What field I choose I'll do my best. I won't look behind but if can see what I can do. Wherever I am, I'll want to do my best. It's not for myself but for other associated with me. Whatever we involve, we do the best.	
00:03:33	**I-1**	But teacher now you said you became a teacher because of your parents, especially your mother. But why special needs education? Why not a Maths teacher, a teacher of other subjects? Why special needs education?	
00:03:48	**R1**	Ok there is a subject that I love teaching, Mathematics. I really love teaching. When the option to apply is not relevant, during that time special needs is one of the new topic in Malaysia. They just introduced this field, my hope was very high. During that time, when I was studying, this thing was new. When I entered into teaching institute, we can see – views about OKU is people with disability. The views, when we went – when we started in the institute, there was the session. Every 3 months once we will go to school and observe ourselves. Then we can realise the students are like this, like that. I feel that these students are like my children. When they have wronged, we will reprimand them la. The way is the same only. Once they are clever, we will give appraisal like that. So that is the way- not to say from the start I wanted	

		to be a special needs education teacher, I was destined to be this teacher, just a matter of time.	
00:05:02	**I-1**	So teacher (Teacher's name), can you tell what SEN means to you?	
00:05:10	**R1**	Special needs in my opinion or anyone you ask, this thing is huge. Special needs can be associated to many things. As far as I know, I have gathered experience for seven years in the field of learning disabilities, if we can involve -- I have met students who are good, the IQ level, average ones, and the IQ level is really low also. In this seven years. This special needs education is maybe one of -- if last time my school, if they see these children they will say crazy. They will be secluded or marginalised. Parents also -- when we're in the world of special needs education, then we'll know special needs education is so and so. We will guide these kids, then we will think there is many -- Malaysia if from before have applied this, I feel many students wouldn't have dropped out. There is -- this special needs education is actually an important thing for these children. We as teacher help the children who are unable to cope with the normal academics, like the normal kids.	[Understanding about SEN]
00:06:25	**I-1**	Ok but why do teacher feel this special needs education is important?	
00:06:29	**R1**	This special needs education is important because it's for children who are drop-out like I mentioned earlier right. Because mostly like us special needs education teachers are trained. Even though we're not fully trained, when we've come here we will know the way to manage. This is one of the -- because the courses we will focus on kids who needs guidance on the aspect of everyday living. We're not 100% academic because not all 100% students will be an expert, Professor or	[Understanding about SEN]

		Doctor. At least we guide them, teach them how to manage their everyday living. If you go outside to communicate, socialize with other people, be able to greet, if other people ask, they're able to give a feedback. That is one of the importance of special needs education for these kids. We help, we are one of the agent there, it's important there.	
00:07:29	**I-1**	So their focus is more towards adapting themselves la, independent.	
	R1	Adapting themselves, independent yes.	[Understanding about SEN]
00:07:37	**I-1**	Ok teacher. In your experience teacher right, what is an effective SEN intervention to encourage student interaction?	
00:07:47	**R1**	If for social interaction, it depends on the student, the student's level. There are students who love to interact, there are some who don't like – takes time just like the mainstream kids, but these people takes more time. If for interaction, we can interact and do activities with them. If possible, the students who loves to communicate, if can we involve together those don't communicate. Those who are silent to themselves, if can want to seclude themselves, we prepare – we form like a mentor. In a group we ask the other kid 'can you look after him, can you hold his hands and do the activity'. Sooner this kind of things, the interaction if we have 4 people to guide the student, maybe once they've known that student, next time it's easy for them to know the other student. Maybe – even though they can't speak, sign language also, it's a form of interaction. They can - next time if that friend calls, they can follow. They can play together as they've known each other better. That if in this school, we would do like this. We would do it in a group that is able to interact, then we'll place one person that can't follow, we will place them in. We will also instruct the clever students to help take care	[Understanding about SEN] [Students' Interactions] [Influence of BSS] [Understanding of the Co-curriculum in BSS]

		of the student. Anything you follow together. Once they're comfortable in a group, the student can interact. Then we can see, two three times after it, we don't have to say 'you help look after', they will know already. The can follow together to play. They're used to it.	
00:09:29	**I-1**	Ok teacher what approaches teacher feel are most effective to encourage interaction among SEN students their mainstream peers, the normal students?	
00:09:40	**R1**	Normal students. Usually now most schools doesn't have a program that involves both these groups together. That is the problem. That is why it's said in most schools, the mainstream students see them as they are a different species. The SEN students looks like alien or what. They see it as strange. Why because these student doesn't know why – their problems. They don't know, it looks the student is good, it's just their attitude has deficiency because -- like the mainstream students also, because these students we know them because we mingle, there is opportunity for them, to create a space where they can mingle with the mainstream students. Then they know each other better. If the school can involve activities that is related, the students can – that is one of the ways. Surely, there is no other way, This is the only one method. If can, in this school co-curriculum- usually there are schools outside for co-curriculum activities they'll do it separately. Special needs education separate, mainstream education separate. If can, students who can participate – I will form, I have formed -- this is the first year they have done. They will join with the other kids. For example, if they have the red crescent society, our kids also is there, two to three people. Football also is the same. Volleyball, the girls will enter volleyball. Other than that, there is teachers, the special education teacher will guide and observe them. Because to know their safety right. This is one of the	[Influence of BSS] [Students' Friendship] [Benefit of BSS] [Understanding about SEN] [Understanding of the Co-curriculum in BSS]

		ways. Last year for the school camping, all the previous years, two to three years, PPKI will do on their own. When I became the assistant for Co-curriculum, I don't want to that way. Together we do it, the students also can know each other and it's easy for us. Now the child knows the other kid's name. How is it? If we seclude ourselves, don't do a program together, they won't know. They won't know their self, their friend, what is the problem. Now they know, this kid is strong, can play football. This one we can talk to. They know right. The co-curriculum last year, we didn't do it in school, we did it outside. KKB I brought twelve student, all can do it. Enter the jungle, activity in groups some more, with the mainstream students. This is one of the ways we can. That's it only. One of the ways for us to form interaction among the two that is effective, this is one of the most important thing we need to do. Every school needs to do this. We do it, don't do it separately. If can, we perceive all of them the same child if we want to do it. We separate then we also feel we ourselves have distance ourselves from them. This is one of the ways la.	
00:12:23	**I-1**	Is there a special program in this school that connects the two student sides, is there a special program in this school?	
00:12:34	**R1**	If a special program, we have the buddy club program only la, football and the tandem bicycle. That is every – we will have every Wednesday in collaboration with Challenges, 7.45am to 9.45am morning at the field. Students that can follow, those without physical problem can follow the field activities, those with physical problem with the teacher's guidance, they will follow the tandem bicycle. But the problem -- the people that will help them is the mainstream education kids, those who are clever at it. They will be like a mentor-mentee for this program la. It looks effective la now. This is one program for	[Understanding of the Co-curriculum in BSS]

		interaction. Even though, as far as possible PPKI (school's name) wants to have a program, if possible I don't want to think alone. This also later in August we will have a football tournament, buddy club. We organize on our own with collaboration from Challenges. Usually Challenges does it, but this year we are doing it. We want to include those kids together la. Together you enter to compete.	
00:13:48	**I-1**	Football tournament ya?	
00:13:49	**R1**	Football tournament. Maybe call the schools that are participating, there is 6 schools in this federal territory. We'll do a league, with trophy. This is one of the ways for the kids to know. If in the first year, when we first wanted to recruit the kids to be in the buddy club was difficult a bit, when at the end of the year there was a tournament, we can only see one thing, we felt in our heart the kids can accept the SEN kids. When the tournament was going on, everyone was interested only to win. The student from this school, a mainstream student was tying the shoelace of the SEN student who can't do it. Meaning the student can accept the SEN student wholeheartedly, even though in the tournament with the ball rolling, they were kicking round, the student didn't bother, he went and help to tie.	[Benefit of BSS] [Students' Acceptance]
00:14:46	**I-1**	He felt responsible	
00:14:47	**R1**	Yes, he felt responsible. Meaning this is one of the way he can know. Not to seclude or anything right.	[Students' Acceptance]
00:14:55	**I-1**	Ok teacher. In your view, is it important for parents to support or help their child's social development?	

| 00:15:08 | **R1** | If follow my point of view, it's compulsory. It's compulsory and very important because these children if follow the actual situation in the family, most these parents – because the living factor here in Kuala Lumpur, many are working. Their child socialization is low. Among their family is already low. If they're not in their care, it's with an assistant, or relatives taking care or the grandmother, it's not socializing with them. This means -- if can parents needs to give an opportunity, send to school, given an opportunity to create a situation where the student can socialize right. It's an encouragement. This is one of the ways to encourage, to send. If you just hide at home, the student will not develop. That will happen, a good thing will become worst. If can we give an opportunity to the student, if you bring outside also -- there is children when we ask 'did your parents bring you out during the school holidays, No!". That is the problem. That is why sometimes we feel the child also have feelings like us also. Want to go out, want to socialize, want to meet friends. When we ask 'school holidays you went where? Me teacher! I went to water park, really enjoyed'. Meaning in the family itself there is good socialization happening. There is some I ask quiet, and moody only. Never gone anywhere teacher. Or they can think they went, after we question, none. They want to be like their friends, there is a situation where they also would like to be happy like them. So the feeling of importance la, parent need to give -- create a place for students like these to interact, one of the important place in their life is school. School environment. Because at home, even though there is siblings maybe not as what happens in school. | [Expectations of Parents in SEN] |
| 00:17:14 | **I-1** | Ok thank you teacher. So teacher maybe you could share your feelings a bit on when you're talking to parents, sharing of ideas, sharing of your views. How do you feel when you're talking to parents? | |

00:17:32	**R1**	Mostly if there is a problem about the student, anything that we want to share here with all these students, usually if there is also I will usually call the parents hand phone la. Usually if we give a letter or anything like memo, it won't reach. Or maybe parents are busy with their work and oversight or really didn't see it. Usually any information, we also now have a SMS system, any information current and before we will send to the admin, that person will pass. Meaning parents all will know anything. Or we use WhatsApp, here we form a WhatsApp group for parents. Whatever info, we will place it there to share any info or anything else, this student not well. Praise to Go so far no problem la. But one problem that we feel, that I would like to mention here is when we want to organize a meeting or meet, less response la. Here is less response. There is information that we want to deliver, is not delivered. The parents maybe are working, yes, but we need to spend time. Even how busy you are also, we need to spend time because these students we can't deliver via word of mouth. It can't like the student go and inform the parents. If can, we want -- because for program, usually we will have two parents meetings in a year. We will do like a seminar for these information, maybe it will be useful to this parents right. When we call, usually I call. This morning also I did a call because a student didn't pass a form, there is parents who gives positive feedback la. They say 'Ok teacher, afterwards I will'. This is one of the things I always do la. Anything, important things I will always call. But so far the feedback ok la. But we need to always follow-up with the parents. Like that.	[Willingness to communicate with parents] [Teacher's perceived roles in SEN] [Expectations of Parents in SEN]
00:19:39	**I-1**	Is there any barriers teacher felt when interacting and communicating with parents? Is there any challenges, barriers teacher felt apart from what teacher mentioned earlier, less response from parents. Is there other examples teacher? Challenges and barriers teacher felt.	

00:20:01	**R1**	Other examples is like financial problem la. If we would want to do a program, we want to involve everyone together to join, to use the money or contribution, this school is a bit – we need to emphasize a bit. Need to make them understand right. There is 2 or 3, that is why we say maybe during the first parents meeting, there is few who didn't attend. In the meeting maybe there are some who have agreed, ok. Those who didn't attend will become a problem when the time we want to ensure a program proceeds. You don't know why, so that thing will continue. That is what we need to solve la. The parents part. Other than that, there is none.	[Teacher's perceived roles in SEN] [Expectations of Parents in SEN]
00:20:51	**I-1**	Ok so I would like to ask teacher, in your experience teacher, what are the most effective ways in communicating with parents?	
00:21:07	**R1**	Ok the means of communication we use only phone la. If a letter is surely like what I mentioned earlier, the letter out of 100%, only 40% will reply. Not everyone will give the feedback. If can we talk when they come to school, to take their children in the afternoon, that time what we want we will discuss. But the way we talk to the person, A and B is different. So we must know the way how we deliver the information, is different. We can't be strict, we can't be - we need to know the person, because parents, there are some like this, some like that. There is a way to approach parents, easy for us to get feedback from them. What we want also can be achieved. That is one of the way.	[Willingness to communicate with parents]
00:21:57	**I-1**	One of the ways is when they sent la.	
00:22:01	**R1**	Yes sent. Sent and fetch, then we deliver. Usually that what happens in this school.	

00:22:04	**I-1**	Ok teacher. Also teacher would like to ask your opinion, is it important for children with SEN to interact with other normal peers of similar age?	
00:22:17	**R1**	Similar age I can say it's important la they need to interact. Because there are sharing – socialization will create a sharing of information. It can be approach to know a person better not just knowing oneself. The PPKI is a small compound, if interact here only we won't go anywhere. Let us open more space for them to grow. To get to know more, the more they know, the more input they will receive. Mostly are slow learners la. They can accept, easy for them to mingle right. If can we – if it's a good thing we can. There is students like in this buddy club, they can enter and compete with the mainstream students.	[Understanding of the Co-curriculum in BSS] [Students' Acceptance] [Benefit of BSS]
00:23:10	**I-1**	But let's say teacher in the long term, what teacher feel is the benefit? Let's say now our students are interacting, in the long term, what do you feel? In your opinion la teacher, what can be achieved?	
00:23:28	**R1**	One of it that can be achieved is the communication problem la. Increase in the level of communication among SEN students even the time, age has increased. There is some can be seen - people see when they are communicating as a normal person. There is no people want – we at school are in a group, outside with other society is different. When they are not clever, can't communicate, people will seclude them. Society is an important agent when we go outside of school because their schooling term is only around ten years only. After that they'll need to go to the community where they will come face to face with outside people. If they have communication with mainstreams students in their old school, it's easy for them to create a communication with outside people. They have confidence, their self-esteem will increase. That is what's important. They feel easy to communicate. Whenever	[Students' Interaction] [Influence of BSS] [Understanding about SEN] [Students' Friendship] [Expectations of Parents in SEN]

		they want to climb the bus, if they're used in communicating, they can mingle, and they can climb the bus. Now they depend on parents, when they've grown up, they can't be depending on their parents. If they have become friends, they know each other so well, they can climb the bus on their own. Get down at a place, no need to depend on anyone. That is what, even here we will emphasize to parents until when you want to keep your child, if one day you all are no longer in this world, who will go. That is what we emphasize, we are worried. If can, you teach your kids on something like communication skills, let them learn, let them explore. Don't be – that is what's important.	
00:25:10	**I-1**	How do you as a teacher support this interaction? How do you help, what I meant, say long term, as a role of a teacher long term in this school, how do you help? Let's say now our student mingle with the normal kids, you role teacher in helping in this process, long term what is the effect in (school's name).	
00:25:39	**R1**	If can what I see when students mingle, I'm happy la. Because there are student who came to chit-chat, there is some who call to play. We allow only. But we need to know the motive, what is happening there. Don't be the motive, student calling for something else that is not good. We need to know la. That is how we assist even though we allow. We allow, it's ok. People invite to play, it's ok if it's a suitable time for you to play, play it's ok. Want to do anything ok, but we need to know what the motive is. What will the student get from that interaction, the benefit from that interaction? We need to estimate 100% of what they bring leads to good things. We need to know that. That is the way. If can here, where mostly the kids who are high level, if there are student who come here, they will recognise. Because why they take the same van, the same bus when they go home. Mostly la, certain student parents will bring	[Students' Interaction] [Benefit of BSS] [Students' Friendship] [Understanding of the Co-curriculum in BSS]

		back home. That also they know because there are some activities they are involved in, they know each other. We provide opportunity to mingle, but we need to know the motive of the interaction, it leads where?	
00:27:01	**I-1**	I would like to ask teacher, why did (schools' name) made a decision to be involved in the buddy club program*?*	
00:27:10	**R1**	Buddy club ok. To say PPKI (school's name) has a lot of program la. If can we want -- usually myself and Madam, if I myself think, if I want my children to gain outside experience. Because we can't provide 100%, environment in the classroom, anywhere also, SEN student or mainstream student need to have learning outside the classroom. That is more effective. Then they will know more right. When there was an NGO came to ask, ok we want to do this type of program, we welcomed them, this program. Because we felt it will be good and beneficial to our students. Because in three years, the third year I can send my students to represent the district for futsal, 3 students from this school. That is one of the - what we say improvement in students la. The participation is there already, from zero how this program helped.	[Benefit of BSS] [Understanding of the Co-curriculum in BSS]
00:28:26	**I-1**	Maybe teacher you could explain in more detail how this buddy club program helped in the social interaction of students from mainstream education with these students.	
00:28:37	**R1**	Ok before this, let's say before we had the buddy club, the time we had for two hours that we have allocated for buddy club activity, before that we were in the classrooms. Each of us follow respective syllabus. After it's inception, we have interaction with ten students from the mainstream education. They will be involved together. Every Wednesday, they will come. Once informed, they will get ready, they	[Benefit of BSS] [Students' Friendship] [Understanding of the Co-curriculum in BSS]

		will do warming up. After warming up, the students at the front will be student from mainstream. At the back also students from mainstream. Because I don't want the SEN students, one of them will accompany to run, the other will be left out. Meaning they have the responsibility, they know teachers instructed. This is one of the ways we use buddy club, it helps the mainstream students to interact, to mingle. They also feel responsible towards the students that are similar age or have problems in their learning. They know, now they know. When they come, they will run in the morning, do warming up, after that there is an activity, and lastly a mini play. Mini play meaning there is 5 a side. Maybe during that time the mainstream student have physical education, we form the buddy club a team, 5 to a side versus the students from mainstream. Or if we're not enough, we will form this two people are a bit good, two people here. Mix altogether, form two teams. This is one of the ways. It's very -- it's a chance for us to maximize the time. All of these.	[Influence of BSS]
00:30:23	**I-1**	For them to interact.	
00:30:24	**R1**	Yes, if we give an assignment to the mainstream students, I will make a SEN student to follow along. 'What the brother does, you also do along, you help the brother. Ok arrange the cones, how many steps, count after that the brother will teach you now. How many step you count, place the cone'. Then the ball, to pump in the air, ok they will do it together, teach them. That means they will cooperate with each other. The buddy club is a program that I saw during that time also, Ok. For our students, if we say here la, if academic wise they want to incorporate is less a bit, because their IQ is like this. If on the aspect of co-curriculum on outside participation, there is an opportunity for them to show their talents. Because last time we don't see it, because we	[Understanding of the Co-curriculum in BSS] [Influence of BSS]

		never form it. Playing football, bicycle. We don't know this student can ride a bicycle. Now we do the buddy club, tandem bicycle, there is a student, age already ten years old, never rode a bicycle. Then we tried, the friend helped push, now he can bring on his own. That is where the existence of buddy club helps. It helps us and we also feel happy, not many schools gets this opportunity. We use this opportunity to the maximum la.	
00:31:50	**I-1**	Teacher can see the potential of the student la.	
	R1	See the potential, yes. The student's potential.	[Understanding of the Co-curriculum in BSS]
00:31:54	**I-1**	So in your opinion teacher, what are the objectives of the buddy club?	
00:32:00	**R1**	Objective of the buddy club?	
00:32:02	**I-1**	In your opinion teacher, after three years of this program. What is the objective?	
00:32:08	**R1**	Ok it's objectives if from my point of view, it's one of the program that needs continuation. Continuation for the times to come. Don't stop 'angat-angat tahi ayam' only. Because this really has an effect I see. But in meantime, the teachers that are involved really need to -- teachers participation as well. We don't take this thing lightly. We really need to focus because this has a big effect on the life of the kids. From the aspect of communication, to mingle. Because we saw last time how the kids was. What's important is the interaction here, this program. Because kids from far see these kids only, run away. Last time there was, the headmaster in the early years, before this, our kids sit here. The headmaster come and see only, the headmaster will run away because	[Influence of BSS] [Understanding of the Co-curriculum in BSS] [Students' Friendship] [Expectations of Parents in SEN]

			scared the kids will come and hug. Now -- because there was no opportunity for the students to interact with the headmaster, or with the other students right. Sometimes the students are afraid because of the kids. Actually they wanted to play with the kids catching, the student got afraid saw the face like this right. We didn't have an opportunity like this. This is one of the program that is able to provide la. That is why I say this program needs to be continued all the time la. One of the things we need to think, the people that are involved are NGOs. Parents if can give some contribution la. Direct or indirectly also can to help this program to continue.	
00:33:47	**I-1**	So from your perspective teacher, to what extend were the buddy club activities appropriate for meeting its aims? From your perspective.	
00:34:00	**R1**	If from my perspective, the objectives can near 90%. Because we're a small group, if a bigger group, it's a bit difficult to achieve. Because this small group we can target ok how many people can. I'm also in the process of 2 to 3 people, to upgrade them. Those who are good in riding the bicycle, can play football right. This is the target, a small group is easy to target. If a big group, it's difficult a bit. But for bigger group, the products are many. If we work hard, the smaller group to produce the product it's very difficult. But we need to work hard, put effort, the ways, we give opportunity. A bit, bit, a bit they can shine. That is the outcome. We have three people now. If I do a tournament, not only for PPKI, I did the other day at Shah Alam, competition within the Tamil schools in the federal territory and Selangor, at Shah Alam the other day. I brought three of my students to enter along, not a buddy club tournament. This is a tournament for mainstream students, I included three of these students here. Out of the three, one really stood out in the defence area. 'Eh teacher, he is good. There is some asking'. So	[Benefit of BSS] [Understanding of the Co-curriculum in BSS]

		meaning we don't place barrier saying this is SEN student, we give all equal opportunity.	
00:35:32	**I-1**	But teacher how is the objectives of the buddy club program monitored or evaluated? How is the objective monitored?	
00:35:42	**R1**	Ok this objectives we really didn't set in the calendar or anything. We didn't set it's target. We have the calendar and the report book. We always have a report book weekly, in there we can always write what activities were conducted, what happened. That is the relevance to the program that we do. If we want the target, of the ways we do a tournament la for football la. If we want to see the objectives achievement, our student can do it, one of it is tournament. That is all. If we want to see the student can play or not. For the problem of interaction, surely 100% in this school is achieved. Because all students that are involved, the ten students, they don't say these kid the hand is small, this and that. None, they will assist also. For the problem of social interaction, here is almost accomplished. Maybe the student who has entered secondary school, we will take in new members for next year, for the first two months, they will feel different a bit la. After that, they'll adjust themselves. If the target – we say target in tournament is like how they are playing. Tournament is one of the ways la. That is all.	[Influence of BSS]
00:36:59	**I-1**	So teacher (schools' name) is an integration school, so SEN students and mainstream students study in the same school. Teacher fee in the long term, the objectives of the buddy club in this integration school how is it? Will it help these students from the aspect of classroom placing?	
00:37:24	**R1**	Ok here also we have the inclusive program. Not to say in terms of football only we want them to integrate, we also have inclusive and	[Influence of BSS]

		target now 30% a year. Meaning this year, after this we will -- before this two years back there was a student that got inclusive. The year before there is one person. That is why the ministry has targeted 30%. That is what we target. When we say target we also have meet the target, we need to plan, draw a program like how. Now, I have talked to Madam, we will -- the class that is clever, the class with high level, and all 6 people we will inclusive. Not full inclusion, this is half-inclusion. Meaning there are certain subjects only they will sit. Meaning we will give them opportunity to sit in the BM class and the physical education. This is one of the ways also they will share, mingle. If there is this program, then buddy club also, inclusive is one of the ways we want to integrate. They come over here, now we go over there, they feel there, learn there.	
00:38:39	**I-1**	So does buddy club help in the placement process to help achieve the 30% target? Say the Ministry has given 30% for inclusive, does the buddy club program help in achieving that target?	
00:38:53	**R1**	Ok to say for sure it's a bit difficult, as it's just the beginning right. We try first how. In the counting just now, we can achieve 23%. This year we can achieve 23-25%. Because one of the ways the buddy club can help us achieve this target, one of the ways is that he student here mostly know the students over there. When we place them there, they won't feel secluded or excluded. They have known, they have known. Not all students will be placed in the same classroom, they follow the level. Like two of them standard 5, that one standard 3. Those whose IQ is a bit low, enter standard 2. When they are there, they know the student there, because we have the buddy club program. That is the opportunity, before we go, there is ice-breaking. Buddy club is like an ice-breaking for inclusive. They can help the children, they enter the class they	[Influence of BSS] [Benefits of BSS]

		recognise already the buddy club member. When they are friends with the member, sometimes they are eating in the canteen or what, they can meet another friend. When they interact they can meet another friend. This is one of the factor that helps. We created a healthy environment where the interaction is not blocked, there is no barriers there.	
00:40:10	**I-1**	So final question teacher, any other things you want to add? Is there anything we have not discussed in this interview that teacher want to add on?	
00:40:22	**R1**	If this?	
00:40:24	**I-1**	Is there any other views?	
00:40:25	**R1**	In my point of view la, so far this school gives cooperation. This is good la, I don't want administration problem la. I'm worried on that only. Administrator sometimes we focus on academics, when we integrate, it will involve the mainstream students as well right. Over there, they concentrate in academic. Activities like these they oversight. For them, these students are not important. They don't know the way right. That is what I feel if can, the administrator over there, they are more recognisable la. This program is for what? Administrator, or teacher. Why do we run this? Once they have known, there won't be restrictions. Ok we give opportunity, 100% let it run. If every school has a program like this, it's good.	[Influence of BSS]
00:41:33	**I-1**	Ok thank you so much (teacher's name) for your time, for this interview.	
00:41:38	**R1**	I came back early	

| 00:41:39 | **I-1** | (laughs) ok I will off this interview teacher. Thank you so much for your time. | |

APPENDIX F

SAMPLE OF PARENT'S INTERVIEW

File : Parents Interview 1

Duration: 29 minutes 43 seconds

Date: 11th July 2015

Speaker Identification: Interviewer 1 – I-1
                                    Respondent 1 – R1

Special Characters:

…,	– An 'Ellipses' indicates brief or slight pauses in speech.
-	– Hyphen is used to connect stuttered words or letters.
--	– Em Dash, double dash or a long dash is when a person trails off on a word (doesn't finish it), or changes their thoughts part way through a sentence. Also used to separate an interjected phrase or when a speaker switches direction in the middle of a sentence.
[ ]	– Unfamiliar terms or non-verbal communication are enclosed in brackets.
[pause]	– Lengthy pause
[unintelligible]	– Unable to make out the spoken words at all.
[B-Roll]	– Off topic discussion.

Time Code	Speaker ID	Verbatim Spoken Material	Researcher's Reflections / Interpretation
00:00:00		[Beginning of recorded material]	
00:00:02	**I-1**	Ok Good afternoon Madam (R1). Thank you for agreeing to this interview. My name is Donnie Adams from University of Malaya. The purpose of this interview is to find out a little bit more about how does the buddy club and the special needs education in (school's name) helped your child. Ok so maybe we can start off – maybe you can tell us a little bit about your child.	[I-1 presents business card to R:1]
00:00:26	**R1**	Ok thank you for you want me to interview me, want to talk something about special kid and today talk about special – my – my child la. Ok, my child in this year is almost 10 years old. She is in (school's name). So my child I think she's a – she cannot communicate with others la but then I saw her to - at the school she's still happy, independent, confident and feel happy also la. You know. Just like this. because I'm not give her pressure la, just let her I thought when she grow up that time happy and then improve then ok, can take care herself . This for me is happy la. But then now I saw her at the school is almost 2 years plus she got improve herself la. Especially the self-improve, she can eat and then whatever she want to do herself can handle la. So I'm so happy. I'm very happy to see that my – my child can improve on these things. But then now I got – more – want to push her improve about something better in paper. Last time is not in paper, she not patient you know. She will angry and then I don't want to force her. Sometimes I force her, she angry I will punish her you know. I- will beat her. One time only la. Very hard but I feel she will very angry then want to listen to me. But I don't want now. Next time so I don't want la. Just let go, slowly when happy then I go la. Then I – when she want to do homework, I let her do and then I just sit beside her and read book – I think la. When I read book,	[Understanding about SEN] [Parents's perceived roles in SEN]

		I read the newspaper or doing myself. She need me beside her la. Like this la. So this one will feel better for her la. I think la.	
00:02:43	**I-1**	So what you're working as Madam?	
00:02:46	**R1**	I'm working – I open a small restaurant. I very busy you know. 6.30, almost twelve hours you know. So I got no time la. No time to - I mean for whole day I give her, I got no time. This special child need house wife you know for whole day to guide her la. Go to study or when she do wrong work you go direct to let her know. I think this is very important la. But I cannot because I have to work, I have to earn money for her right. So this is one of my problem la. So my child cannot improve very well la.	[Understanding about SEN]
00:03:35	**I-1**	How about your husband Madam?	
00:03:36	**R1**	My husband he's just pass away 3 years. He got heard attack. So like this la. When she go in – want to go in standard 1 la, that day she's 7 years old. That time la, so – it's very difficult	
00:03:56	**I-1**	So how many children do you have Madam?	
00:03:57	**R1**	3 children.	
00:03:58	**I-1**	You have 3 children. So she is number?	
00:04:00	**R1**	Three. The third one, the youngest one.	
00:04:03	**I-1**	So the first child how old is that?	

00:04:04	**R1**	22 in university. This is the final year la. Is in UTAR la. Study in finance.	
00:04:12	**I-1**	Second girl is in University also. Subang Alpha College, study interior architect.	
00:04:23	**I-1**	And how old is she?	
00:04:25	**R1**	20. This is the second year.	
	I-1	20. So she is the third girl? (looking at the girl)	
00:04:29	**R1**	Ya third girl. That day I was 45 la when I born her. Maybe my age is a bit old la. Maybe I don't la.	
00:04:40	**I-1**	So Madam at what age that you found out that she is a special need child?	
00:04:45	**R1**	Less than one year. She cannot follow the age when she turn, and she walk, and she sit. Never – didn't got this how to say – this symptom. Cannot turn, cannot sit. Sleep only. Only 7 month la, 7 or 8 month. My husband know that. So I go to the government hospital la. For long time also la. But then the government keep for long time. It's long time la, about – quite sometime la. So I – last two years I don't want to go the government for this service la. Cannot la, wait for half a day, more than half a day you know. Cannot work. So I don't want la. So now I just Saturday send her, send my child to go speech therapy and others therapy la.	[Parents's perceived roles in SEN]
00:05:45	**I-1**	So what actually is her special needs Madam? What -	
00:05:50	**R1**	Growth delay. Doctor said is growth delay.	[Understanding about SEN]

00:05:56	**I-1**	Ok and what is that? She cannot -	
00:06:02	**R1**	She cannot talk well la. Cannot talk, only few words. "I want to go out", "I want this". Only three or four words only.	[Understanding about SEN]
00:06:14	**I-1**	So Madam in your opinion, Madam how important it is for your child to talk with other children the same age as her?	
00:06:22	**R1**	Opinion?	
00:06:24	**I-1**	Yes, in your opinion. That means for you, what do you think? It's important or not for your child to talk with other children the same age?	
00:06:36	**R1**	Important. Because she cannot talk – she cannot communicate with other children, so I'm now thinking want to let her to go to the sign language you know. In public – in public you cannot communicate with other people so it's difficult for her la when she grows up. So now I consider to send her to the sign language – sign language right. So maybe she got her own plan la. I don't know la, don't know it's suitable for her. I think it's good or not I consider la.	[Understanding about SEN] [Parent's perceived roles in SEN]
00:07:16	**I-1**	But why you say Madam it's important? Why you say it's important?	
00:07:20	**R1**	I want- I want her got the friend in this group. In her group she got a friend at least. Outside she cannot communicate with other people, only family only. You know – you know what I mean. So after don't how many years I'm not here, let's say I already pass away or what. She needs her – her - her group la, got her friend like this la.	[Understanding about SEN]
00:07:50	**I-1**	So how about Madam she mix with other normal students? What do you think about that?	

00:07:56	**R1**	She can mix together. She can – can go to the other friends. Can la, I think she can. She's not alone.	[Students' Friendship]
00:08:05	**I-1**	She's not alone -	
00:08:06	**R1**	Because she's not –she's not a – autistic. Autistic the children is only their area right. But my – my – my child ok.	
00:08:23	**I-1**	Ok so she has a lot of friends, normal kids also?	
00:08:26	**R1**	I saw her in school is feel happy also. Ok la.	
00:08:31	**I-1**	So Madam I'll like to ask you. What do you think of teachers – about your child's social development? How can they help your child?	
00:08:40	**R1**	I seldom go to the – to the teacher because the school not allow the parent to go in, to the school. So very seldom. No chance, no time to talk to the teachers also la. The teachers also good la. Is kind, but I to - send her to the school, it's a Chinese school. But when I go in that time, when 3 years ago la, why so many teachers is in Malay. Even my child she cannot. Because she – haven't talk Malay in one word you know. I also – I feel very disappointed la that time. After a year, then ok la. So no choice la, only two Chinese school, Chinese teacher only, no choice la, what to do? Like this la.	[Willingness to communicate with teachers] [Expectations of Teachers in SEN]
00:09:35	**I-1**	But so Madam how you would like the teachers to help your child? Can you give some example how you would like the teachers to help your child?	
00:09:44	**R1**	But it's very difficult you know. Because this special child need one teacher to – most is 3 children only. But there, one to 5 you know, even 7 or 8. And then got one helper la now. The school send one helper, cannot do – teach the children. So I think at school not improve a lot la. No improvement. Even	[Expectations of Teachers in SEN] [Parent's perceived roles in SEN]

		already 2 years plus, 1,2,3 my child also don't know you know. 1,2,3. 1+1=2 also don't know. Ya la, I have no time to teach her at the – at the – the - at the house. This is my fault la. But at least you know 1,2,3 to 10 at least you know. But until now, she also don't know.	
00:10:33	**I-1**	The basics la.	
	R1	Basic also don't know. 1+1 also don't know. Zero you know get. But others ok la. Match thing my - my child is ok. Matching is very high – high function. Only the maths and the words.	
00:10:47	**I-1**	So you think it's because of less teachers in the school is it?	
00:10:54	**R1**	Ya la. Less teacher – less teacher	
00:10:57	**I-1**	So you would like more teachers so that the student are reduced so the teachers have more time.	
00:11:03	**R1**	You know one – one – one – one – one – how to say? One hour – one hour to 50 minutes.	
00:11:15	**I-1**	About one hour	
	R1	One hour 8 children you know. One to one only 5 to 10 minutes. 7 minutes only la. How to teach? Cannot right. Because this special child need one to one talk you know. Guide her, this kind of thing. But some behaviour very - naughty la. They will - how to say? They will disturb other students, some more worst. Even 5 minutes also don't have. Cannot talk like this, normal – normal children you talk on board, everybody will know, concentrate, they cannot. That's a special kid, they cannot concentrate with the board when you talk, she cannot.	[Expectations of Teachers in SEN] [Understanding about SEN]

00:12:02	**I-1**	So Madam, how do you support your child's social development?	
00:12:07	**R1**	Go outside	[Parent's perceived roles in SEN]
00:12:08	**I-1**	You go outside	
	R1	Outside. The special – speech therapy. And then I go for the Korea one of the - good thing la. Kuku-Gogo feedback therapy la. Now I going – I attend the – the class la.	[Parent's perceived roles in SEN]
00:12:29	**I-1**	How often is it?	
	R1	One week once. But she want twice a week la. But then I cannot, no time. Weekdays I cannot, so only Saturday la. Let them know la. So only once a week. Two and a half hour la. So once a week only. Just started about – 4th, 5th time la. But expensive, RM 1,600. You know. Ten times – ten times. They counting ten times. Not per month la, ten times la.	
00:13:06	**I-1**	So one lump sum RM 1,600?	
00:13:07	**R1**	Ya, RM 1,600 for ten times.	
00:13:09	**I-1**	Ten sessions la.	
00:13:11	**R1**	Ten sessions yes. But what to do. I want her to improve. Because the golden age they say 0 to 6 or 6 to 12. I don't want la, just improve her. So I give. Because Saturday I got free la. Saturday, Sunday. But Sunday they no school also you know. Saturday even no you know.	[Understanding about SEN]

00:13:35	**I-1**	So the two programs la you send her. The speech therapy and also this one. This one also is speech therapy is it, the second one?	
00:13:41	**R1**	No – no this is for the brain. I don't' know la. Talk about the brain. Because the brain not balance. This to set the brain to good la. If you go to other – other place she cannot absorb. Let's say ten – she can absorb ten percent or twenty only. So if you balance the brain or mind, she will absorb more. They talk to me is like this la. So I try lo.	
00:14:12	**I-1**	So how much is it helping your child so far?	
00:14:15	**R1**	Ok. I say got improve a bit la.	
00:14:18	**I-1**	There's some improvement la.	
00:14:19	**R1**	Can talk about words out. Last time she want me go out – upstairs. "Mummy you go down". "You go down, you go down". Last time cannot, just sign language only. "Mummy" (shows sign language). Just like this. "Mummy, go down like this." (shows sign language). Show the hand. Now she can say "Mummy you go down". Eh, I happy. Don't know la. Don't know which side la. I don't know school or Go-go feedback. Like this.	
00:14:49	**I-1**	Madam, just want to ask you. You know about the buddy club in (school's name) right?	
00:14:54	**R1**	Ya!	
	I-1	So what kind of information did they tell you about the buddy club? What did they tell you about the buddy club?	

00:15:02	**R1**	The first time when my child go in the buddy club, the teacher just tell me my child is select in the buddy club. So what is the buddy club? It's the football – the football la. I said "My girl, my child is girl. How come select her". I don't know la, I just know this la. The first time la about 2 years la.	[Understanding of the Co-curriculum in BSS]
00:15:27	**I-1**	So did they tell you anything about buddy club except football?	
00:15:30	**R1**	None, they didn't.	
00:15:32	**I-1**	Ok so what do you think Madam about buddy club? If the teacher never tell you, what do you think the buddy club is?	
00:15:40	**R1**	I just – go for the exercise only. Just let her. I just know that she go for exercise only. Got take football not also I don't know. Got take football? I don't know. I just let her to the activity. One of the activity exercise only.	[Understanding of the Co-curriculum in BSS]
00:15:58	**I-1**	So Madam I would like to ask you. What questions did you ask to the teachers about buddy club? Did you ask them any questions about buddy club?	
00:16:09	**R1**	No also	
	I-1	You didn't. Ok. Do you talk a lot to teachers about buddy club? Do you talk to teachers most of the time?	
00:16:22	**R1**	I didn't	
	I-1	You didn't also. So I would like to ask Madam how does the buddy club help your child so far? You see your child enter the buddy club, so how does the club help your child so far? Do you see any improvement?	

00:16:36	**R1**	My child is got improvement la. But don't know which – which side la. Got improve la.	[Benefit of BSS]
00:16:44	**I-1**	So in terms of like you say exercise right, do you see any improvement in there?	
00:16:51	**R1**	Yes improved.	
00:16:52	**I-1**	Like how Madam? Maybe you can give some examples. Like how does your child improved? Can you give some examples or what. You see her more active now or how -	
00:17:04	**R1**	She not quiet la. Active la. When at home, she can do everything what she want, what she need la. She can do herself la.	[Benefit of BSS]
00:17:12	**I-1**	She can do herself la.	
00:17:14	**R1**	Ya. This one don't want, that one don't want she also know la.	
00:17:17	**I-1**	She also know already la. But now is she more active? More – more- more people say healthy now?	
00:17:25	**R1**	Yes healthy. Healthy much.	[Benefit of BSS]
00:17:28	**I-1**	And then I like to ask Madam also. You know, how is her confidence?	
00:17:35	**R1**	Confidence. I don't know because every – I'm a – ours is a Christian, so every Sunday we went to the – we go to the church la. Maybe – maybe get used to a lot of people, the Sunday school. She found confidence, when she see people she say "Hello", "Hi". This one la she's ok.	[Influence of BSS]

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00:17:58	**I-1**	She's ok la. How about friends? Does she have a lot of friends?	
00:18:04	**R1**	Not to say no – no friend because the children you don't know how to communicate, how to talk? No response the normal kids don't want to talk to her you know. But maybe she still – still young la. So she not feeling what la. I also frightened that when she grow up a bit, grow up la, I also afraid that she will – how to say -	[Students' Interaction]
00:18:38	**I-1**	She will feel alone?	
00:18:39	**R1**	Ya feel alone, the people don't want to talk to her. But now- from now la, she no la. You know the children is very direct, you don't know how to talk, no response, how to talk to you? Even she go outside the – the – the child will say "Hello Untie". Oh your friend, go out (show's daughter's reaction). I feel my heart very – very – very unhappy la.	[Students' Friendship]
00:19:05	**I-1**	But how is she friends with the normal students?	
00:19:10	**R1**	She normal student **[pause].** Not – not – not social, not so. Not to say she social not good, because the person don't want to social with her, she also alone. But I saw her face, ok la.	[Students' Friendship]
00:19:27	**I-1**	Does she come back and talk you about buddy club? Did she come back and tell I met this friend in buddy club, I met that friend in buddy club?	
00:19:35	**R1**	Because she cannot talk well, so she didn't la. But something she will take from the bag, a letter or what. She will show to me la. Say – maybe she let me know the teacher want me to send – give to you like this. This one – this one got la.	

00:19:55	**I-1**	That means most of the time the teachers will – how the teachers talk to you? I mean if they want to tell you anything, how the teachers talk to you?	
00:20:04	**R1**	They will go to – through to me la. Now got WhatsApp	[Expectations of Teachers in SEN]
00:20:08	**I-1**	Oh now they got WhatsApp. So they will just put all the information there.	
00:20:13	**R1**	Ya asking la, respond la. Information or what la got the WhatsApp la.	[Willingness to communicate with teachers]
00:20:19	**I-1**	Apart from WhatsApp, any other way they talk to you? If not through WhatsApp, any other way?	
00:20:27	**R1**	Just through to – when they saw me to send my child to school, they will direct to talk to me la. What they need, what they want.	[Expectations of Teachers in SEN]
00:20:38	**I-1**	So how often they do this? How often they talk to you? When they see you – How I mean how many times they talk -	
00:20:46	**R1**	No la. Seldom la. Very less you know.	
00:20:51	**I-1**	Not very often. Ok Madam when you talk to teachers, how do you feel when you want to talk to teachers? You want to share ideas, you want to share your point of view about special needs, how you feel when you talk to teachers in the school?	
00:21:07	**R1**	Never talk this kind of thing la, but I also don't want to talk la. Don't know people absorb or not. So no la. No talk about how to sharing this. No la.	[Willingness to communicate with teachers]
00:21:15	**I-1**	But why Madam? Why you don't want to talk to the teachers there? Maybe you can share with me a bit why you feel you don't want to talk with the teachers.	

00:21:25	**R1**	Because they is special teachers they know how to – how to teach this kind of children. I'm not trying to – want to talk about this la.	[Willingness to communicate with teachers]
00:21:40	**I-1**	Do you give them any suggestion?	
00:21:42	**R1**	But if got some parents who asking, I'm – I'm happy to share it.	
00:21:45	**I-1**	If other parents ask you.	
00:21:49	**R1**	Ya but my child also not so good. How to share? People want to share, talk about how – I happy to sharing la.	
00:21:59	**I-1**	But you don't talk very often to the teachers la.	
00:22:02	**R1**	No la. Not private, simply talk no la. Scared people don't like. (laughs)	[Willingness to communicate with teachers]
00:22:06	**I-1**	You afraid people don't like la.	
00:22:08	**R1**	Yes.	
	I-1	Ok. So Madam how often do you meet and talk to teachers? How often? Do you meet and talk to the teachers very – very -- all the time?	
00:22:20	**R1**	No no.	
	I-1	No ya. Why is that Madam? Why, because you're – why you don't talk to the teachers?	

00:22:28	**R1**	But I saw my child is ok. Didn't do anything wrong. Wrong thing or what, straight away go to asking or talk to the teacher no la.	
00:22:40	**I-1**	So Madam what do you think about the teachers in the school? Do you feel they are very good. Maybe you can tell me a bit what you think about the teachers in the school?	
00:22:51	**R1**	But go to the teachers side. The teachers also very difficult you know because all 50 children all also the special kid you know. They also very hard want to handle everyone you know. But sometime one of the children got problem, they will WhatsApp why you didn't – why my children like this? why my child like this? and then the teacher also very got pressure you know. So the teacher side also very difficult to handle all these children I think. So like no la, we parent also want to know the teacher side. Like this la.	[Expectations of Teachers in SEN]
00:23:31	**I-1**	Need to understand la.	
	R1	Want to understanding more, my child nothing, they happy then ok. Because special kid la right.	
00:23:40	**I-1**	So Madam any other things you want to say? We come to the last question. Any other things you want to say, any other things that you feel that we have not talk here and you want to say something?	
00:23:56	**R1**	Want to talk a lot la but now want to talk also cannot think talk what la (laughs).	
00:24:07	**I-1**	Any other things? Anything else you want to share?	
00:24:09	**R1**	Share ah. Sharing?	

00:24:10	**I-1**	Anything. Open topic. Anything else you want to share?	
00:24:17	**R1**	Like this special kid, they need more time and then need to study more of a therapy for them la. Like 12 years, before 12 years is golden time la as I know la. So don't want to give up this children la. Hope the teacher, parents all can get more time to – the school and the children where the school need what, we want to help. What you can help, you help. What to say -	[Understanding about SEN] [Parent's perceived roles in SEN]
00:25:06	**I-1**	Why are you feeling sad Madam? Maybe you want to share this. Why? Because as you speak you – I can see you're very sad. Maybe you want -	
00:25:16	**R1**	No no, no sad. Because I not to give more time to my child because of – don't know talk in English la. Bahasa also cannot. Like my children not to get more time to – like I la, family not give more time to her la. Then she cannot learn more, cannot – cannot -- for her not – for her it's not – not fair to her la. Not fair to her la.	
00:26:14	**I-1**	You feel that you can – you can do more.	
00:26:19	**R1**	Yes I can do more but I cannot.	
00:26:22	**I-1**	Because your commitments. Business and all this. So you don't have much time for her. So how do you see her in the future (parent's name)? Do you want her to study with the normal kids?	
00:26:43	**R1**	Of course! Of course la.	
00:26:44	**I-1**	Why you say like that Madam? Why you say of course?	

00:26:47	**R1**	If she can with the normal kid because I got my – some friends la. They give her – give the child a lot of time, high function also. She want to go to the normal school, also cannot you know. Try only not even one month also cannot because behaviour they start – they will do something behaviour disturb the other people. Then the – the – the teacher also not allowed you know. Because the normal teacher they not, they don't know the special need is what you know. They not this kind type of experience. Just only say. Not to give time to let the children to attend the normal school because they have the high function. And only the behaviour they cannot allow the children to go into the normal school, so my – my friend also in front of the school la send to outside the --	[Understanding about SEN] [Expectations of Teachers in SEN]
00:28:00	**I-1**	Special school?	
	R1	No not special school. Sunday – not sunday school, home-schooling. They went to home-schooling la. Like this la.	
00:28:08	**I-1**	But long term you want to see your child studying with the normal students la.	
00:28:14	**R1**	Wow, if like this. Long journey, I think – I don't la. Cannot la. Maybe only the special school only.	
00:28:24	**I-1**	But why Madam you feel that you want your child to study with the normal kids? Why you feel want that to happen?	
00:28:32	**R1**	But in this level, my children is not come that level. 1-10 also don't know, ABC also don't know. How you can go to normal school? Cannot. Because she's 10 years old already you know. Cannot, if she want to go to Standard 1 also cannot. Because standard 1 see so high. Standard 1 also shock you know. So the height also feel not balanced. You know what I mean.	

00:29:02	**I-1**	So you feel she is better in this special school?	
00:29:06	**R1**	Yes. She is happy, enough.	
00:29:10	**I-1**	Ok anything else Madam you want to share? Anything else you want to add before we end this interview?	
00:29:19	**R1**	(laughs) I'm sorry that la. I feel a bit sad la. Because thinking about my child then I don't feel happy la. I can talk what I want to talk, I talk out la. You know, I'm happy la I can help you.	
00:29:35	**I-1**	Thank you Madam. Thank you so much for your time ya. So I will off this recording now.	

APPENDIX G

MATRIX OF TEACHERS' INTERVIEW RESPONSES

Matrix of Teachers' Interview Responses

Coding	Interviewee		
	T1	T2	T3
[Understanding about SEN]	A special educational needs teacher needs a lot of patience and need a lot of learning from the student, and the parents too. I observe these kids needs a lot of guidance and help, they are not learning as a normal kids, they are slower than a normal kid. We need to guide them in one to one learning. We need to use the strategies and methods that are suitable for them.	Special education, in my opinion are students with different abilities, uniqueness given an opportunity to learn the same as mainstream. These students have their specialities, their differences and have all kinds of talents. SEN must exist to help them so in future they will have an opportunity to sit the same level as other people, with the society at the same level. SEN student has low self-esteem and needs help from the mainstream students, normal people around them so they are able to increase their self-confidence.	Special needs education is important because it's for children who are drop-out. We will focus on kids who needs guidance, teach them how to manage their everyday living. If you go outside to communicate, socialize with other people, be able to greet, if other people ask, they're able to give a feedback. That is one of the importance of special needs education for these kids. When they are not clever, can't communicate, people will seclude them.
[Willingness to communicate]	It's difficult for us to talk to the parents. In this school it's the language of communication. Also the parent teachers' association meeting is not held often. So the only time we meet parents is the time students are going home or when they're sending their kids. That is the only opportunity, which we meet only one to two minutes. So it's very rare. Sometimes not parents come to school, it's the	We share our views bout SEN to parents. We will have a program with the parents for example gotong royong and then while we are doing the work, we will talk about their children. From there we're able to inform what is happening to their children in school.	If there is anything to share, I will usually call the parents hand phone. Usually if we give a letter, out of 100%, only 40% will reply. Not everyone will give the feedback. Here we form a WhatsApp group for parents. Whatever info, we will place it there. If can, we talk when they come to school, to take their children in the afternoon, that time we will discuss what we need.

	grandfather or grandmother. So sometimes we don't meet the parents, they will come at the end of the year only.		
[Perceived roles in the implementation of SEN]	In terms of ideas, when we give an idea, half will want to listen, the other half still with their own opinion. So over here for teacher and parents it's really difficult to collaborate you know. So it's really difficult for us to share ideas with parents. Teachers will suggest what they have observed and forward to parents for them to view it. If they feel ok, they will say go on. If they feel it's not ok, they can add-on what they need.	We as an adult, we need to help our children. Help the SEN students and also their parents for them to participate in the society.	When we want to organize a meeting, here is less response. There is information that we want to deliver, is not delivered. We need to always follow-up with the parents, need to make them understand.
[Expectations of parent's role]	Parents need to really know about their child's development, they need to give full support. Don't be too protective over the child. Give an opportunity to the child to be with another person. Also in the teacher parent association, we inform the parents what is happening, what are the student's problems. We expect they also let us know what they would like the objective be for their children.	Parents are as advisors. Parents are example to their children. So parents needs to show an attitude they can mingle equally. It's very important because when kids observe their parents can interact with the SEN students, they will follow suit. I'm confident they'll see the parents as an example. Parents here is very open minded and they are very concern towards SEN students. They emphasize on special needs education. They're very supportive.	Parents needs to give an opportunity, to create a situation where the student can socialize. It's an encouragement. If you just hide the child at home, the student will not develop. The parents maybe are working, yes, but we need to spend time. Even how busy you are also, we need to spend time.

[Students' social interaction]		The mainstream students and the SEN students do interact with one another. So far there is no problem, the mainstream students can accept the SEN students. Students are able to mingle with each other and there exist a positive interaction among them. They've become close, communicates with one another. Even during recess, they talk and there are SEN students placed at the mainstream classes for them to learn and they can help each other in their studies for example.	They have become friends, they know each other so well. This is because of some activities they are involved together. They can play together, they can mingle. For example, a mainstream student helped to tie the shoelace of the SEN student who can't do it. Meaning the student can accept the SEN student wholeheartedly. If they can accept each other, it's easy for them to mingle.
[Understanding on the co-curriculum of the BSS]	SEN children even though their level is lower than peers of similar age, but they are supposed to be placed among these kids so they're more motivated to interact. We encourage them to meet people, enter into co-curriculum activities with the mainstream students of similar age. The objectives of the buddy club is to create awareness of special needs. They want to form a social inclusion between mainstream students and SEN students.	The buddy club was formed to involve the SEN students and the mainstream students. For example I will merge students with SEN and students from mainstream, they need to communicate and work together. Mostly through play because it's the children's instinct. They really love play. They will do a lot of activities together. So in there, we get strengthen the relationship between themselves. I will involve them equally and I will instil moral values. I felt over here SEN students will be able to show their talents in sports. The buddy club's objectives are to create a space for SEN students and the mainstream students to interact with one another and to provide	We can interact and do activities with them. If possible, the students who loves to communicate we can involve together with those who don't communicate. Maybe once they've known that student, next time it's easy for them. Even though they can't speak, using sign language also, it's a form of interaction. If we seclude ourselves, don't do a program together, they won't know their self and their friends. We do activity in groups with the mainstream students. Sharing and socialization will form interaction among the two that is effective. Mainstream kids are like a mentor-mentee for this program. We can also see the student's potential and teacher's participation as well. What's important is

		opportunity to the SEN students to be accepted among mainstream students and for equality.	the interaction here in this program. We don't place barrier saying this is SEN student, we give all equal opportunity.
[Influence of the BSS]	It encourages the SEN students to play with other people. They will gain more confidence. When last time we saw they cannot, don't want to kick, don't want to play. But when there is buddy club, they are motivation in watching others play, they also want to join even though they can't kick.	The buddy club should be expended throughout Malaysia, not only here because it's here the mainstream students can accept the SEN students, and the SEN students can accept the mainstream students.	Once they're comfortable in a group, the SEN students can interact. They can follow together to play. Most schools doesn't have a program that involves both these groups together. Every school needs to do this program. If they have communication with mainstreams students in their school, it's easy for them to have communication with people outside. They have confidence and their self-esteem will increase. They feel easy to communicate. Buddy club is also inclusive and we can achieve 23-25% (inclusion) this year. Because one of the ways the buddy club can help us achieve this target is that the students here mostly know the students over there. So when we place them there, they won't feel secluded or excluded.
[Benefit of the BSS]	It's successful in creating social interaction between mainstream student and the SEN students. They can walk together and chit-chat. The SEN student's legs are also getting stronger, they can walk faster. Their psychomotor skills is now much better. Their focus in listening to orders has increased also.	If there is the buddy club, they might be able to interact at least once a week. So its bond for them. When there is buddy club, the relationship among them, the meetings among them are more often and they know each other. Not only they recognise the appearance, they recognise their names too. So I feel it's really good this buddy club.	There is opportunity for them, to create a space where they can mingle with the mainstream students. They know each other better. Before that we were in the classrooms. Each of us follow respective syllabus. After its inception, we have interaction with ten students from the mainstream education. When they are there, they know the student there, because we

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Coding	Interviewee		
	T4	T5	T6
[Understanding about SEN]	These students is different from normal students and has specific problems like syndrome down, autism and all that. They need a different learning style than mainstream education. SEN students' needs more attention from the teacher and every lesson needs to be repeated so they always remember and master in an activity. I feel a play method is the one which attracts student's interest. Normal la this primary kids loves to play, so we integrate every lesson using play method. So they'll be more excited and it's easy for them to remember what we are teaching, what they need to master in terms of skills. As long they can manage themselves if sufficient already, clever to be independent, don't	The special needs kids firstly, these kids' needs are not the same as normal kids. We want them to be like normal kids. They should receive the same needs as the normal kids. We need to use few techniques. We want people accept them. If in school they're not accepted, how will the society accept them? In this school, it's like a small society. If the small society don't look at them, don't accept them, don't appreciate them, how will they be when they go out later. We want in this school as much as possible they're accepted. If they don't play together, how they going to know each other.	It's an education that is divided into three that is special needs education for the blind, special needs education on hearing and special needs education on learning difficulties. Interacting with special kids is more challenging and needs a lot of patience. In SEN, they will be able to learn firstly how to manage themselves correctly. The best SEN intervention is through interaction. Interaction within their peers, the SEN friends or together with the mainstream students encourages self confidence among the SEN students.

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> have the buddy club program. Buddy club is like an ice-breaking for inclusive. They can help the children, they enter the class they recognise already the buddy club member. We created a healthy environment where the interaction is not blocked, there is no barriers there.

	trouble other people is sufficient for this special needs.		
[Willingness to communicate]	We communicate with parents to monitor their child at home. Sometimes there is no time to meet, but this school so far its ok. Because we have set appointments everything, so far parents are giving good respond. Communication with parents is important because parents know their child best compared to teachers. I want to get to know the parents first. Once we know the parents, then we'll know their child. So we need to understand the parents first then only the child.	When we're discussing, parents actually will feel low-self-esteem as their child is a SEN child. The communication is important. It's needed. We can help them. That is what we tell to parents. In the beginning, there is communication barrier in terms of language. But praise to God we have teachers who can communicate in Tamil. Some parents when we call them to come to see our presentation, they didn't come. They're busy. Usually we will meet parents when they sent their child, so we can talk to them. The most effective way is when we do a meeting with them.	Usually we'll call the parents and we'll start with a topic like what's needed to be done for their child. The scenario is usually twice a year. We discuss with parents if they agree, then we will proceed. If there are challenges or problems, we will solve it together. The school also have a parent WhatsApp group where all the information can be directly sent, which is very effective. We also have a communication book where all activities in school are written in this book including homework. So for the information, that book is important. This book is also where we paste letters from the school.
[Perceived roles in the implementation of SEN]	Teachers need to play a role in letting parents know what is taught in school, needs to be done at home too. It's good to actually share ideas with parents because parents know their child better. The IEP for me, I'll do with parents. I ask what the parents' opinion are.	We do a video, or power point, you insert photographs of the places we visit, and we show and explain to the parents, what is the use of these visits. In the beginning there was parents that do not really understand, we explain to them everything. We will record a video and show to parents only how their child is in school. Maybe their character at home is like this, outside like this.	From the aspect of language, there are some parents who are Indonesian, so we need to explain really explain clearly so they'll understand.

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[Expectations of parent's role]	Parents play the most important role because these student's time mostly are at home compared to in school. Parents can play a role like observation. When there is communication with teachers, it will in a way assist us. We will receive the information that we can't gain in the school.	The most important is the mother. Mother has to be fully responsible where she should learn ways on how to tackle the child. Parents play an important role. Parents needs to give cooperation, these SEN kids have allowance, use the money to help them and their child. We request them to do home based activities that will improve the child.	Parents play a very important role in encouraging the relationship among children or their child. For example, from the home itself they need to communicate with their children. Parents needs to see and check the children's homework, has the child done it? Not yet done it? So this things are important for us to monitor our child's development. When the child go home, check if there are homework for the child. It's all written in the communication book.
[Students' social interaction]	They become friends. So the SEN student that joins the inclusive will not feel isolated because they have friends, they can mingle easily and talk. They are more comfortable in their friendship and interaction. That day I involved them in a futsal game, there was a student not very good in kicking, coincidence I saw a mainstream student approach this SEN student and helped him. He helped this student, taught the way to kick the ball.	If they play football, they kick at each other. I kick to you, you kick to me. So that is the time there is laughter, smile. There's joy and fun. Now they can play together. Mainstream students don't look down anymore.	Within themselves when we're training together at the field, they are cheerful and mingling with each other. Mainstream students started socializing with the SEN kids. We also see a close cooperation in class.
[Understanding on the co-curriculum of the BSS]	Before they play football, they need to divide into groups first. I will ask the student first which group they want to be together in. So here happens communication. Apart from that they will also cooperate. It's better to have groups. When learning in groups, we	We include 12 kids with the normal kids in camping and sports. We also teach them to eat together in the canteen. If they eat together in the canteen, they're accepted. That's important. They will also play together. They will have their confidence, they	I do an indoor activity mixing the mainstream and SEN students in the same group. Children really loves sports and games. It helps create cooperation between mainstream and SEN students. The buddy club mainly is to socialize the mainstream students and the SEN students.

	need to merge all levels of the students. We need to merge the weak and the strong so they will work together, and help each other. I always use group technique. The buddy club wants to further improve the social interaction between mainstream students and SEN students so the SEN students are not isolated. It's also to instil good cooperation between these students and improve their psychomotor skills. So through this futsal, the students that were previously weak in walking, they walk slowly. When the training is repeated many times, it will strengthen their legs more.	will have their ways to be independent. All these actually can form a student who is holistic. From the co-curriculum they can start in academics. Because when they can interact, they have their self-confidence, when they enter into the normal class, go to the inclusive class to learn together with the normal kids, they won't have a problem. The objective of the buddy is the tagline 'We play together, we grow together'. If they can play together, they can grow together so they can be accepted by the society later.	
[Influence of the BSS]	I see the SEN students gives a good response. There is some who don't talk much, now talks a lot. From those who always sits alone, when there's play, they will participate. So it's good also this buddy club actually.	In year 2013, since the buddy club was established, I can see improvement in their interaction. The mainstream students come here to play together. They don't see the kids here is different now. There is no gap. They can be together. There is no more fear towards SEN kids. Parents also when they send their child, they're not afraid of the SEN kids already	When they join the buddy club, they will play football together at the field, after that they will also play indoor games together in the recreation room, so it really helps. As an inclusive school, the buddy club really helps the SEN student who have gone to mainstream classes.
[Benefit of the BSS]		Now there is none saying special educational needs is separate, when there is buddy club programs, we're together with the normal school. So	These games and sports enables them to interact with each other and with the mainstream students. Through the games they are able to interact with each other

		now they don't feel we're separate. In the beginning I saw my kids walking slowly but after the buddy club training, we can see the way they walk, the way they kick the ball, already can play football. When the buddy is there, they play and grow together. Its integration, we are together. It's not limited to studies only, but from the aspect of inclusive co-curriculum, it will be a start for inclusive academic.	exchanging ideas. Students also have a close cooperation and tolerance where the mainstream will help the SEN kids. Apart from that, the mainstream students are able to recognise the characteristics and problems of the SEN students. The SEN and the mainstream are able to interact between themselves and we can see the self-confidence especially at the field when they are playing football together. The SEN students sometimes in class, when we ask them to come to the front of the class, they are shy. So now when they have joined the buddy club, they're more confident.

APPENDIX H

MATRIX OF PARENTS' INTERVIEW RESPONSES

Matrix of Parents' Interview Responses

Coding	Interviewee				
	P1	P2	P3	P4	P5
[Understanding about SEN]	I want her to improve. Because the golden age they say 0 to 6. A special kid, they cannot concentrate. This special child needs a house wife you know for whole day to guide her. She cannot communicate with other children, she needs a friend. Like this special kid, they need more time and then need a therapy for them.	She was a bit different compared to all other kids. She has autistic, she didn't communicate well with all the other kids. We really want her to be independent, more on the life skills rather than education. Through all the routine she will actually improve a lot I believe.	My child is a special needs child. He can follow, but sometimes, he don't understand what teacher is teaching. I send so he can mix around. But for kids like this, we can't just follow you know. We must be strict a bit. His world is mainly towards an imagination world. Sometimes, he will wash teacher's car. That is a step for him you know. His hands movement, to help him write. We as parents, we need to understand this. All this is like a training for him. Horse-riding, swimming, bowling. They have their own specialities.	I don't want to compare with other students, what he can do, let him do. He's a slow catch up, we understand. What is important I want my child to go to school, they learn, there is improvement. Now my child has problem, now only I know how important special needs education to children say like problem in studying. Give them lessons at the level they can, they learn.	She is a slow learner. If we let her know something, she knows. She can answer. After 5 minutes when we ask again, she forget already. My child is already like this. Let it be when she grows up, it's with these people. I don't want her to be left behind by her friends when she grows up later

[Willingness to communicate]	I seldom go to the teacher because the school not allow the parent to go in. So very seldom. Never talk about sharing info. They are special teachers they know how to teach this kind of children. I don't talk about this, scared people don't like.	I have that open communication with teachers and they have that open communication with me also. So I don't feel scared to share with them my ideas or how I do things at home. I don't feel ashamed also to talk to them about my negative side how I do things. I normally talk to them via WhatsApp and whenever every day when I meet them also, that's when they will communicate with me. So there's always that daily progress report they will give me and bout this IEP also they will tell me. So whenever I meet them, there's always a communication. It's not on a specific time	Parents will need to approach the teachers at school. We need to go and meet. We go and see the teacher and suggest this and that. We need cooperation. When parents and teachers communicate, there won't be a problem. I actually feel comfortable. We need to be transparent and it's the way we speak. Don't scold the teachers and we need to relax.	We just attend the meeting and parent's day. Anything we ask the teachers, they will answer. Every morning my husband goes to see the teachers.	Sometimes I go for the meeting, sometimes I don't. Yes teachers call twice. I just went for one only. That's all. I don't communicate often with the teachers. Only if needed I will call, like when she's sick I will call. It's just that. I feel I'm not good to talk on that aspect, I feel low self-esteem. But teachers are good towards me.

		of the year where I meet them or anything.			
[Perceived roles in the implementation of SEN]	I want to push her improve in academic. Saturday I send her go to speech therapy and others therapy. Where the school need, we want to help. What I can help, I help.	I and my husband find some place for her music, I mean to help her in music. We also send her to speech development and occupation therapy. I've met teachers about IEP.	I did give him physiotherapy and mental therapy outside. After that, I teach him to ride a bicycle using focus and balance. As parents we should be more involved in the school. Ask teacher, get yourself involved. When we are involved in the school, we will know our child's problems. As mothers we play our role to our kids. I say we need to be involved in the school. When we're involved in the school, indirectly we have drawn closer to the teachers. We need to be together. Teacher's role and parent's role to be close.	I'll have to focus in teaching him, my responsibility is to teach him. I need to push him to study a bit. Teachers give lesson, parents also needs to push. We need to collaborate together to help these children then we can see their future is good, support the studies.	
[Expectations of teacher's role]	This special child need one teacher to 3 children only. When teachers see	I don't want the teachers to isolate my child. I don't want them to see my child as	We mix with the normal kids. The teacher categorise them you know. This kid, in this	We improve in their studies, like now they go on an outing, concentrate on reading.	At the special educational needs school here there is no problem. Teachers give a letter for events or anything,

me when I'm sending my child to school, they will come to talk to me. What they need, what they want.	a different living thing you know. I really want them treat her as all the other kids like how they treat all the other normal kid. Treat her the same way, it's just that she has a different way of learning. I want the teachers to learn her way and teach her and guide according to her way. You feel safe and secure when the teacher come and talk to you rather than taking it on their own hands and scolding my child. Teachers here will attempt to come and talk to me even the negative side of my child. So it's really good. They'll give me better suggestion to improve what I've done. They also tell me what they do in school so that they allow me	class. That kid, in that class. Like they do camping. They mix together. Mix with the normal kids. Like sports also mix with the normal kids. From that aspect, the interaction has no problem. Teacher gives a lot of cooperation. Teachers will inform the parents the school program, any activity with WhatsApp. From that aspect we are more knowledgeable you know. Usually once a year they will give a talk. They will call a guest speaker for the parents. Regarding teaching styles also we ask for teachers' opinion. We would like it that way.	Teachers usually will write a letter and pass to my kid ask me to attend meetings. Every meeting it's like this. Teachers will sometime inform they will teach something different like do some cakes, do some biscuits, something else students have to learn. If there is any problem, teacher will inform me. So far no problem. Teachers also explain everything to my husband like push my child to study.	they will invite. If there is anything, the teacher will call.

		to implement it at home with my child. So it has that, you know the same balance with the school and the teachers.			
[Students' social interaction]	She can mix together. She can with other friends. She's not alone but normal kids don't want to talk to her you know. She don't know how to communicate.	There was once her friend invited for a birthday party, it was a normal child. She was telling us about this normal friend that she had who was so nice to call her to come for a birthday function.	If we're late in fetching him, he will play with the normal kids. He interacts, no problem. He joins with the normal kids. When we fetch him, he doesn't even notice us. He's playing with them right.	He has no problem in interaction. If he interacts with the kids also, he is a bit naughty, he is hyperactive right. Also once he's gone to special needs, he likes the school, he won't cry. Every day he goes to school.	If similar age, she can't, she'll fight. She's clever looking for friends that is younger than her. All the normal kids are her friends. She has 50 over friends. She feels comfortable and happy to go to school. Morning she gets up to go to school very fast. It's not difficult to wake her up. When she comes back home also she's happy. She always says her teacher and friends is good Mom.
[Understanding on the co-curriculum of the BSS]	I just know that she go for exercise only.	Their aims is mainly to help my daughter more in terms of her physical development. What they normally do is that they have extra time slot, say like football activities with the kids. One thing	They have football with kids from the normal classroom. These children they want to make them same as the mainstream students.	Buddy club its about football.	

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		good is that the football activity they have is also the normal kids.			
[Influence of the BSS]	My daughter get used to a lot of people. She found confidence, when she see people she say "Hello", "Hi".	My daughter learns the skills and qualities from the normal kid through the game. Buddy club is actually a topic for me to start-up a communication with the teachers, then they talk to me on SEN matters.			
[Benefit of the BSS]	My child is got improvement. She not quiet now, active and healthy.	My daughter actually gets to mix with the normal kids, which is really good. Before she joins the buddy club, she was weak, she gets tired very fast. Now she's improved a lot in her development. She's become so active. The buddy club has also helped her hand eye coordination.	I see improvements. We can see his hands movements has improved. Definitely it helps.		She is now brave, no longer afraid. She's clever in making friends now.

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APPENDIX I

PHOTOGRAPHS OF STUDENTS' SOCIAL INTERACTION DURING

A BUDDY CLUB'S ACTIVITY