

**MINISTRY OF EDUCATION AND TRAINING
THE VIETNAM INSTITUTE OF EDUCATIONAL SCIENCES**

MAI THI PHUONG

**EDUCATION OF SCHOOLING SKILLS
FOR THE CHILDREN WITH AUTISM
TO PREPARE FOR THE 1ST GRADE**

Majors: Theory and History of Education

Code: 62.14.01.02

SUMMARY OF THE THESIS

Ha Noi, 2017

This thesis has been completed at the Viet Nam Institute of Educational sciences

Academic Supervisors: **1. Prof. Dr. Nguyen Thi Hoang Yen**

2. Dr. Vuong Hong Tam

Defender 1: Assoc. Prof. Dr. Nguyen Van Le

Defender 2: Assoc. Prof. Dr. Nguyen Minh Duc

Defender 3: Assoc. Prof. Dr. Le Van Tac

The thesis will be defended at the Defense Committee held at The Vietnam Institute of Educational Sciences.

At on.....

The thesis can be found at:

- The Vietnam National Library
- Library of The Vietnam Institute of Educational Sciences

INTRODUCTION

1. Reason for topic selection

1.1. In the world, in many countries, including Vietnam, “autism” issue is becoming prevailing. This has become a matter of society.

1.2. Children with autism spectrum disorders (ASD) have many difficulties, especially in communications and social interaction as well as stereotype and rigidity in their interest and activities. Children with ASD are special target group which needs support and assistance to assure that they have access to caring services, education as other children, in accordance with Convention on the Rights of the Child, Constitution, laws, i.e. Law on Education, Law on Persons with Disabilities, Law on Children Caring and Education.

1.3. The number of children with ASD has been drastically on increase. Yet, the majority of them have studied at special schools. The number of those who have access to general primary school very limited. According to the survey results in the research by Nguyen Thi Hoang Yen, “*The early identification and inclusive education for preschool children with ASD in Ha Noi and Ho Chi Minh city have been done well. However, when transitioning to primary school, those children have very few chances attending regular classrooms*”(56, page 248). In the meantime, “*The majority of children with ASD tend to accept and want to go to inclusive primary schools, pre-schools. There is only a small number of children with ASD that do not want to go to school. Those children have severe ASD, with very limited communication and interaction skills* (56, page 249).

1.4. In foreign countries, research on children with ASD has been done since long time ago with huge amount of studies. On the contrary, in Vietnam, research in ASD have been implemented over the last 10 years. Research in Vietnam focus on early intervention. Some few studies examine children with ASD at primary-school age. There are very few studies on preparing children with ASD for 1st grade of general primary school while the demand for inclusive education is huge.

Based on the mentioned literature and reality, we decided to go with the topic “*Education of schooling skills for the children with autism spectrum disorders to prepare for the 1st Grade*”, which aims to preparing schooling experience to create favorable conditions for children with ASD to enter 1st grade, thus assuring their right for education.

2. Study goals

Proposing methods on schooling skills to help children with ASD to effectively enter the 1st grade.

3. Participants and research objectives

3.1. Participants

The process of teaching schooling experience to prepare children with ASD at higher preschool level to start 1st grade.

3.2. Research objectives

Solving relations between unique difficulties of children with ASD in comparison of demands for primary-school students.

4. Scientific hypotheses

Children with ASD face many special difficulties (social interaction, communications, behaviors), which cause obstacles in their education at general primary schools. Hence, if we can introduce such instructional methods as using visual techniques, applying Vietnamese poem, music, song, games with rules, organizing “lessons”, “classrooms”, formulating and implementing individual education plan (IEP) on teaching schooling skills, applying rewards and punishment etc., children with ASD can have basic schooling skills to integrate themselves into general primary schools.

5. Study tasks

- Study literature issues on children with ASD and teaching academic skills for them to prepare entering 1st grade.

- Study the reality of schooling skills of children with ASD and the reality of teaching academic skills for children with ASD to enter 1st grade.

- Propose education methods on schooling skills for children with ASD to enter 1st grade and implement pedagogical experiment.

6. Methodology and research methods

6.1. Methodology

The thesis approaches the issues on comprehensive way with specific viewpoints: i.e. dialectical materialism, individual access, activity, inclusive education.

6.2. Research methods

6.2.1. Literature research methods

6.2.2. Realistic research methods

- Observation
- Questionnaire
- Interview
- Teaching experiment
- Case study

6.2.3. Other methods

- Expert method
- Mathematics statistics

7. Research scope

- The research sample limits at 35 children with mild and moderate ASD, ranging from 5 years 0 months to 7 years and 11 months; 35 parents of the children with ASD and 30 teachers who have been teaching 1st grade preparation classrooms at special education center in the urban area of Hanoi.

- The thesis limits the experiment on 2 children with ASD, i.e. 5 years 0 months to 7 years old and 11 months with mild and moderate ASD. Those children have been attending the Experimental Unit, Research Center for Special Education, Vietnam Institute of Educational Sciences.

8. Defending theoretical points

8.1. In order to enter inclusive 1st grade, children with ASD need to be equipped with schooling in the following skill domains: self- help at school, using and

preserving learning and school materials, following school and classroom regulations, interaction with teachers and peers.

8.2. Teaching academic skills play a important role in preparing for children entering to 1st grade. However, the reality of teaching schooling skills to the children with ASD has not yet been studied to fit the Vietnamese educational environment.

8.3. Teaching methods on academic skills for children with ASD needs to combine between general education and special education for children with ASD fitting with Vietnamese culture and education, focusing on preparing academic skills for children to enter primary schools in a convenient way.

9. Thesis contribution

9.1. In terms of theory

Supplement and diversify theory on primary education and schooling skills for children with ASD :

- Formulating system on children with ASD and introducing the concept with new approach.
- Formulating concept of academic skills and the system of schooling skills is described in details.
- Desinging checklists on academic skills for children with mild and moderate ASD in preschooling ages.

9.2. In terms of reality

- Introducing the reality on academic skills for children with ASD and educating academic skills for children with ASD.
- Methods on academic skills are suggested and verified through teaching practice, having reference values for research, training teachers for preparation classrooms for children with ASD in particular and children with disabilities in general to enter 1st grade.

10. Thesis structure

The thesis includes introduction, conclusion, recommendation, appendix and 3 chapters.

Chapter 1: Theoretical foundation on educating schooling skills for children with ASD to enter 1st grade.

Chapter 2: Reality of teaching schooling skills for children with ASD to enter 1st grade.

Chapter 3: Methods on educating schooling skills for children with ASD to enter 1st grade and pedagogical experiment.

CHAPTER 1: THEORITICAL FOUNDATION ON EDUCATING SCHOOLING SKILLS FOR CHILDREN WITH ASD TO ENTER 1ST GRADE

1.1. Overview of literature

1.1.1. Research on children with ASD and education for children with ASD

In the world, autism has been studied by scientists since late XIX century. Yet, in 1943, America psychiatry named Leo Kanner introduced clear description on autism, which is mental disorder at early childhood [72]. The “autism” matter has been attracting attention by a huge number of researchers, hundreds of books in various types have been published. Many scientists have spent years on study and have become authors of researches and book titles. Most typical authors are Leo Kanner, Eric Schopler, Lorna Wing, Bryna Seigel, Ivan Lovass, Carol Grey. Especially, Ms. Temple Grandin, who also gets autism, is author of famous books such as *Emergence*, *Labelled Autistic*, *Thinking in Picture*, *The way I see it*. The researchers have helped to provide further understanding of this symptom.

In view of education, one of the biggest achievement of research on autism is the study and application of education methods for children with ASD. Many methods have been widely introduced, such as Applied Behavior Analysis – ABA, Treatment and Education of Autistic and related communication handicapped children – TEACCH, The Picture exchange communication system – PECS, Positive Behavior Support – PBS and education programs for children with ASD such as Small steps, PEP-R (Psychology Education Profile – Revised), More than words, Need 2 persons to talk, etc.

In Vietnam, autism has just been known by early XXI century. Researches on autism spectrum disorders have been conducted over the last 10 years. Researches on children with ASD have been done at children at preschool ages. A small number of researches targeted children at primary school level. The usage of programs and intervention methods have been mentioned at a number of researches. Those are intervention in core activity and phonetics for treatment, teaching children with ASD to understand the feeling, the reaction of children with ASD behaviour, the application methods such as TEACCH, PECS, ABA, Montessori, Social Stories, etc. in intervention for children with ASD. Studies worth to mention include Ngo Xuan Diep [9], Nguyen Thi Thanh [38], Nguyen Nu Tam An [1], [2], Dao Thi Thu Thuy [44], Do Thi Thao [40], Nguyen Hoang Yen [54], [55], Nguyen Thi Huong Giang and Tran Thu Ha [10], Vu Thi Bich Hanh [13], Nguyen Thi Kim Anh [3].

In general, in Vietnam, there are a number of basic theory on early intervention and inclusive education for children with ASD. However, the number of such researches remains very limited when comparing to other countries. We need to have broader and in-depth studies that fit with Vietnam’s culture and education.

1.1.2. Research on schooling skills and schooling skills for children with ASD

In the view point that academic skills are part of social skills, relating to communication skills, self-help skills. In this regard, based on the previous studies and researches on the above topics, we try to understand each method to build up

skills for children with ASD. From that point, the relations between studied issues which are covered by this research. With this approach, we examine education methods for children with ASD, communication experience, self- help experience for children with ASD. Based on the findings from such examination, the foundation for schooling skills for children with ASD is expected to be formulated. To provide children with ASD with needed skills, such methods as ABA, TEACCH, PECS, social stories, video modeling, role playing/drama, friendship club, visual aid, establishing study environment, music therapy, game, etc. are needed to be done.

Based on retrospective studies, consolidation reports, analysis, we find that research on skills for children with ASD has attracted great attention by scientists and researchers in various kinds of methods. We have also consolidated effective methods and techniques, which include ABA, social story, visual aid, TEACCH, PECS, music therapy, game, creating favourable environment. However, those methods needed to be selected and to be formulated to be relevant to Vietnam's social and culture environment.

Research on education method on schooling skills for children with ASD to enter 1st grade is newly conducted in this sector in Vietnam. The study on this issue is very necessary and urgent. Also, this study should be based on the outputs of previous research, which need to be flexibly applied to suit to our country's culture and education environment.

1.2. Children with ASD

1.2.1. Concept

Based on analysis of available concept on children with ASD, in this research, we use criteria of Diagnostic and Statistical Manual of Mental Disorders-DSM by American Psychiatric Association-APA, the latest version DSM-5, published in 2013. This material is considered by psychiatrist as "bible" to formulate concepts on children with ASD. Those include:

ASD children are those who have impairments in communications, social interaction, stereotype in interests and activities. Those symptoms must appear in the early childhood and limit children's daily activities.

Under the scope of this thesis, we target children with ASD, using the technical approach and the concepts commonly- used in the world. Yet, to be concise, we use the terminology Children with ASD.

1.2.1. Criteria for diagnosis

In this research, we use criteria DSM-5 to confirm the concept of children with ASD, which is used throughout this thesis.

1.2.2. Classification of children with ASD

Within the thesis, we use the classification of children with ASD based on DSM-5 level [57, page 30]. Based on this classification, children with ASD are divided into groups with various needs for support as follows

Level 3: Need to support at maximum level, equivalent to severe level of autism;

Level 2: Need to support at positive level, equivalent to moderate level of autism;

Level 1: Need to support at relevant level, equivalent to mild level of autism;

In line with common trends and current conditions of Vietnam, the identification of children with ASD target groups is verified by doctors at Paediatrics Central Hospital. Based on evaluation results, we select children with mild and moderate ASD to evaluate the levels of academic skills. Also, we select 2 cases to experiment the proposed academic skills..

1.2.3. Characteristics of children with ASD

Within the thesis' scope, we focus on main characteristics of children with ASD, which do good and harm to teach academic skills. The characteristics include awareness, social interaction, language-communications, behaviors.

1.3 Inclusive education and pre-inclusive classrooms

1.3.1. Concept

"Inclusive education is an education method under which children with disabilities study at the same environment with other children, right at the children's living areas" [27, tr.67].

Currently, inclusive education is common method for Vietnamese children with ASD. Hence, the thesis aims at support, preparation for children with ASD to successfully integrate themselves at primary levels.

1.3.1.1. Environment for inclusive education

Education environment include two (2) types, i.e. material environment and psychology environment. Material environment is pre-condition for teaching and learning. This environment include infrastructure of school, classroom, desk, chair, teaching facilities such as blackboard, locker, layout of classrooms to create favourable conditions for children with ASD to exercise activities at the most convenient way. In addition to this, psychology environment is condition needs to implement the teaching and learning effectively. This environment is formulated by the interaction of emotion, psychology between children and children, between teachers and children. If the psychology environment contains friendly factors, making children safe and beloved, comfort children, they prefer going to schools and actively integrate themselves in teaching and learning. On the contrary, if the psychology environment contains unfriendly factors, discomfort children, make them unsafe, frighten, the children will lose their interest in learning. This surely results in unwanted outcomes.

1.3.2. Pre-inclusive classrooms

In this research, we explored teaching methods on academic skills for children with mild and moderate ASD, who are joining classrooms of pre-inclusive at special centers in Hanoi. Hence, we clarify the concept of pre-inclusive as follows

Pre-inclusive classroom is for children with special needs, including ASD. This kind of class aims to equip children with knowledge and academic skills to support them to enter primary level conveniently and to better response to primary school life.

Pre-inclusive class is considered as a preparation step to start primary level. This thesis uses two (2) names, i.e. class on pre-integration or pre-schooling. This is due to different names at various centers. Yet, the common purpose is to provide knowledge

and schooling skills at basic levels for children with ASD and disabled children before entering 1st grade..

1.3. Schooling skills

1.3.1. Concept

To take as basis for confirming the concept of schooling skills, we examine the concept of skills, academic skills and learning skills. From this, we identify the difference between those skills and the difference with the academic skills which will be formulated by ourselves. We provide the rationales to confirm the concept of academic skills as follows:

- Target and environment applying those skills are pupils at class, school. Those skills are mostly happened at school, class and location related to schools.

- Those skills do not belong to specific skills to study any specific subjects. For example, skills to study mathematics include awareness, calling number, calculation skills, etc. skills to study Vietnamese include reading in mind, reading out loud, reading and understanding, writing, preparing document, correspondence etc. Academic skills do not belong to specific skills to learn specific subjects.

- Those skills happen at class, school with factor of learning environment factors such as teacher, friend, desk, chair, ruler, pen, pencil, book, notebook, etc.

From this point, we introduce the concept of academic skills as follows:

Schooling skills are skills which are used by pupils at class, school, to execute with results of one activity or one action by applying learned knowledge, experience, to act in response to the reality, to help themselves properly response to school life at primary level.

1.3.2. Schooling skills classification

Based on difficulties of children and targets for children need to attain at pre-schooling level, the education target for developing emotion and academic skills for 5- 6 year old children; based on standard criteria for children at 5 years old, we select academic skills needed for children with ASD to enter 1st grade with 4 groups of skill with details as follows.

A. Skills of self-help at school: skills to help children care for themselves when they are at school, i.e. eating, drinking, clothes wearing, using toilet, bathroom, securing personal sanity. Hence, the self- help skills include the following:

A1. Having meals with friends. A2. Take drink and drink. A3. Wearing shoes and sandals. A4. Going to toilet. A5. Wearing hat. A6. Wearing and taking out clothes. A7. Keeping body clean.

B. Skills of using and preserving of learning and school materials: skills to properly use function of learning facilities and to preserve those facilities, to avoid intentionally destroy those facilities. Those include the following:

B1. Preparing learning facilities before going to schools. B2. Arranging learning facilities after use. B3. Using learning facilities. B4. Preserving learning facilities. B5. Preserving facilities at class. B6. Using facilities at school. B7. Washing dusters and cleaning blackboard.

C. Skills of following class and school regulations: representing in behavior such as observing school/ class regulations. This include the following:

C1. Queuing in line to go to class. C2. Wearing uniform tidily. C3. Going toilet, discharging rubbish at permit areas. C4. Going to class on time. C5. Sitting at right manner and not changing seat. C6. Sitting at right location. C7. Rise hand when providing answers. C8. Standing up when answering and Sitting down after completing answers. C9. Not talking freely/ Keeping silent. C10. Paying attention when teachers provides lessons. C11. Completing homework.

D. Skills of interacting with teachers and peers: representing at interaction between teacher and friend and with friends. This include the following:

D1. Greeting. D2. Speaking in the public. D3. Cooperating with classmates. D4. Following teacher's instruction. D6. Searching for teacher's support. D7. Getting permit from teacher to go out and to enter the class. D8. Making friends. D9. Play with friends.

1.3.3. Characteristics of schooling skills of children with ASD to enter 1st grade

1.3.2.1. Skills of self- help at school

At this age, after long period of time, children with ASD are taught to do self-help, those children can execute basic skills such as using spoon to feed themselves, wearing shoes and sandals, taking drink and drinking, washing hands, making water, etc. However, due to disorders in action, habbit, feeling, etc. Children with ASD execute those skills at their preference, in some strange manner. For example, some prefer facing to the wall in toilet or wahing hands has to strictly follow all steps, i.e. washing hands with water, taking soap, washing every finger, twist, washing again with water, drying hand. If there is no towels for drying hands, the child becomes inconvenient, running back and forth continuously. If the child does not want to do those skills, they will definely resit without caring for other's response and mood.

1.3.3.2. Skill of using and preservating of learning and school materials

At this age, children know how to use pencil for drawing, color pencil to color the picture, to use scissors to cut the straight line, to use paper and notebook. However, children are not aware of the arrangement of study facilities, preservation of their own school facilities and of others, of school, class and the public. Due to the imitation on behavior, hobby or other abnormal action, children with ASD will have various types of response. For example, they very much prefer drawing on notebook, desk, wall, etc. on any places they like. When getting angry, they can easily tear the paper, throw away pen, broke rule, etc. When seeing nice flower garden, they can jump across the fence to enter the garden to pick up flowers.

1.3.3.3. Skills of following of class and school regulations

At this age, children know how to follow a number of regulations set forth by teachers when they join pre-schooling or personal activities, treatment hours, exercise hour, etc. However, those activities at pre- schooling hours are quite different from those at primary schools. At pre-school, the majority of activates are games, children learn through playing games. Children are not forced to follow regulations. Hence, the observation of school, class regulations is very simple. Children can sit at their right place, reply to teacher's question, eating and sleeping as regulated by the

school. However, the children can walk back and forth inside class, always stand up or sit down or even can chat with friends, etc.

1.3.3.4. Skills of interaction with teachers and peers

At this age, children know how to play with peers, how to report to teacher when other students hit them or when other friends chat or break learning facilities, know how to beg for teacher's support when needed. However, for children with ASD, those are untold difficulties. Due to serious disorders on social communications and social intervention in many cases [69], children with ASD do not know how to play with friends. They only play by themselves and play the way far different from the normal. They do not know to seek for support when meeting difficulties. They are passive in greeting, saying thank you or sorry when needed.

1.4. Teaching schooling skills for children with ASD preparing to entering 1st grade

1.4.1. Meaning of teaching schooling skills for children with ASD

Teaching schooling skills for children with ASD to enter 1st grade is very meaningful for children. This work has the following benefits.

- Contributing to the right to study, to be integrated into primary school environment, which is the very first setting for children to later integrate into society.

- Helping children to get used to activities similar to those at primary school. This helps children avoid surprise, decrease the anxiety when entering 1st grade for the first time at junior school, as children are easy to be effusive when they face with sudden changes without recommendation or notice beforehand. In case of sudden change, the negative response such as shouting, running back and forth all the time, hurting themselves or hurting others.

- Preparing basic academic skills to support children better response to life at 1st grade, i.e. raise hands to get permit for speaking or to go outside class.

- If children can go to school, their future will have more chance to be developed, they can become good citizen.

- Teaching schooling skills for children with ASD to enter 1st grade is to contribute to successfully implement inclusive education.

1.4.2. Objectives of a schooling skills for children with ASD to enter 1st grade

Based on unique features of children with ASD, pre-schooling's purposes, education for children in general, we introduce the objectives for teaching schooling skills for children with ASD as follows:

Based on features, level of autism, each children with ASD needs support and education to attain basic skills on self- help, usage and preservation of learning facilities, school and class facilities, observation of school, class regulations, interaction with teachers and friends to be well prepared to enter 1st grade.

1.4.3. Teaching content of schooling skills for children with ASD entering 1st grade

With the above objectives, teaching schooling skills for children with ASD entering 1st grade is done with four modules, i.e. teaching skill of self- help at school, teaching skills of usage and preservation of facilities for study, teaching observation of school and class regulations, teaching interaction with teachers and friends. Those

modules are taught through practical exercise at each school, center at each nursery, pre- school for integration. Such format as lesson, classroom with suitable education to children with ASD.

1.4.4. Methods of teaching schooling skills

Content of teaching schooling skills needs to be done through practical experiment at class at special centers or through implementing lessons, classrooms; organizing games on academic skills, using visual aids, using methods on compliments or punishment, using music and poem, establishing class environment.

Environment for schooling skills includes education at school (to formulate and to practise academic skills) and at family (to support, to strengthen, to practise academic skills at class, and school.)

Conditions to implement schooling skills: preparation on human resource teachers and parents of children with ASD must properly cooperate with each other during educating academic skills for children. Teachers need to have level of professionability on educating academic skills for children with ASD as well as commitment to the work. Parents of children with ASD need to be trained on objectives of this type of education, its content, methods and formats for schooling skill education for children with ASD before the process starts. For infrastructure, the preparation for room properly equipped with degree, light, desk and chair, locker, etc. learning materials, study volume, environment for entertainment.

1.5. Factors affecting schooling skills for children with ASD to enter 1st grade

During the process on schooling skills, children with ASD are affected by difficulties from children themselves, teachers in-charge, family, classmate, student environment. Specific:

1.5.1. Strengths and obstacles of children with ASD

1.5.2. Professional ability and commitment of teachers

1.5.3. Support and cooperation from family of children with ASD

1.5.4. Support from peers

1.5.5. Classroom environment

Conclusion for chapter 1

1. In the world, research on children with ASD have been deeply executed. Yet, in Vietnam, issues on children with ASD, methodology, methods for this group remains very new, especially teaching schooling skills for children with ASD. In this regard, this type of research must be further developed in a more comprehensive way, helping children with ASD to enter primary education level more comfortably, assuring the right for study.

2. Previous research on academic skills, communications skills, self- help skills for children with ASD are base for formulating teaching academic skills relevant to children with ASD in Vietnam. The effective methods include ABA, TEACCH, PECS, using visual aids, friendship circle, treatment by music, game. Those method and methodology must be studied well to search for the ones relevant to Vietnam's

socio and economic conditions, suitable to teaching schooling skills for children with ASD in Vietnam.

3. Due to the fact that children with ASD have disorders in behaviour, language, sensory, etc. especially, those disorders have caused serious difficulties in social interaction, social communications, they meet with many difficulties to enter 1st grade at primary schools. Hence, children with ASD needs to be equipped with basic skills to start study at 1st grade effectively.

4. During the process of teaching academic skills for children with ASD, such factors as family, teacher, friends, learning environment have both positive and negative affects. Therefore, researchers must explore positive and negative impacts, minimize affects by negative factors, through study, research to search for suitable academic skills.

5. Children in general, children with ASD in particular, all need to be well prepared to enter 1st grade. Teaching schooling skills for children with ASD is very meaningful work, helping, to follow regulations at school, to use and to preserve study facilities, to interact with teachers and friends. Having such kinds of skills, children with ASD will become less hesitant, surprised when entering 1st grade, thus easily integrate themselves at school.

CHAPTER 2: REALITY OF TEACHING SCHOOLING SKILLS FOR CHILDREN WITH ASD TO ENTER 1ST GRADE

2.1. Overview of the survey

2.1.1. Objectives of the survey

Understanding, analysing, evaluating special features of schooling skills for children with ASD to prepare entering 1st grade and the reality of methods which have been used by teachers providing schooling skills for children with ASD. From that point, the foundation to identify methods on schooling skills, suitable to children with ASD, to help them have needed skills to enter primary schools successfully.

Content of the survey

- Reality of children with ASD in preparing to enter 1st grade: strong points and difficulties of children with ASD, special features on schooling skills for children with ASD to enter 1st grade.

- Current reality of schooling skills for children with ASD to enter 1st grade: awareness of parents and teachers on the importance for preparing schooling skills for children with ASD; reality of teachers and parents who have been applying teaching schooling skills for children with ASD and the effectiveness of the methods which have been employed by teachers and families; Advantages and disadvantages which parents and teachers encounter during the education process; affecting factors to education process for children with ASD to enter 1st grade.

2.1.2. Survey tools

To achieve the above targets, we have used the following set of survey, i.e. Testing table on schooling skills for children with ASD, Questionnaire on survey and interview by teacher, Survey sheet and deep interview for parents.

2.1.3. Location, target group and survey timing

Survey area: schools/ center for special training, a number of pre-schools inside Hanoi.

Target group: 30 teachers for special education, 35 parents and 35 children with ASD.

Survey timing: from September to November, 2014

2.2. Survey result

2.2.1. Reality of schooling skills of children with ASD in 5 – 7 years old

Through survey of schooling skills by 35 children with mild and moderate ASD and interviews with teachers, we find that skills at self-help skill group are done by children at those ages. Those skills do not cause any harm to children themselves as they can learn such skills at personal lessons, practise those skills at daily base and repeat those skills again and again. The remaining skills of the other 3 groups cause difficulties for children with ASD to execute as those are quite new and some skills are difficult that children with ASD themselves with disorders hardly can do. Such skills as usage and preservation of study facilities, observation of regulations at schools, interaction with teachers, friends are not yet provided to children with ASD. In the case such skills are provided, the children are in the process to get used to those.

Reality of schooling skills for children with ASD to enter 1st grade

- *Awareness of teachers and parents about importance of preparing schooling skills for children with ASD.*

Both parents and teachers highly appreciate the teaching of schooling skills for children with mild and moderate ASD. 73.8% of common results from 2 groups consider those are very important and 26.2% make it important. This result reflects modern understanding and high level of expectation by parents and teachers for teaching schooling skills for children with ASD. However, for parents with thinking of “very important” as they are regulated by institutional factors. They expect much on teaching schooling skills for children with ASD. Results from working with parents of children with ASD show that even when children with ASD have serious disorders and cannot control behaviours, their parents still wish to send them to primary schools.

- *Current status of teachers using education methods on schooling skills for children with ASD and effectiveness of methods applied*

Table 2.6. Comparing frequencies of usage and effectiveness of methods used by teachers in educating schooling skills for children with ASD

Method	Frequency of usage			Effectiveness		
	TB	SD	level	TB	SD	level
Using words	2.00	0.00	1	1.17	0.65	4
Making example	2.00	0.00	1	1.13	0.82	5
Using game	0.50	0.73	9	0.47	0.73	8
Using social story	0.07	0.25	13	0.10	0.40	13
Visualize	0.93	0.78	6	0.87	0.90	6
Applying complement	1.93	0.25	3	1.87	0.35	1
Applying criticism and punishment	1.80	0.41	4	1.47	0.73	2
Formulating working schedule	1.47	0.63	5	1.40	0.72	3
Establishing positive learning environment	0.47	0.73	10	0.40	0.72	10
Using music and poem	0.33	0.71	12	0.33	0.71	11
Applying TEACCH method	0.70	0.75	8	0.43	0.63	9
Applying ABA method	0.93	0.78	6	0.60	0.72	7
Applying PECS method	0.37	0.61	11	0.30	0.53	12

The above table shows that such methods as using words, making sample, compliment, and punishment are frequently used to educate schooling skills. Under which, teaching method using words and making samples, compliments are mostly used because teachers do not have to spend much time to prepare, to design and to affect children at once. Other methods such as social story, using poem and music, applying PECS, establishing positive learning environment are less used. However,

the effects resulting from those methods are not relevant to usage frequency. To be exact, using words and making sample are frequently used but its effects are not evaluated by teachers, as compared with other methods such as compliments, punishment, formulating working schedule. Using words and making sample are selected when both 2 methods are combined. Such methods as social story, using poem and music, applying PECS are ranked at the table bottom. The reason is very few teachers can well use those methods or get used to those. Hence, they cannot provide any information on how those methods work.

In fact, most of teachers clearly understand role of those methods but due to many reasons, i.e. experience, duration, training to improve knowledge, giving extra class to earn for living, etc., the teachers have few chances or are hesitant to introduce those to life.

- *Advantages and difficulties, expectation by teachers and parents for educating schooling skills for children with ASD*

Advantages which we have learnt that children with ASD are much loved and cared by both parents and teachers, professional levels of teachers are frequently improved and strengthened. However, the difficulties which confront to both parents and teachers show that school/ center for special children at both State and private sector have to manage finance by themselves. Hence, the tuition fee is very high. There is no general management in finance, professionalism and finance support from any ministries. The fact that children with ASD joining 1st grade is also a headache. Many schools do not want to receive children with ASD though the Vietnamese state has issued law on rights to get education for disables. If one family expects to enroll their child to school, a teacher must guarantee for that child. After that, the application form will be submitted to headmaster or the family has to find an accompanion for that child. How hard it is! In fact, there remain many discrepancy in education for the diables in general and the disabled children though Law on disable was issued in 2010. Seven years has passed since the issuance date. Yet, many children with ASD has not had chance to access to education in full meaning. Over twenty years has passed since inclusive education is implementd. Yet,the inclusive education has not properly done its role.

2.2.3. Influential factors on education process schooling skills for children with ASD to prepare entering 1st grade

The result shows that teaching schooling skills is affected by many factors. Yet, the mail factors are the children themselves, teachers, families, special centers.

Children themselves: Both teachers and parents view that difficulties from children are basic factors, affecting result of education by both teachers during educating schooling skills because children with ASD get many difficulties in social intevention, communication, behavior, feeling, etc. and many children meet difficulties in mental aspects.

Teachers: Both teachers and parents view that factors affecting teaching schooling skills for children with ASD are teacher. Teacher plays very important in education for children with ASD because teacher introduce methods to formulate separte plans, incl. Personal education plan to educate schooling skills for children

based on daily, weekly, monthly and semester base.

Families of children with ASD: Family is important to help children make progress on process of teaching schooling skills. This reflect through the cooperation between teacher and parents in the way that introduced by teachers. As long as children are educated at all environment settings, clear progress is made.

Intervention center: Centers for intervention are base to organize small class to support children with ASD having good environment for schooling skills at basic level to enter 1st grade comfortably. The arrangement of human resource and infrastructure contribute to education process on schooling skills for children with ASD.

Comments on reality

In terms of positive side, we find some good points as follows

- 1) Many teachers and parents have properly and fully understand the importance of schooling skills to prepare for children with ASD to enter 1st grade. They also understand how difficult it is to educate schooling skills for those children
- 2) The teachers, who have certain levels of professionalism and much experience working with children with ASD, have strong commitment to the career and really love children.
- 3) Teachers have applied many methods and countermeasures to educate schooling skills for children with ASD.

In terms of negative side, we find a number of difficulties and obstacles as follows:

- 1) ASD children have many defects, especially at social communications and social interaction. They are also not flexible, imitative in their hobbies and action. Those defect make them untold difficulty when entering ordinary schools, thus making them not being able to harmonize themselves with others. Those defects also cause them difficult when learning academic skills, i.e. They do not know how to follow school regulations, they find themselves difficult to follow teacher's order, they meet with difficulty in communications and playing with friends and teachers.
- 2) Teachers know how to apply various methods. Yet, those are not systematic, not yet to be well implemented and to be relevant to scientific process
- 3) Cooperation with parents have been done but only at limited level. This cooperation is not frequent and remains losing.
- 4) Teaching schooling skills for children with ASD is impacted by many subjective and objective factors. This results in low level of education in schooling skills.

The survey results show that this reality is caused by the following:

Education units have not had official research about teaching schooling skills for children with ASD before applying to the reality. Those units implementing teaching schooling skills to meet the demand children with ASD and parents by grouping children into classrooms and apply methods and countermeasures which teachers have learnt at schools or collected from professional document. Each unit has their own process and education methods on schooling skills, which are formulated by teachers. There is no research to verify those methods. The guidance document for

teaching schooling skills for children with ASD to enter 1st grade remains very limited.

Conclusion of Chapter 2

1. Children with ASD, who have been studying at pre-school classrooms, have not had or in the process of formulating skills among 4 skills of academic skills. Among those skills, children with ASD meet biggest difficulty in interaction with teachers and friends, in following school regulations. The skills on self-help are mostly done by those children.

2. Parents and teachers view that teaching schooling skills for children with mild and moderate ASD is important and so difficult. Children with ASD having many defects, which cause many disadvantages for children when studying at ordinary schools.

3. Teachers have tried to diversify methods. However, the result of those methods have not been equivalent to usage frequency. Methods which are selected by teachers and bring along high effectiveness include making samples on practising skills, visualizing information, encouragement of compliment, punishment, formulating working schedule. However, in reality, based on subjective and objective viewpoints by teachers and the low level for relevance of methods, the achieved outputs are quite limited.

4. Process on education for schooling skills for children with ASD is regulated by many factors such as children themselves, level of teachers, parents, intervention centers. If such factors are well connected, the children can enjoy big benefits. On the contrary, if those factors are not well connected, the children must be negatively affected. During the process on schooling skills education for children with ASD to enter 1st grade, each factor has direct and indirect, positive and negative impacts. Hence, the future research must take note of the above points to recommend suitable methods.

5. This research survey will be material and base for us to continuously formulate suitable methods and the reality to provide teaching academic skills for children with ASD more effectively.

CHAPTER 3: TEACHING METHODS OF SCHOOLING SKILLS FOR CHILDREN WITH ASD TO ENTER 1ST GRADE AND PEDAGOGICAL EXPERIMENT

3.1. Principles of method establishment

3.1.1. Assure the relevance to objectives on pre-schooling education

3.1.2. Assure the individualization

3.1.3. Combining education methods for ordinary children and special methods for children with ASD

3.2. Education method on schooling skills for children with ASD to enter 1st grade

Based on the understanding and succeeding the previous study and the above 3 principles, we propose a number of education methods on schooling skills for children with ASD as follows:

Method group 1: Preparing conditions for educating schooling skills

Method 1: Preparing human resource and infrastructure

Method 2: Evaluating schooling skills and formulating individual education plan

Method 3: Training parents and teachers to share, to cooperate between stakeholders during educating children.

Method group 2: Organizing to implement schooling skills

Method 4: Organizing class and lesson

Method 5: Applying visual aids

Method 6: Applying music treatment by using Vietnam's music and poem

Method 7: Applying playing treatment by using games with rules suitable to children with ASD

Method 8: Establishing class environment with great love and happiness

Method 9: Using encouragement methods, compliment or punishment

Method group 3: Evaluating education results on schooling skills and considering transition plans

Method 10: Evaluating education process on academic skills

Method 11: Establishing transition plan on consulting for parents

Due to the difference of 4 academic skills, methods taken from the 11 above ones need to be relevant for each group of skills. Under which, all 4 skills need to be applied for method group 1 and 2 methods of method group 3. The remaining 6

methods in method group 2 will be selected to apply to each group of children with ASD.

Methods are arranged in the structure: purpose, content, ways of expression.

3.3. Relations between method, implementation conditions and notice when using education methods on schooling skills

3.3.1. Relations between methods

The above methods are formulated, based on education process on schooling skills. Hence, those methods have close relations with each other, within the same system to supplement and to fulfill each others. Methods at method group 1 is conditions, pre- condition to implement methods at group 2. Methods at group 3 can only be implemented, only when methods at method group 2 are done. It is the interaction and the order that have formulated logics, systematics and uniformity of methods and countermeasures previously recommended. Besides unified relations, methods need to support and to depend on each other during schooling skills for children with ASD. It is impossible to apply only one method. Rather than that, the combination of many methods result in expected outputs.

3.3.2. Conditions to execute methods

The above methods can be done with assuring the feasibility study and big effectiveness, if satisfying the followings:

- *For children*

- Children with ASD, who are selected for schooling skill education at mild and moderate levels.

- Children who wish to go to school, need to study at pre-schooling class frequently.

- *For teacher*

- Teacher needs professional capacity and good teaching skills, a certain level of profession on special education, communication skills, can organize education activities, which are suitable to children with ASD. Teachers need to care for and to know clearly strong and weak points, difficulties of the children at each individual skill.

- Teacher also must have commitment for career. Thanks to this commitment, love for children, teacher will try best during schooling skill education. They will always express love, sincerity and humor.

- *For parents*

- Parents properly understands the weak points of their children. Parents need to express the care and education capacity for their children.

- Parents are aware in cooperating with teacher to educate academic skills for their children.

- *Infrastructure conditions*

- Classroom assuring the silence, light and degree, area at adequate level.

- Study and play facilities must be provided properly, i.e. desk and chair by standards, teaching and learning facilities for teacher and pupils

- Playing room or entertainment area is needed, after lessons at classroom

3.3.3. Notice

When applying methods, user needs to take note as follows:

1, Methods are applied in sequence order in groups, i.e. implementing methods at group 1 → implementing methods at group 2 → implementing methods at group 3.

2, Schooling skills include 4 various groups. Hence, education process of schooling skills requests teacher become flexible in implementing methods to be relevant for each method and method group. It is not correct that for all method groups, all methods (11) are needed to be executed. Teachers can flexibly select methods which are most effective and relevant.

3, Each method has its own features on hobby, characteristic, strong points and difficulties at various levels. Hence, teachers need to consider those points to have education impact, relevant to each child by the same method.

4, With each schooling skill, it is needed to educate children by various methods, to avoid the boring mood and to bring about the best effectiveness.

5, It is needed to unify methods to be used at various special education environment, pre-schooling integration environment at home must be strengthened again and again and will not be confused by children with ASD, who have inflexible and imitative thinking. If there is difference at home and at environment outside home, bad results will come out during schooling skills.

3.4. Pedagogical experiment

3.4.1. Introduction of the experiment

We select 2 children with mild and moderate ASD at pre-school class (class to prepare to enter 1st grade) at Research center for special education, The Vietnam institute of educational sciences. Teaching experiment was done to verify the feasibility of teaching methods on schooling skills for children with mild and

moderate ASD and to evaluate the positive impacts of those methods. As the pre-school classrooms are done in the afternoon, we cannot have chance to experiment the group of self- help. In this regard, we only study 3 skill groups, i.e. communications with teachers, friends, observation of school and class regulations, usage and preservation of learning facilities, school amenities.

3.4.2. Experiment results

Two cases of our selection is 2 children, representing children with ASD at mild level (child K) and moderate level (child B). Experiment result is as follows:

- Though belonging to 2 various groups of autism, both the 2 children meet with many difficulties in doing skills on communications with teachers and friends. Hence, the progress of skills in this group is lower than the other 3 groups. However, the difficult level of each child is not the same. Looking at chart BK1, we see clearly that B child with moderate level meets with more difficulty than K child with mild level. Distance of difficulty and progress of 2 children are quite big.

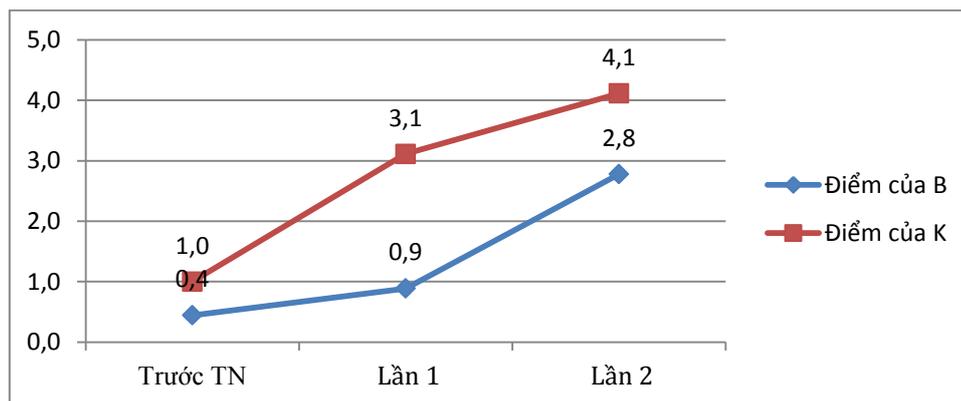
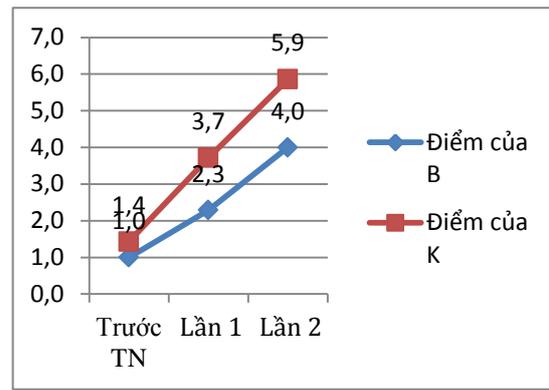
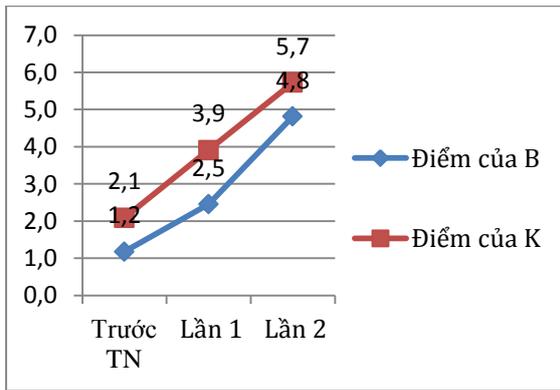


Chart BK1: Comparing skills 1 at 2 children for experiment

- At the other 2 groups of observation of school and class regulations and preserving facilities, toys, the difficulty levels of those 2 children are equivalent. Yet, the child B is the one with more difficulty than child K. Yet, the gap between those children is not big.

- (Look at BK2 and BK3).



Picture BK2. Comparison of skill 2 Picture BK3. Comparison of skill 3

Conclusion of chapter 3

1. Based on principles, we formulate 3 groups of methods: group 1: preparation of teaching schooling skills (3 methods), group 2: organizing teaching schooling skills (6 methods), group 3: assessing process and planning transition (2 methods). In which, preparation methods are pre- condition to proceed the methods in group 2. Methods of group 3 are only done after completing group 2. Those methods are connected to one another. Each child needs to follow fully those methods. Yet, the application and adjustment must be done accordingly to each target.

2. Experiment shows that methods have been formulated based on basic principles, which are above mentioned and experiment results prove that 3 method groups with 11 methods are relevant and effective to children with mild and moderate ASD.

3. Due to the difference of schooling skills, it is not possible to apply all 11 methods to all 4 groups of schooling skills. Teaching schooling skills for children with ASD needs to apply 5 methods at group 1 and 3. Depending on each group of skills, education expert will select methods at group 2 to suit each group of schooling skills.

4. We see that the teaching schooling skills for 2 children get success is thanks to the following: 1) Teacher has professional capacity and experience working with special children in general and children with ASD in particular, 2) Commitment to career and loving for children help teacher positively think to search for relevant methods to educate children, 3) Teachers need to be flexible at work to understand children and to organize education activities, 4) Proper awareness of parents on roles

of teaching schooling skills to enter 1st grade as well as attitude and behavior during training academic skills for children, 5) Educating schooling skills, done at groups with 8 children/ 2 teachers is relevant. Children must experience practical activities, which are frequently repeated at groups at pre-schooling and need support from family at home.

5. Result shows that autism level is direct ration to the implementation of schooling skills of children with ASDwhen entering 1st grade. Hence, children with ASDat higher lever, it is more difficult to implement schooling skills. Those children need to be trained living skills relevant for self- help or following vocational training, suitable to personal capability and demand.

CONCLUSIONS AND RECOMMENDATIONS

1. Conclusion

1.1. In the world, research on children with ASD and methods on educating children has been extensively done in a huge number. Yet, in Vietnam, research on children with ASD, methods remain very new; especially, the number of research of teaching schooling skills for children with ASD is limited. Hence, this research is expected to contribute to studies on autism in Vietnam, as good reference source for other research to develop more issues.

1.2. It is needed to prepare for children in general and children with ASD in particular to enter 1st grade. This is meaningful thing to do, to help children get used to lesson, class at school, follow school/ class regulations, know how to use and to preserve learning facilities, to interact with teachers and friends. Children with such skills become less hesitant, less surprised when entering 1st grade, become easy to integrate themselves at school.

1.3 Process on education for schooling skills for children with ASD is regulated by many factors such as children themselves, level of teachers, parents, intervention centers. If such factors are well connected, the children can enjoy big benefits. On the contrary, if those factors are not well connected, the children must be negatively affected. During the process on schooling skill education for children with ASD to enter 1st grade, each factor has direct and indirect, positive and negative impacts. Hence, the future research must take note of the above points to recommend suitable methods.

1.4 Two children selected for experiment representing 2 targeting children with mild and moderate ASD show clear progress after 2 times of experiment. Though at mild and moderate levels of ASD, those 2 children meet with biggest difficulty in communications with teachers and friends. This is very suitable to theory on features

of children with ASD, which is mentioned at chapter 1. The level of autism is in direct portion with implementing schooling skills of children with ASD when entering 1st grade.

1.5 Teaching experiment on 2 children with mild and moderate ASD show that 11 methods are suitable, feasible and effective with each targeting children with mild and moderate ASD. The 11 methods are formulated based on 3 main principles, assuring the individualization, suitable to education targets at pre-schooling level, assuring the combination pre-schooling and special education. Methods on academic skills formulated under this research needs to be further implemented at wider scope and in longer duration to further completion.

2. Recommendations

- 2.1. With ministry / department of education and training
- 2.2. With management staff of schools and special centers
- 2.3. With teachers
- 2.4. With parents
- 2.5. With pre-schools and inclusive primary schools