

# Educating Young Children with Autism in Inclusive Classrooms in Thailand

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## ABSTRACT

The purposes of this study were to: (1) analyze appropriate instructional curricula to promote teaching students with autism in inclusive classrooms in Thailand, (2) provide teaching strategies to improve the achievement and learning skills of students with autism in inclusive classrooms in Thailand, and (3) investigate problems of curricula for teaching students with autism in inclusive classrooms in Thailand. The study involved in-depth interviews of six principals and twenty-four teachers, observation of teachers' instructional methods in classrooms, and document analysis of school curricula and lesson plans relating to teaching curricula and teaching programs of six schools.

Key findings for the research questions were as follows Common features of effective curricula for teaching students with autism in inclusive classrooms included opportunities, health care, specialized curriculum, students' individual needs and abilities, guidelines of teaching, teacher training and supervision, transition plan, parent involvement, tools/classroom environment, and students' class assignments. The teaching strategies included varying the teaching format (large group, small group, and one-on-one), teaching functional communication (giving direction, close-ended questions or open-ended questions), reinforce communication, using demonstration, modeling, and shaping to teach skills, expecting to gather the child's attention, demonstrating nonverbal communication, using appropriate language for the child, providing visual materials, starting with small intervals of time and reinforcing, using other children as peer models for helping, working to maintain eye contact, asking the child to say the word, pointing to objects with hands and with gestures, including regular exercise, providing time to be alone, and using math activity. The problems in teaching students with autism in inclusive classrooms in Thailand included lack of special teachers, knowledge or training for teachers, a good plan and curriculum, supportive services or collaboration, budget, and essential information and materials.

**Key words:** special education, autism, inclusive classrooms, Thailand

## บทคัดย่อ

วัตถุประสงค์ของงานวิจัยในครั้งนี้ ได้แก่ 1) วิเคราะห์โครงสร้างหลักสูตรที่ใช้ในการพัฒนาการสอนของเด็กออทิสติกในชั้นเรียนรวมในประเทศไทย

2) พิจารณาวิธีการสอนที่ใช้ในการพัฒนาการเรียนในชั้นเรียนรวมของเด็กออทิสติกในประเทศไทย และ 3) ตรวจสอบปัญหาของการใช้หลักสูตรการเรียนการสอนในชั้นเรียนรวมของเด็กออทิสติกในประเทศไทย การรวบรวมข้อมูลประกอบด้วย 1) การสัมภาษณ์

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ผู้อำนวยการหรือผู้บริหาร และครูอาจารย์ ผู้สอนเด็กออทิสติก จำนวนทั้งสิ้น 30 คน 2) การรวบรวมหลักสูตรและแผนการสอนที่ทางโรงเรียนได้มีการจัดทำขึ้นเพื่อการสอนเด็กออทิสติกในโรงเรียน และ3) การสังเกตการณ์ในชั้นเรียน จำนวน 6 โรงเรียน

ผลการวิจัยหลักสูตรและแผนการสอนของเด็กออทิสติกในชั้นเรียนรวมในประเทศไทย พบว่า โอกาสทางการศึกษา สุขภาพของผู้เรียนออทิสติก หลักสูตรการสอนเฉพาะบุคคล ความสามารถหรือความต้องการของผู้เรียน คู่มือทางการสอน การฝึกอบรมครูผู้สอน แผนการส่งเสริมการศึกษาต่อ การร่วมมือของผู้ปกครอง เครื่องมือและสภาพแวดล้อมของการเรียนการสอน และอัตราส่วนของผู้สอนกับผู้เรียน สิ่งเหล่านี้เป็นปัจจัยร่วมในการพิจารณาหลักสูตรการเรียนการสอนของเด็กออทิสติกในชั้นเรียนรวมในประเทศไทย

ส่วนลักษณะการเรียนการสอนในชั้นเรียนรวมประกอบไปด้วย ขนาดกลุ่มของผู้เรียน (ทั้งขนาดใหญ่ เล็ก และสอนเป็นรายบุคคล) ผู้สอนซึ่งอาจ อธิบาย กระตุ้นผู้เรียนออทิสติกให้เกิดความสนใจ และทำตามตัวอย่าง ใช้ทักษะการสอนในรูปแบบของการซักถาม ใช้สื่อของจริง การอธิบายโดยภาษาท่าทาง สอนโดยการใช้เพื่อนช่วยสอน โดยการสบสายตาสู่ผู้เรียน กระตุ้นผู้เรียนโดยชี้ไปที่วัตถุ และกระตุ้นให้ผู้เรียนได้เปล่งเสียงออกมาเป็นคำพูด นอกจากนี้ยังพิจารณาในเรื่องของการใช้เวลา เพื่อให้ผู้เรียนออทิสติกได้สงบสติอารมณ์ และใช้ทักษะทางการคำนวณช่วยในการสอน นอกจากนี้สภาพปัญหาของการใช้หลักสูตรการเรียนการสอนในชั้นเรียนรวมของเด็กออทิสติกในประเทศไทย พบว่า ยังขาดครูผู้ชำนาญการทางด้าน การสอนเด็กออทิสติก ครูผู้สอนไม่มีความรู้ในเนื้อหาที่สอน ขาดการฝึกอบรม หลักสูตรขาดการวางแผนที่ดี ขาดความร่วมมือและผู้สนับสนุน ขาดงบประมาณจากรัฐบาล รวมทั้งขาดแหล่งข้อมูลและสื่อการสอนที่ดี

## INTRODUCTION

In the past, Thai education for children with disabilities was contributed by nongovernmental organizations (UNESCO BANGKOK, 2004). Thai people have traditionally provided special education programs in institutions for students with mental retardation, visual, physical and hearing impairments (Utairatanakit, 2001). There was some limited integration into private sector and government schools (Constitution of the Kingdom of Thailand, 1997). In addition, school-based programs for students with autism were limited to treatments in hospitals (Chrontawonpanit, 2002).

Based on information provided by the Thai Department of Mental Health (2005), out of approximately thirty thousand Thai children from 1 to 5 years of age who were prone to autism, 1814 children were definitely diagnosed with autism. The condition usually occurs in about 1 child per 1,000 live births and occurs three times more often in boys than girls (Srisuruk, n.d.). In 2006, there were approximately 200,000 children with autism in Thailand, but there were only about 1,000 children who received treatment (Ministry of Education, 2006).

In Thailand, the Ministry of Education does not have a specific curriculum for teaching children with autism. The schools provide a variety of teaching strategies and curricula for children with autism in different ways. These teaching strategies and curricula depend on what individual principals and teachers decide is needed for children in their schools. In addition, curricula for teaching students with autism are based on abilities of children, teachers and parents. Many schools create programs for students with autism that are developmentally appropriate and adopted from the foundations of formal education. However, some school programs or curricula for teaching students with autism are unsuccessful. Sometimes, teachers were unable to deal with the students' challenging behaviors, and these students were removed from the schools.

Moreover, these students' development has regressed in both academic performance and social behavior. This study was designed to help educators better understand students with autism, and to provide additional information about appropriate education strategies and curriculum including environmental structures, communication and social skill development, and behavioral management. Most of the strategies presented in this research are beneficial to a variety of students with special needs in inclusive classrooms.

The questions that guided this study were:

(1) What contributes to appropriate instructional curricula to promote teaching of students with autism in inclusive classrooms in Thailand?

(2) What teaching strategies improve the achievement and learning skills of students with autism in inclusive classrooms in Thailand?

(3) What are the problems of curricula for teaching students with autism in inclusive classrooms in Thailand?

## METHODOLOGY

The primary purpose of the present study was to enhance understanding of comprehensive teaching strategies and curricula for students with autism in inclusive educational classrooms in Thailand. Principals and teachers were asked, through interviews, to provide input regarding program quality and effectiveness. The research design was both quantitative and qualitative in its quest to investigate the appropriate and instructional curricula used to promote teaching students with autism in six inclusive classrooms in Thailand.

### Setting and participants

This research study was conducted in Thailand. The participants in this study included six principals, and 24 teachers at six schools. These schools were under the Office of the Basic Education Commission, Ministry of Education in Thailand. The criteria for selecting schools as sites included: (1) the school must have at least a three-year curriculum for

teaching students with autism; (2) the school must have students with autism in an inclusive classroom; and (3) the principals and teachers in the school must have been working there for more than one educational year.

### Research design

The researcher combined three qualitative methods to gather data: (1) semi-structured interviews (Creswell, 2005, p. 598) with the principals and teachers of each school; (2) document collection and analysis (Gall, et al., 1999, p. 297) of the curriculum and lesson plans that were implemented in the six schools, and (3) nonparticipant observations (Creswell, 2005, p. 212) of teachers' instruction in the inclusive classrooms. The benefit of using multiple methods is to gain a greater understanding of some aspect of human behavior and the validity of the findings (Burton and Bartlett, 2005).

*Semi-structured interviews* with the principals and teachers of each school. The interview guidelines and open-ended questions in this study were used to investigate what constitutes teaching strategies for students with autism in inclusive classrooms and to analyze the teaching curriculum designed to teach strategies to students with autism in Thailand. A three-part questionnaire was developed to answer these three research questions. Part 1 of the questionnaire consisted of 13 items asking for personal and institutional background information, such as gender, age, years of teaching, degree of education, and knowledge of teaching. Part 2 of the questionnaire consisted of six items, asking for information to determine the eligibility of the participant for the study, to identify the type of institution, the location of the school, and the type of the curriculum. Part 3 concerned resources in the development of the protocol in this study. Items were rated on the following scale: *1 Never, 2 Rarely, 3 Sometimes, 4 Often, and 5 Always.*

*Document collection and analysis* of the curricula and lesson plans of practices implemented in the schools. The research considered information

from two types of sources: (1) public sources, such as school curricula, official documents, textbooks, newspaper articles, and letters; and (2) private sources, such as journals, personal notes, memos, newsletters, and minutes from meetings (Creswell, 2005).

*Nonparticipant observations* of teachers' instructional methods in the inclusive classrooms. The researcher observed teachers using strategies and interacting with students with autism in inclusive educational classrooms. Each observation period lasted for 60 minutes. The observation form consisted of 23 Likert scale items, developed by the University of North Texas Center of Autism Research and Education Programs in Special Education. Callenhan (2004) designed the form to analyze the teaching strategies for students with autism in Thailand. Items were rated on the following scale: *1 Definitely not observed, 2 Mostly likely not observed, 3 Uncertain if activity is observed, 4 Possibly observed, and 5 Definitely observed.* Field note observation was recorded on the nonparticipant observation form designed to determine the level of importance that participants attached to selected advocacy skills and strategies.

### Statistical procedure for data analysis

For qualitative data analysis, the researcher transcribed interview data in Thai, translated to English, and entered into a word processor. After collecting data, the researcher utilized NVivo7<sup>®</sup> qualitative data analysis management software program (Qualitative Solutions and Research PTY Ltd., Melbourne, Victoria, Australia, 2006) to facilitate the analysis of the interview data, the contents of strategies for teaching students with autism, the contents and objectives of the school curricula, and the lesson plans. Commonalities between observations and created nodes for handling the various pieces of information were sought. Transcribed data for each interview was entered into text files. The text was searched and indexed (coded) by the defined text units. Using automatic coding of the data via search

techniques designed to generate code, a data matrix was prepared.

For quantitative data analysis, the data was analyzed using SPSS<sup>®</sup> 14.0 statistical and data management package (SPSS Inc., Chicago, 2006). The researcher used descriptive data analysis, including frequency, mean, and standard deviation to address the second research question. Frequencies and percentages for each teaching strategy were reported in chart essays.

## RESULTS OF THE STUDY

The results of this study are described in three main sections. The first section contains the description of the six sites. The second section includes demographic data and description of schools collected about the principals and teachers. The third section is an analysis of quantitative and qualitative data and answers all of research questions.

### Demographics

The participants in this study included 6 principals, and 24 teachers of six schools. These participants consisted of two female and four male principals, 19 female, and 5 male teachers. Fifty percent of the interviewees held master's degrees, while 3% held doctoral degrees. Thirty percent of interviewees had major degrees in teaching education. The number of years teaching in a primary or elementary setting was split between zero and five years (27%) and more than 10 years (33%). Seventy-three percent of the interviewees already had knowledge about students with autism before their teaching, while 27% did not have knowledge about teaching students with autism. The frequency of the special trainings or conferences was split between one to two times per semester (27%) and more than four times per semester (13%). The total number of students was split between fewer than 100 students (33%) and more than 3,001 students (17%). Seventeen percent of the schools had between one to three students with autism and between 71-80 students

with autism (17%). The classroom size was split between 11 to 20 students (33.3%) and more than 50 students (17%). The total number of teachers in a school was split between fewer than 50 teachers (33%) and more than 200 teachers (33%).

### Description of schools

The study involved four schools in Bangkok and two schools in provincial areas. The schools were separated into classrooms for each type of student with disabilities. Normally, the schools served students with autism in a separate classroom. There were only a few students with autism capable of attending school in the inclusive classrooms at the elementary level. This meant that these students with autism functional at very high levels so they should not interfere with the other students' learning. Students with autism attended the special education classroom for most of the day, but were integrated into general education settings with students without special needs for class periods such as music, drawing, and physical exercise class. Each general classroom consisted of two head teachers and approximately thirty students. However, the general classrooms with students with autism had extra special education assistant teachers attending to these students. The school provided the special education assistant teachers to help these students gain better understanding of academic skills, and to develop and strengthen students' skills in social-emotional, communication, sensory, cognitive, and motor development areas. One assistant teacher was responsible for taking care of one or two students with autism. Assistant teachers were required to have at least two years of teaching experience with young children. The assistant teachers served as advisors to students with autism, parents, and head teachers. The assistant teachers also identified areas of students needs and suggested activities to improve teaching and management in the classrooms.

Every school provided the teaching curriculum for students with autism from the individualized education program (IEP) for every student with

autism. The IEPs were based on each student's abilities and developmental level.

Moreover, the schools used a parallel classroom to provide a teaching program for students with autism. Students with autism received education similar to students without autism. The curriculum for teaching students with autism in a parallel classroom was adopted from the foundation of formal education that was appropriate based on the abilities of these students.

*Research question 1: What contributes to appropriate instructional curricula that promote teaching of students with autism in inclusive classrooms in Thailand?*

The answers to this question and the extended questions revealed the participants' understandings of the common features of effective curricula for teaching students with autism in inclusive classrooms. Analysis of the interview data revealed 10 features of curricula by principals and teachers. Table 3 presents participants' responses, which provided answers to research question 1.

Responses from principals and teachers were coded into 10 categories that emerged as the researcher coded the text units. These categories were entitled: providing opportunities, health care, specialized curriculum, recognizing students' individual needs and abilities, guidelines of teaching, teacher training and supervision, transition planning, parent involvement, tools and materials in the classroom environment, and students' class assignment.

"Providing Opportunities" encompassed a host of topics: students received free appropriate public education; classrooms were integrating students with special needs with their peers; students were encouraged to feel free to learn; and children with autism received understanding, respect, and value others for their differences from their peers.

"Health Care" included students with autism' information about from physicians, stating that the children were in good health and could participate

in schools, the curriculum for teaching students with autism was appropriate for their abilities and developmental levels, students were in good health and in safe and pleasurable programs, programs were developed through collaboration between educational and medical professionals, and processes were approved by their parents in cooperation with the specialists.

“Specialized Curriculum” meant the individualized education program (IEP) for every student with autism, the IEPs provided were based on students’ abilities and developmental levels, and curricula of teaching students with autism were individualized.

“Recognizing Students’ Individual Needs and Abilities” included students’ education, programs based on the unique needs of the students, and students with special needs learned what was appropriate based on their needs and abilities.

“Teaching Guidelines” was broad and general in nature and contained ideas such as providing structure with clear guidelines regarding expectations for appropriate behavior, providing strategies to be used for teaching students with autism, and providing guidance and direction for children’s learning, supporting academic growth, preparing the environment and selecting learning materials to assure the good use of learning styles, and children’s time.

“Teacher Training and Supervision” included teacher training to increase skills and techniques or teaching children, enhanced the quality of instruction, and information provided about implementing developmentally appropriate practices in the classroom, understanding child development, and instructional teaching.

“Transition Planning” was consisted of direct statements in the curriculum that focused on developing skills students could use in their current and future lives in school, at home, and in the community.

“Parent Involvement” is a crucial component in making families better understand the teaching

program.

“Tools and Materials in the Classroom Environment” encompassed providing tools, such as written or picture schedules, and selecting activities that match children’s needs.

“Students’ Class Assignment” included the ratio between teacher and students in the classroom and varying teaching format (large group, small group, and one-on-one). Table 1 summarizes the responses to the open-ended questions by category.

*Research question 2: What teaching strategies improve the achievement and learning skills of students with autism in inclusive classrooms in Thailand?*

While gathering data, a coding system was used to indicate what type of teaching strategies were being observed. This coding system listed every type of strategy on a reference sheet. There were clearly established routines. After looking at the various pieces of information gained from the field observations, the following list was created. The strategies were listed in the order in which they generally occurred during the day to produce an easy reference guide. The guide that was used is as follows:

- (1) Varying teaching format (large group, small group, and one-on-one)
- (2) Teaching functional communication (giving direction, close-ended questions, or open-ended questions)
- (3) Reinforcing communication
- (4) Using demonstration, modeling, and shaping to teach skills
- (5) Expecting to gather the child’s attention
- (6) Demonstrating nonverbal communication (use gestures with speech)
- (7) Using appropriate language for the child (short-sentence structure)
- (8) Providing visual and materials (books, computers, or real objects)
- (9) Starting with small intervals of time and reinforce

**Table 1** Distribution of Text Units for Question 1

Contents	<i>n</i> text units	% of total units retrieved	% principals and teachers responses
1. Providing opportunities	180	54	100
2. Health care	123	30	98
3. Specialized curriculum	80	28	96
4. Recognizing students' individual needs and abilities	98	32	83
5. Guidelines of teaching	82	31	79
6. Teacher training and supervision	120	34	75
7. Transition planning	76	31	73
8. Parent involvement	106	41	70
9. Tools/materials	67	26	69
10. Students' class assignment	76	20	65

Note. *N* = 30. Number of text units does not equal number of participants. Some participants provided more than one response in a particular category. Percentage of principals and teachers responses differs from category to category.

**Table 2** Distribution of Text Units for Question 3

Problem	<i>n</i> text units	% of total units retrieved	% principals and teachers responses
1. Lack of special teachers	127	27	90
2. Lack of knowledge or training for teachers	120	22	82
3. Lack of a good plan/curriculum	89	12	76
4. Lack of supportive services/collaboration	92	30	75
5. Lack of budget	87	35	70
6. Lack of essential information/materials	80	25	68

Note. *N* participants = 30. Number of text units does not equal number of participants. Some participants provided more than one response in a particular category. Percentage of principals and teachers responses differs from category to category.

(10) Using other children as peer models for helping

(11) Working to maintain eye contact

(12) Asking the child to say the word

(13) Pointing to objects with hands and with gestures

(14) Including regular exercise (active movement activity)

(15) Providing time to be alone, if needed

(16) Using math activities including counting, one to one, odd and even, and patterns

*Research question 3: What are the problems of curriculum for teaching students with autism in inclusive classrooms in Thailand?*

The primary reasons for unsuccessful curricula for students with autism in inclusive classrooms included lack of teachers in the field of special education, knowledge or training for teachers, a good plan and curriculum, supportive services for general education teachers, inadequate collaboration among teachers, parents and medical personnel, budget and inadequate textbooks and materials for teaching students with autism. Table 2 presents participants' responses, which provide answers to Research question 3.

## CONCLUSION AND CRITIQUE OF RESEARCH

The first research question asked about the factors of appropriate and instructional curricula to promote teaching of students with autism in inclusive classrooms in Thailand. The results of this question indicated that the opportunities, health care, specialized curriculum, students' individual needs and abilities, guidelines of teaching, teacher training and supervision, transition plan, parent involvement, tools/classroom environment, and students' class assignments were applicable to curricula for teaching students with autism in inclusive classrooms in Thailand.

The second research question asked what teaching strategies improve achievement and learning skills of students with autism in inclusive classrooms in Thailand. It was found that the teaching strategies include varying teaching format (large group, small group, and one-on-one); teaching functional communication (giving direction, close-ended questions, or open-ended questions); reinforcing communication; using demonstration, modeling, and shaping to teach skills; expecting to gather the child's attention; demonstrating nonverbal communication (using gestures with speech); using appropriate language for the child (short-sentence structure); providing visual materials (books, computers, or real objects); starting with small intervals of time and reinforcement; using other children as peer models for helping; working to maintain eye contact; asking the child to say the word; pointing to objects with hands and with gestures; including regular exercise (active movement activity); providing time to be alone; and using math activity to include counting, one-to-one, odd and even, and patterns.

The third research question concerned about the problems of curricula for teaching students with autism in inclusive classrooms in Thailand. The findings revealed that the problems in teaching students with autism in inclusive classrooms in Thailand included lack of special teachers, knowledge or training for teachers, a good plan and curriculum,

supportive services or inadequate collaboration, budget, and essential information and materials.

The findings are parallel to the article by Schwartz, Billingsley, and McBride (1996) in which strategies promote teaching curriculum for students with autism in inclusive classrooms. According to Ilene S. Schwartz, *et al.* (1996), there are five strategies to provide education services for students with autism in inclusive classrooms: teach communicative and social competence, use of instrumental strategies that maintain the natural flow of classroom activities, teach and provide opportunities for independence, proactively and systemically build a classroom community that includes all children, and promote generalization and maintenance of skills.

The findings are also consistent with the article by Dunlap and Fox (1999) mentioning that the effective instruction of students with autism should address structure in the environment, personal care, tools provision, guidelines for teaching, developing skills focus, transitions, and encouragement to parents to participate with schools. In addition, in Harrower and Dunlap's article (2001), "Including Children with Autism in General Education Classroom," a review of effective strategies mentions that the inclusive classroom has given students with and without disabilities good opportunities to develop friendships and learn about appropriate socialization and communication styles in inclusive education system.

Moreover, the findings are consistent with the article by Grossi-Kliss, (n.d.). According to Joanne Grossi-Kliss, "Successful inclusion of students with ASD in the regular educational setting will depend on the severity of the disability, the attitude and training of the educator, and the collaboration of the educating parties involved" (p. 5-6).

The findings are parallel with Chrontawonpanit's study (2002), which found that the problems of mainstreaming for students with autism in Thailand included lack of facilities and specialized personnel for mainstreaming,

inadequate coordination among involved curriculum development personnel and evaluation for students with autism.

Finally, the results also agree with Samahito's study (2001) in which teacher training is necessary for success for life to align with the educational system and culture. The findings revealed "the teacher training should add the content of teaching strategies for children with different learning styles, children with special needs, and children in the English as a Second Language program" (p. 139).

## IMPLICATIONS FOR PRACTICE AND FURTHER RESEARCH

This study expands research on the teaching curricula for students with autism in inclusive classrooms in Thailand. The findings of the current study lead to a number of recommendations for implementing teaching curricula and teaching strategies for students with autism in inclusive classrooms in Thailand. The following implications appear to be supported by the study's findings.

First, the teachers and principals, who were the interviewees, reported that the schools lacked a good plan and curriculum. The primary reasons for unsuccessful integration were that the Ministry of Education does not have the specific curricula for teaching students with autism that schools can practice, and teachers had little knowledge or information of appropriate strategies to teach students with autism. The teachers were unable to teach students with appropriate strategies, and these students failed to learn in inclusive classrooms. In addition, the students' developments had regressed in both academic performance and social behaviors. Consequently, it is important that the Ministry of Education in Thailand should provide a model curriculum for teaching students with autism. The schools will be able to apply the model the foundations of formal education. It is also important for developmental psychologists and educators to

decide and provide quality and effective curricula for teaching children with autism.

A second finding of the study also has implications for educating young children with autism in inclusive classrooms in Thailand. This finding is related to teachers' perceptions of effectiveness in curricula for teaching students as follows:

(1) All 6 principals and 24 teachers believed that teacher training and staff development enhanced the quality instructional strategies of the curriculum for students with autism. One hundred percent of the teachers attributed a better understanding of knowledge, skills, techniques, and effectiveness of instruction strategies of teaching students with autism to teacher training.

(2) Forty-five percent of the principals and teachers responded that most schools did not have financial support for teacher training.

(3) All 6 principals and 24 teachers who were the interviewees reported that the primary reasons for unsuccessful curricula for teaching students with autism in inclusive classrooms were: lack of special teachers in the field of special education, teachers with little knowledge or no training in working with students with autism, lack of supportive services for general education teachers, inadequate administrative support, ineffective collaboration among teachers, parents and medical personnel, lack of budget and not having enough textbooks and materials for teaching students with autism.

The implications based on principals' and teachers' beliefs clearly denote the importance of early childhood teacher training or staff development. The participants in the present study suggested that the Ministry of Education in Thailand should provide more financial support for teacher training in special education for every school. In addition, the training should include teaching strategies or techniques to promote students' development skills. The schools need to develop collaborative partnerships between educational and medical professionals in researching

effective educational services for those children in Thailand. It is also important for developmental psychologists and educators to decide and provide a model for providing inclusive education to children with autism which model should include: informing and preparing everyone involved; the process of student selection; the cooperative relationship among the school, hospital and parent; and the development of curriculum and instruction, staff training, and support services.

Third, this research study had no information of students with autism in the schools that were observed. The observation focused attention on the teacher using strategies, classrooms, and materials. Thus, observation of the children was not a part of this research study. In any future study, the research should include information about the students with autism such as characteristic behaviors, personal characteristics of the child, relationship in family, and results of using treatments of the child. This would give additional information about what could benefit educating young children with autism in inclusive classrooms in Thailand.

Finally, there were only six schools in the present study. The study focused on curriculum for students with autism in inclusive classrooms and analyzed the teaching strategies for students with autism. Further studies should employ a larger sample of schools and comparisons made between inclusive classrooms and special settings for children with autism. There should be more research in the field of special education or about students with autism in Thailand.

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