

Project No.: 2010/0075 (Revised)

**Project Title:** Use of filial play model to enhance teacher-child and parent-child relationships, and children's social competence

### Part C Project Detail

#### Introduction

In January 2008, a nine-year-old girl who was well behaved and excelled academically committed suicide allegedly due to a slight decline in her recent academic performance. The incident has aroused public concern whether children have adequate ability to face up to adversity. According to the information collected by the Education Bureau (EDB) over the past three years (2004/05 to 2006/07 school year), among the students aged 12 or below, unfortunately three children attempted to commit suicide including a primary 6 student aged 11 in the 2004/05 school year, a primary 6 student aged 11 in the 2005/06 school year and a secondary 1 student aged 12 in the 2006/07 school year. Besides, one primary 5 student aged 10 died of suicide in the 2005/06 school year. It is so disappointed to know that the above cases are all reported as depressed, withdrawn, and low self-esteem. EDB attaches great importance to reduce internalizing problems (e.g., depression, withdrawal, and sadness) in order to enhance students' social competence to cope with adversity and respect for life.

Therefore, it is inevitably suggested to the teachers to well-equip their children with strong social competence to face up to adversity in the early years. While play gives children a wonderful way to explore new ideas, develop their social skills, work through anxiety or stress, and entertain or calm themselves. The proposed project is built upon the project with successful experience and good practices in June 2010, the new element of filial play training to both teachers and parents is introduced.

#### Background of Project Leader

Dr. Leung, Chi-hung is a Chartered Psychologist with practising certificate at The British Psychological Society. He has been granted the member of the APS College of Developmental & Educational Psychologists since 2004. He has conducted a study of "Enhancing social competence and child-teacher relationship using filial play training model" and sent to the Australian Journal of Developmental and Developmental Psychology for review. He has also published a paper of "Eduplay and Children's Social Competence" at the Early Child Care and Development in 2010. Dr. Leung has received his play therapy training since 2008. He has received the Certificate of Play therapy training from the Taiwan Play Therapy Association. He has taught various psychology subjects for nearly 16 years. His research focuses are (a)

Play and social competence. (b) Chinese parenting practices. (c) Learning effectiveness among University students, and (d) Assessing moral development of preschool children.

### **Background**

Play in western literature indicated that it encourages children's peer interaction, cooperative and frequent exchange of positive affect predict good social skills and favorable peer ties (Gottman, Katz, & Hooven, 1996; Harrist et al., 1994; Mize & Pettit, 1997). Play helps the very young child gain a sense of competence and in turn supports development of a healthy self-concept. Children often express pride in accomplishments when they play in purposeful and meaningful ways (Swartz, 2005).

Play provides children with a means of communicating about their needs and feelings and processing events they have experienced (Youngblade & Dunn, 1995); facilitates the development of crucial social, emotional, physical, and cognitive skills (Galyer & Evans, 2001; Lindsey & Colwell, 2003); and serves as a unique interactional context for an adult to interact with a child to build and foster a healthy and secure relationship (Russell, et al., 1998).

Similarly, Levine (1988) postulated that play serves as a mechanism for parents and teachers to facilitate their children's understanding of experiences, anticipation and planning for future events, and development of shared symbols.

Therefore, a considerable research indicated that the Landreth and Bratton (2006) 10-week filial play training serves to facilitate children's social and emotional development, to foster a secure relationship with parents and teachers.

The experimental study of enhancing teacher-child relationship and children's social competence has been completed successfully in July 2010. Both internalizing and externalizing problems were significantly reduced after 10 filial play training sessions. The teacher-child relationship in three areas, communication of acceptance, allowing child's self-direction, and involvement, were also significantly improved. The study has received lots of positive and constructive feedbacks from teachers and principals. They asked if the parents can also receive the filial play training. They also requested to publish DVDs, filial play manual, handbook and exercises to the public so that more teachers and parents could benefit from the filial play training.

The proposed project wants to extend the study to the parents and other stakeholders. It proposes to provide filial play training to both teachers and parents in 7 kindergartens. All the training sessions, workshops, and seminars will be recorded in DVD or uploaded onto a webpage for delivery to other stakeholders.

### Goals

The goal of the proposed project is to introduce the filial play training to both teachers and parents to enhance teacher-child and parent-child relationship and children's social competence. The target beneficiary groups will be 28 preschool teachers, 70 students with either internalizing or externalizing problems, and 70 parents. All the training sessions, workshops, and seminars will be recorded in DVDs for further dissemination. It is expected that even other teachers and parents not involved in the training they can still benefit from the DVDs and printed materials.

### Objectives

1. To provide filial play training to both teacher and parents to enhance teacher-child and parent-child relationship and children's social competence.
2. To provide training to both teachers and parents on using play assessments (MEACI & PTOI).
3. To train both teacher and parent participants to be the filial play trainer to train other teachers and parents in kindergartens.
4. To disseminate the products, like DVDs, published manuals, handbooks and exercises, and academic conference, to the public. The beneficiary groups will be extended to other stakeholders other than the 7 project kindergartens.

### Conceptual Framework

Numerous studies (Stover & Guerny, 1967; Guerny & Stover, 1971; Oxman, 1972; Sensus, 1981; Glass, 1986; Kale & Landreth, 1999; Smith, 2002) indicated that the use of Landreth and Bratton (2006) 10-week filial play training model significantly reduced both internalizing (e.g., social withdrawal, anxiety, and depression) and externalizing (e.g., aggression and delinquency) problems in order to enhance social competence among children, and increased parents' efficacy, including empathic responsiveness, communication of acceptance, and allowance of self-direction, toward their children. Social competence is defined as "children exhibit a positive demeanor around or toward others, have accurate social information processing abilities, and display social behavior that lead them to be well liked by others" Frost, Wortham, & Reifel, 2008). Filial play training, which trains parents to be therapeutic agents in their children's live (Gyernye, 1964; Landreth, 1991), is a culturally sensitive intervention for different cultural population (Chau & Landreth, 1997; Yuen et al., 1997; Jang, 2000; Lee, 2002). It helps parents to be sensitive, to understand, and to accept their children's needs within a nonjudgmental and accepting environment (Landreth, 1991). In filial therapy, parents are taught to be the primary change agents for their own children; parents learn to be aware of their children's emotional needs, and interact effectively on an

emotional level with their children (Landreth, 1991). It was introduced to preschool teachers and kindergartens in Hong Kong in 2009. The experimental study has been conducted successfully to enhance teacher-child relationship and children's social competence (Leung, 2010).

#### **The importance of teachers' involvement in play**

Lindsey and Mize (2000) reported that high quality parent-child play interactions and more sophisticated play were positively correlated with peer- and teacher-reported measures of children's social competence. Other researchers (e.g., Isley, O'Neil, Clatfelter, & Parke, 1999; MacDonald, 1987) have reported the significance of mutual responsiveness in play for positive social and emotional development.

#### **Rationale of filial play training model**

The rationale underlying filial play training model is based on the hypothesis that if parents can learn the role of therapist, they can be more effective than a professional because the parent naturally has more emotional significance in the life of the child (Sweeney, Homeyer, & Pavlishina, 2000). Training the parent as a therapeutic agent also diminishes the problems that otherwise are aroused when the parent does not develop appropriate responses to new child behavior patterns (Guerney, et al. 1999; Landreth, 2002; Stover and Guerney, 1967; VanFleet, 2000). Play helps to release children's emotion and to express children's feelings.

Filial play training teaches parents new ways of interacting with their children, thus improving the parent-child relationship (Guerney, et al. 1999; Landreth, 2002; VanFleet, 2000). The parent is the most emotionally significant adult in the child's life. The parent's focus on the child in the process of filial play training encourages the child to unlearn anxieties learned by the parental influence and clarifies miscommunication by the parent (Guerney, et al. 1999; Sweeney, 1997).

According to Guerney (1964), the objective of the play sessions is to change the child's perceptions or misconceptions of parent's feelings, attitudes, or behavior toward the child; allow the child to communicate thoughts, needs, and feelings to parents which have previously been kept from the parents; and bring the child a greater self-respect, self-worth, and confidence. In filial play training, typically six to eight parents and an investigator are involved in a discussion with lively interaction among parents (Landreth, 1991). At each training session, homework assignments and handouts are given to help maintain involvement between sessions. Parents learn and practice how to recognize and respond to feelings, to employ reflective communication, to engage in appropriate limit setting, to select and prepare a time and place for the play times, and to conduct the sessions. Parents are encouraged to ask questions and take notes. They also receive supervision and feedback about their play sessions in training sessions

(Landreth, 1991).

Landreth and Bratton (2006) developed a filial play training model that collapses parent training into a 1-week parenting class that meets two hours each week and prepares parents to begin playtime sessions after the third training class.

Toys and materials. The filial play therapist facilitates the child's expression of a wide range of feelings by providing carefully selected toys. Items likely to direct a child's play, such as books or electronic toys, are avoided. The availability of items for ages between two and eight such as a bop bag, dart gun, and dinosaur, convey a message to the child that anger and aggression are accepted. Inappropriate aggressive or harmful behaviors are redirected to acceptable outlets. Baby bottles, dolls, and kitchen food facilitate the expression of nurturance. A dollhouse and associated figures and furniture are often used in the expression of family issues (Landreth, 2002).

The play kit for parent and child should include expressive media such as paint, crayons, markers, paper, and clay. These items encourage a variety of expression. The inclusion of a ring toss game, blocks, and play money can facilitate the expression of mastery, competition, and cooperation themes. Other recommended items are puppets, a baby bottle, container with water, small plastic soldiers, Play-Doh, and skipping rope (Landreth, 2002).

#### **Research on the effectiveness of filial play training model**

The efficacy of filial therapy has been verified with numerous research studies. Smith (2000) categorized empirical research on filial therapy into six areas of study: (1) effectiveness of parents as therapeutic agents of change with their children (Guerney & Stover, 1971); (2) effectiveness of filial therapy with children who have various types of emotional, symptomatic and behavioral problems (Guerney & Stover, 1971; Oxman, 1972); (3) effectiveness of methodology and integration of essential components of the model (Kale & Landreth, 1999; Landreth, 2000); (4) effectiveness in strengthening the parent-child relationship and effectiveness of parents as therapeutic agents of change versus professionals and paraprofessionals (Payton, 1980; Brown, 2000); (5) effectiveness with unique populations of families living with risk factors and extremely difficult life circumstances; and (6) effectiveness of filial therapy with culturally different populations (Chau & Landreth, 1997; Yuen et al., 1997; Jang, 2000; Lee, 2002).

#### **Filial therapy with culturally different populations**

Chau and Landreth (1997) examined the effectiveness of the Landreth and Bratton (2006) 10-week filial therapy model with first generation Chinese immigrant parents and their children in the United States. All assessment instruments and filial play

training instruments were translated, and the training was conducted in Mandarin. They reported that the parents in the experimental group showed significant increases in the parent's empathic interactions, in full attendance to the child, in acceptance of expression of positive and negative feelings, in allowance of child self-direction, in implementation of therapeutic skills, in demonstration of unconditional love, and in recognition of their child's need for autonomy as compared to the control group. The parents in the experimental group also showed a highly significant decrease in their stress level related to as compared to control the control group.

Yuen, Landreth and Baggerly (1997) utilized the Landreth and Bratton (2006) 10-week filial play training model with Chinese immigrant parents in Canada. They found a significant increase in parental empathic behavior, acceptance of the child, and a significant decrease in level of stress related to parenting and in parental perceived problems in their children. The study revealed that (a) effective communication skills were developed by the mothers; (b) the children expressing anger towards the mother in the play sessions became more open with their mothers; (c) mothers who developed personal insights changed with their children in a positive direction; (d) mothers who learned to honor their own needs were better able to meet the needs of their children; (e) positive changes developed in the mother-child relationship as both gained in self-esteem; and (f) as mothers and children became more involved in the play sessions, there was an increase in closeness and effective communication.

Jang (2000) studied the effectiveness of the Landreth and Bratton (2006) 10-week model of filial play training of enhancing the parent-child relationship of Korean parents in Korea. Although the training focused on the mother and a child of focus, Jang reported positive results of the filial play training generalized to other relationships within the family. The qualitative results showed an increase in the mothers' level of sensitivity to the needs of their children, improved couple communication, improved relationships with other family members, and increased empathy and parental acceptance. The mothers also reported decreases in parental stress and in children's behavioral problems.

Lee (2002) conducted a pre-post study to investigate the effectiveness of the Landreth and Bratton (2006) 10-week model of filial therapy in enhancing the parent-child relationship of immigrant Korean parents in the United States. The control group received no treatment. The results of the study confirmed the effectiveness of filial therapy training in increasing the parents' level of empathic interaction with their children, increasing the parents' attitudes of acceptance toward their children, and in reducing the parents' levels of stress related to parenting.

Most of the filial play training researches in Asian population are mainly focused on enhancing the parent-child relationship and the decrease of parental stress (Chau &

Landreth, 1997; Yuen et al., 1997; Lee, 2002). The use of the filial play training model in reducing children's overall behavioral problems is absent. However, the experimental study has been conducted successfully to enhance teacher-child relationship and children's social competence (Leung, 2010). It is believed that the filial play training model is useful to enhance teacher-child and parent-child interaction and to reduce both internalizing and externalizing problem among preschool students in Hong Kong.

### **Innovation**

The following strategies are built on the successful experience and good practices of the experimental study done in June 2010. The concept and operation of 10-week filial play training model is based on Landreth and Bratton's Child Parent Relationship Therapy (CPRT) in 2006. The training model has been successfully implemented in enhancing teacher-child relationship and reducing children's externalizing or internalizing problems. The proposed project is going to extend the training to parents.

*Participant.* Twenty-eight teachers, 70 children and 70 parents in seven kindergartens will be invited to participate in the study. Four teachers, ten children and ten parents will be selected in each kindergarten. All teachers and parents should meet the following selection criteria for the study : (a) must have a child between the ages 3 to 6 who want to enhance child's social competency (reducing both internalizing and externalizing problems); (b) must be able to attend the ten weeks of play training at the scheduled times; (c) must be able to attend a pre-training session to complete pretest instruments and be videotaped playing with their child; (d) must be able to attend a post-training session to complete post-test instruments and be videotaped playing with their child; (e) must agree to participate in weekly 30-minute play session with their student and children in school; and (f) must be willing to sign the consent form to participate. Parent with a child ages between three and six with either internalizing or externalizing problem will be assigned to each teacher participant by the investigator.

All teacher and parent participants who meet the criteria specified above will be scheduled to bring their child to a pre-training session to complete all the pretest requirements, such as to complete (a) the CBCL; (b) a demographic information form; and (c) a consent form. Directions to complete the assessments are given verbally, and teachers will be instructed to respond to all items in the pre-training session. The teachers will be videotaped with a child in a room that contained specially selected toys and materials recommended by Landreth and Bratton (2006). They will be shown the room and will be given the introductory explanation, "This is a room where you and your child can play together. You may play with the toys in lots of the ways you would like to. You will have 15 minutes for the playtime. I'll come and tell you at the end of 13 minutes, so you will know that you have 2 minutes before playtime

will be over. Then I will come back to get you when your playtime is over." All assessments will be conducted prior to the play times to prevent contamination of the parents' assessment responses to the playtime.

#### Confidentiality of the privacy

Confidentiality of the information provided on questionnaires and of the videotapes is ensured through use of the self-assigned code numbers. Only the investigator has the list of the participants' names.

During the day following the last play training sessions, the post-test of instruments will be administered to research participants in the groups. The post-test session's procedures are identical to the pre-test sessions.

*Procedure.* There are two phases of the project. Each teacher participant will be assigned of their students, between the ages of three and six, as the "child of focus" for the ten-week training period. Parents of selected child will be the observer in the first phase of training period. The roles of teachers and parents in the second phase training period will be swapped.

In Phase One (Apr. 2011 – Aug. 2011), Twenty-eight teachers will be randomly selected for receiving 10-week filial play training in seven kindergartens. Four selected teachers will be required to give filial play training to 10 children with either internalizing or externalizing problems in each kindergarten. The selected teachers are trained to be the filial play trainer in their kindergartens. Parents with selected child will act as the observer in this phase. They are asked to observe their children's performance in the play sessions through the video in each teacher training session.

In Phase Two (Sept. 2011 – Jan. 2012), 70 parent participants in ten kindergartens will then be trained to be the filial play parent trainer receiving 10-week filial play training. Twenty-eight teachers will become the observer in phase two. All trainings will also be offered in ten kindergartens after school hours.

The concept and operation of 10-week filial play training model is based on Landreth and Bratton's Child Parent Relationship Therapy (CPRT) in 2006.

End of February – A 30-minute play session between child and teacher is conducted and video-taped.

Phase One Study : Ten-week Filial Play Training Model – Teacher participants  
(Apr. 2011 – Aug 2011)

Twenty-eight teachers will participate in a 10-week model of play session developed by Landreth and Bratton (2006). Each group meets weekly for a two-hour training session for ten consecutive weeks in kindergarten. The groups will be conducted in Cantonese. Materials utilized in the training will be translated into Chinese by the investigator.

The following training session outline is from Landreth and Bratton (2006) :



#### Training session one

Teachers will be asked to introduce self, describe kindergarten, and characterize child they would have special play sessions with. Teachers will be encouraged to work with three to four assigned children during training to increase consistency. Goals and objectives of the training are explained. The homework assignment is to identify emotion of anger, happiness, sadness, and surprise in their child of focus and make a reflective response. Responses are to be written down for reporting to the group. Parents of selected child are also invited to join all the sessions as the observer.

#### Training session two

Teachers will be asked to share homework assignments on identifying and reflecting feelings. Empathic responding is elaborated on and the investigator demonstrated empathic responding with a volunteer followed by viewing of a video tape of the investigator in a play session with a child. Teachers have opportunity to pair off and practice reflective responding. Teachers are given a list of toys (Play Doh, crayons, car, play money, rope, transparent tape, Bobo, ring toss, small cardboard box with window and door cut in side doubles as doll house and container for toys). Investigator will demonstrate each toy and explain their purpose in the special sessions. The homework assignment was to put the toy kit together. Teachers will be asked to select a time and an uninterrupted place in the home suitable for the play sessions. The play sessions may not be interrupted to convey importance to the child and communicate the child is special.

#### Training session three

Teachers will be asked to report on arrangements for their play sessions. Investigator will teach play skills to teachers with role play and a second video taped play session of the investigator with a child. The investigator may use a live demonstration with one of the children. The homework assignment is helped the child make a "Play Session – Do Not Disturb" sign to hang on the door and to have the first play session at kindergarten. Teachers are given a list of play time rules and adhere to them. One teacher is asked to bring video taped play session.

#### Training session four

Teachers have opportunity to report their first play session at home. Areas of difficulty will be discussed with suggestions offered by the investigator. Investigator pay attention to the feelings teachers experienced with support and encouragement. A video tape of a teacher play sessions will be viewed with feedback given from other teachers in the group.

#### Training session five through nine

These sessions will follow the same general format. Teachers will briefly report on their play sessions at home. The investigator gives suggestions and instruction, facilitated group interaction on common problems, and pay attention to parents' feeling. A teacher

video tape will be viewed and discussed each time. Training and role playing of skills are continued each session.

#### Training session ten

Teachers will report on their play sessions, parent session was viewed. The last hour will be spent with parents sharing their evaluation of the experience in play sessions.

A 30-minute play session between teacher and child after 10-week filial play training sessions is video-taped for the analysis of child-teacher relationship.

#### Phase Two study

Sept. 2011 – A 30-minute play session between parent and child is conducted and video-taped.

Phase Two Study : Ten-week Filial play Training Model – Parent participants  
(Sept. 2011 – Jan. 2012)

The schedule and content of “Ten-week Training Model” for the parents are same as the teacher participants as explained above. The parent participants will be asked to train their own child in the play training sessions. The role of parents and teachers will then be swapped.

**Toys for the Play Sessions (between parent-child and child-teacher).** Play Doh, crayon (8 colors), paper, blunt scissors, nursing bottle (plastic), rubber knife, dart gun, a family of small dolls, toy soldiers (10-15 only, 2 colors), small plastic car, Lone Range type mask, a cardboard box (type copy paper comes in) – use the lid to indicate rooms by strips of tape, doll house furniture, small baby doll, blanket, doctor kit, an inflatable Bop bag, a piece of rope, a deck of cards, a ring toss, a couple of domestic and wild animals, craft items for older child. A hand puppet toy would be a special asset. The investigator will discuss with parents and teachers the addition of other items in the first training session.

#### Performance indicators / Evaluation of outcomes

The parent and teacher version of the Child Behavior Checklist (CBCL) (Achenbach, 1978; Achenbach & Edelbrock, 1979; Edelbrock & Achenbach, 1984) will be distributed to the parents and teachers in before and after 10-week filial play sessions to assess children’s social competence (reducing both internalizing and externalizing problems). The Measurement of Empathy in Adult-Child Interaction (MEACI) observational scale was slightly modified by Bratton (1995) developed by Stover, Guernsey, and O’Connel (1971) to assess three major aspect of empathy in child-teacher relationship (CTR): communication of acceptance, allowing the child self-direction, and involvement, during 10-week play sessions.

*The CBCL.* The parent and teacher version of the Child Behavior Checklist (CBCL) (Achenbach, 1978; Achenbach & Edelbrock, 1979; Edelbrock & Achenbach, 1984) will be distributed to the parents and teacher in before and after 10 play sessions to assess children’s social competence. A revision of the CBCL (Achenbach, 1991) was normed on a national

sample of children ranging in age from 4 to 18 years of age. Norms are also available for children 2 to 3 years of age (Achenbach, 1992). A norm for Hong Kong Children was developed in 1991 and revised in 2001. This rating form consists of two scales: social competence and behavior problems scale (Barkley, 1988), only social competence will be recommended to use to measure children's internalizing and externalizing problems. Excellent reliability has been reported for the parent version of the CBCL. Achenbach (1991) reported one-week test-retest reliability of .87 for the social competence portion of the scale. Investigations regarding the validity of the CBCL have revealed positive results as well. The CBCL has demonstrated adequate discriminant validity in distinguishing between clinic-referred and nonreferred children (Achenbach & Edelbrock, 1983). It has been found to be useful in measuring behavior change following a parent training program focusing on child management skills (Webster-Stratton, 1984).

The CBCL is undoubtedly one of the most well-developed, empirically derived rating scales currently available for the behavioral assessment of children. Furthermore, its provision of normative data for different age and sex groups allow the teachers to compare a child on a number a behavioral dimensions while acknowledging the influence of developmental factors. The high reliabilities of the Chinese CBCL were reported, from 0.76 to 0.84, for the subscales in Leung et al's study (2006). The criterion-related validities for the subscales were from 0.66 to 0.96. The CBCL has been widely used among psychologists to identify children's behavioral and emotional problems in Hong Kong.

*The MEACI.* The Measurement of Empathy in Adult-Child Interaction (MEACI) observational scale was modified by Bratton (1995) developed by Stover, Guernsey, and O'Connel (1971) to assess three major aspect of empathy in parent-child interactions: communication of acceptance, allowing the child self-direction, and involvement, before and after 10 play sessions. Two trained observers (two full time undergraduate HKIED students) will be employed to observe parent-child interactions and child-teacher relationship using the MEACI before and after 10 play sessions. The MEACI has been developed for many years with high reliabilities, and excellent concurrent and construct validity.

Reliability coefficient alphas were established for each of the three subscales of the original Stover et al (1971) instrument. The reliability correlation coefficient alpha for the communication of acceptance subscale was .92. The allowing the child self-direction subscale had a correlation coefficient alpha of .89, and the adult involvement subscale had a coefficient alpha of .89. The instrument demonstrated concurrent validity by correlating .85 with a previously developed measure of empathy. Reliability coefficient alphas were reported by Kidron (2003) as high as Stover's study (1971), which were 0.97 for the "Communication of Acceptance, 0.96 for the "Allowing Child Self-Direction, and 0.82 for the "Involvement". High reliability coefficient alphas of three subscales were also reported in Lee's study (2002), they were 0.97 for the "Communication of Acceptance", 0.99 for the "Allowing

Self-direction”, and 0.58 for the “Involvement” among Korean subjects in the United States. This shows that the MEACI is culturally valid and reliable to measure adult-child interaction. The first dimension, communication of acceptance is the major element in the communication of empathetic feeling. Verbal acceptance of a child’s feeling may be an important variable in explaining exceptionally positive or healthy adult-child relationships.

The second dimension, allowing child’s self-direction, this subscale ranges very widely in the spontaneous interaction between parent and child (Stover, 1967).

The third dimension, involvement, it is a measure of the adult’s attention to and participation in the child’s activities.

The MEACI is a five-point, bipolar scale utilized to rate the three dimensions of adult-child interaction at three-minute intervals for six consecutive rating intervals. The scale ranges from a high rating of one to a low rating of five. Each point on the scale is followed by typical responses obtained from coding the direct observations of parent-child interactions.

Considering the three subscales together as components of empathic behavior, the highest level of empathy is evident when the adult commenting frequently on the child’s expression of feeling or behavior in a genuinely accepting manner, is clearly demonstrating that the child is fully permitted to engage in self-directed activity, and is attending fully to the child’s behavior. The lowest level of empathic communication occurs when the parent is verbally critical and rejecting of the feelings or behaviors of the child’s behavior. The lowest level of empathic communication occurs when the parent is verbally critical and rejecting of the feelings or behaviors of the child; cajoles, demands, and continually redirects the child’s activity; and is self-involved, preoccupied, or shut-off from the child.

The Measurement of Empathy in Adult-Child Interaction (MEACI) observational scale has been modified by Bratton (1993) and was used Chau and Landreth (1997) in Chinese population, Jang (2000) and Lee (2002) in Korean population.

*The PTOI.* The Play Therapy Observation Instrument (PTOI) was originally developed Howe and Silvern (1981) and adapted by Perry (Perry & Landreth, 1991) to assess children’s play behavior in a way that meaningfully inform diagnosis, treatment planning, and outcome measurement. These areas of functioning are assessed with 13 items: (a) social inadequacy, (b) emotional discomfort, and (c) use of fantasy. Six items do not fall onto the three domains. The first item on the social inadequacy subscale refers to incoherent or bizarre content. This refers to disjointed, psychosis-like trains of thought or statistically infrequent play behavior. Other items on the social inadequacy scale include the exclusion of the teacher or the parents from the child’s activities, responding to the therapist’s interventions with hostility or withdrawal, and the degree of body stiffness that the child exhibits in gross and fine movements. One aspect of the emotional discomfort subscale includes the quality and intensity of affect that the child expresses; this refers to the child’s mood, not the affect-theme within the play. Other areas of the emotional discomfort scale include aggression toward the teachers or the parents,

conflicted play, and anxiety as expressed by talk about concerns or by disruption of the play. The use of the fantasy subscale includes items such as the amount of time spent in fantasy versus reality, time spent concentrating on characters rather than things, number of different fantasy stories, and number of different roles enacted.

The PTOI was designed to be used in rating 12-minute segments of a videotaped play therapy session. For each subscale item, the rater chooses a descriptive number that best represents the frequency and/or intensity of the child's play behavior as it occurred over the 12 minutes. Two trained observers (two full time undergraduate HKIED students) will be employed to assess children's play behavior using the PTOI during 10 play sessions.

*Evaluation of teacher and parent participants feedback.* Survey and focus group interview will be conducted to collect teacher and parent participants feedback.

**Data Analysis.** Due to the small sample size, usually less than 100 cases, data screening is considered to examine the normality of the data, linearity among variables, and homogeneity of variance (Tabachnick & Fidell, 2007).

An analysis of covariance (ANCOVA) is conducted to test the significance of the difference between the experimental group and the control group on the adjusted posttest means for each hypothesis. In each case the posttest specified in each of the hypotheses is used as the dependent variable and the pretest as the covariant.

ANCOVA is used to adjust the group means on the posttest on the basis of the pretest, thus statistically equating the control and experimental groups. Significance of difference between means was tested at the .05 level. On the basis of the ANCOVA, the hypotheses are either retained or rejected. Effect size is measured by eta-squared. The appropriateness of the use of covariance was determined by ensuring that there were no significant correlations among the dependent measures (Stevens, 1992; Dancy & Reidy, 2004). The assumption of homogeneity of regression for the ANCOVAs will also be checked (Dancy & Reidy, 2004).

## Time frame of the proposed project

Date	Content
Apr/2011	<p>Conduct a briefing session to all participant parents and teachers on the rationale of filial play training model</p> <ul style="list-style-type: none"> <li>- draft an invitation letter to seven kindergartens, participant teachers and parents</li> <li>- draft a "Consent Form"</li> <li>- draft a Manual of Filial Play Training Model</li> <li>- Organise a 2-hour "Training workshop on using MEACI to observe teacher-child and parent-child relationship before and after the training sessions" and PTOI on assessing children's behavior during the play sessions for 2 undergraduate HKIED students</li> <li>- Teachers will be asked to conduct a 30-minute play session for the participant students before the 10-week filial play training sessions. The session will be video-taped for the analysis of teacher-child relationship.</li> </ul>
Apr 2011 – Aug 2011	<p><b>Phase One Study : 10-week filial play training for teacher participants</b></p> <p><b>Pre-test :</b> Distribute the CBCL (teacher version) to teachers and the CBCL (parent version) to parents one week before the 10-week play training sessions for teachers.</p> <p><b>10-week filial play training sessions for twenty-eight teachers in seven kindergartens</b></p> <ul style="list-style-type: none"> <li>- a weekly 2 hours training session for 10 weeks</li> <li>- a weekly 30-minute play sessions with student in kindergarten</li> <li>- 2 trained observers (2 undergraduate HKIED students) will observe child-teacher relationship before and after the 10-week filial play training sessions and assess children's behavior during all play sessions Parent participants will act as observer in the training sessions.</li> </ul> <p><b>Post-test :</b> Distribute the CBCL (teacher version) to teachers and the CBCL (parent version ) to parents after the 10-week filial play training to evaluate whether students' internalizing or externalizing problems have been reduced.</p>
Aug 2011	<b>Interim evaluation workshop and seminars : Evaluation</b>

	meeting of 10-week filial play training by teachers
Sept 2011 – Jan 2012	<p><b>Phase Two Study : 10-week filial play training for parent participants</b></p> <p><b>Pre-test :</b> Distribute the CBCL (teacher version) to teachers and the CBCL (parent version) to parents one week before the 10-week play training sessions for teachers. Parent participants will be asked to conduct a 30-minute play session for their own child before the 10-week filial play training sessions. The session will be video-taped for the analysis of parent-child relationship.</p> <p><b>10-week filial play training sessions for the parent participants in seven kindergartens</b></p> <ul style="list-style-type: none"> <li>- a weekly 2 hours training session for 10 weeks</li> <li>- a weekly 30-minute home play sessions with child</li> <li>- 2 trained observers (2 undergraduate HKIED students) will observe parent-child relationship before and after the 10-week filial play training sessions and assess children's behavior during all play sessions. Parent participants will act as observer in the training sessions.</li> </ul> <p><b>Post-test :</b> Distribute the CBCL (teacher version) to teachers and the CBCL (parent version) to parents after the 10-week filial play training to evaluate whether students' internalizing or externalizing problems have been reduced.</p>
Feb 2012	<p><b>Workshop on training teachers and parents on using MEACI and PTOI to measure children's play behavior.</b></p> <p><b>Evaluation workshop and seminars : Evaluation meeting of 10-week filial play training by parents</b></p>
March 2012	Data screening and data analysis & report write-up
Apr 2012	DVD production, publication of manual, handbooks, and exercises.

#### Expected deliverables and outcomes

Teacher-child and parent-child relationship and student social competence will be enhanced. All the training sessions and play sessions will be recorded in DVD for public reference. Handbook, manual, exercises, and teacher and parent sharing will also be published. The investigator will present the findings in one of the international conferences of child development. A paper will also be submitted to one of the academic journals for publication. The DVD and printed products (e.g., Manual & exercise books) have commercialization potentials.

## Budget

I. Staff Cost		Salary
A. 1. Project Assistant – 13 months 12,400 per month		\$161,200-
Provision of MPF to PA : $\$161,200 \times 5\% = \$8,060$		\$8,060-
2.2 student helpers (2 observers)		\$26,320-
70 hours x 2 students helpers x \$47/hour x 2 instruments x 2 phases		
	Sub-total	\$195,580-
II. Equipment		
B. 1. Toy materials		\$70,000-
Play Doh, crayon (8 colors), paper, blunt scissors, nursing bottle (plastic), rubber knife, dart gun, a family of small dolls, toy soldiers (10-15 only, 2 colors), small plastic car, Lone Range type mask, a cardboard box (type copy paper comes in) – use the lid to indicate rooms by strips of tape, doll house furniture, small baby doll, blanket, doctor kit, an inflatable Bop bag, a piece of rope, a deck of cards, a ring toss, a couple of domestic and wild animals, craft items for older child, and hand puppet toys. \$1,000/set		
10 sets for each kindergarten $10 \times 7 \times \$1,000 = \$70,000$		
	Sub-total	\$70,000-
III. General Expenses		
C. 1. Printing (Manual of filial play training, Instruments and documents)		\$500-
2. CDs, DVD or tapes for recording of play sessions		\$500-
3. Production of DVD, Manual, and Exercises (Xerox Color Print)		\$3,500-
\$500 per copy x 7 = \$3,500		\$1,540-
4. Travel expense		
Travel expenses for research assistant within Hong Kong		
22 round trips x \$70/trip = \$1,540		
	Sub-total	\$6,040-
D. 1. Contingency		\$2,282-
	Total	\$273,902
		(Round up to 274,000.00-)



**Justifications for the Budget in Each Category****A. Project Support**

PI will conduct all play training sessions. A PA will be accountable for data collection, data entry, and data analysis. He/She will also assist in coordinating schools and parents, doing literature search, organizing meetings, supervising student helpers, and dealing with issues related to the project.

Student helpers will assist to observe the parent-child interactions, child-teacher relationship, and children's play behavior during the play sessions which is videotaped.

**B. Equipment (Toy materials)**

Each kindergarten will reserve 10 sets of toy materials for parents to use in the play training sessions at home

**C. General Expenses**

The general expenses include printing of "Play" manual and "Toys and Materials", CDs and DVDs for recording all play sessions in the study.

Travel expenses

The PA will need to travel to the kindergartens to collect all the data.

**Assets Usage Plan**

Category (in alphabetical order)	Item / Description	No. of Units	Total Cost	Proposed Plan for Deployment
Not applicable in the time being. The unit cost of each item does not exceed \$1,000.				

**Report Submission Schedule**

I / My school / My organization commit(s) to submit proper reports in strict accordance with the following schedule:

Project Management		Financial Management	
Type of Report and covering period	Report due date	Type of Report and covering period	Report due date
Progress Report 1/4/2011 - 31/3/2012	30/4/2012	Interim Financial Report 1/4/2011 - 31/3/2012	30/4/2012
Final Report 1/4/2011 - 30/4/2012	31/7/2012	Final Financial Report 1/4/2012 - 30/4/2012	31/7/2012