

A Professional Learning Program for Enhancing the Competency of
Students with Special Needs

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Abstract

This study used a quasi-experimental research design to examine the impact of a professional learning program designed to enhance the competency of children with Autism, Attention Deficit Hyperactivity Disorder and Learning Disabilities and to develop knowledge, understanding and skills of teachers and parents in helping them. Data were collected from sample groups including administrators, teachers, students and parents. These sample groups were from 16 target schools, eight from Supanburi and eight from Khon Kaen provinces in Thailand. The instructional approaches were developed by teachers and taught in schools. Students were in Grades 1 to Grade 6. Research tools included parallel lesson plans, teaching materials and intervention techniques for enhancing student learning, a set of achievement tests and reflective forms. It was found that teachers and parents implemented intervention techniques which led to increased student academic performance and the development of a more collaborative approach to supporting children with diverse needs in Thailand

Introduction

The philosophy of inclusive education envisions the idea of providing opportunities for students with disabilities to study as equal partners with their classmates without disabilities (Forlin, 2008; Mitchell, 2008). It is believed that if students with disabilities receive appropriate accommodations and proper support, their educational and social performance will be enhanced (Salend, 2008). Furthermore, inclusive education can counter the stigma associated with labeling as these two groups of students will have opportunities to accept and understand each other. In addition to benefiting students with special education needs, inclusive education can result in improved academic skills, a greater recognition of social justice and the development of a more caring attitude toward others (Salend, 2008). Thus, an inclusive classroom is one in which the continuing emphasis on valuing individual differences leads all pupils, irrespective of social or cultural background, disability or difficulty in learning, to succeed in terms of the fulfillment of academic and social goals, and the development of positive attitudes to self and others (Alban-Metcalf & Alban-Metcalf, 2001).

A significant barrier in achieving these goals has been the lack of education provided to teachers, administrators, parents and the general public related to understanding the educational and social strengths and challenges of these students. The Office of the National Education Commission (ONEC, 2009) in Thailand, reported that teachers in schools with inclusive education classrooms do not have sufficient background knowledge to teach all students effectively. It was found that many of the teachers have received no training in special education. It was also noted that the policy for providing education for special needs groups is not clearly implemented.

To help overcome these barriers, this article presents a model professional learning (PL) program designed to enhance the competency of students with special needs. The *National Education Act* (1999) specified the educational rights guaranteeing every Thai citizen a basic education of not less than 12 years. As for the underprivileged and those individuals with intellectual and physically disabilities the government is mandated to provide special education for them. The second chapter under the *National Education Act*

(1999) also emphasized that special education has to be provided in an appropriate form according to individual needs (ONEC, 1999).

Ten years after implementation of these educational reforms in Thailand, an evaluation was conducted by ONEC (2009) which found that certain aspects of educational reform functioned at a satisfactory level such as education for students with special needs. It was reported that in 2007 that 3,075,341 underprivileged students attended schools, which was a significant increase in the number of students as compared with attendance data from 2004. There also has been increasing numbers of students with disabilities attending schools. In 2007, 223,211 students attended schools which were higher than in 2004 when 66,000 students were enrolled. The other aspects found that there were problems especially in terms of a lack of trained teachers in special education. For instance, the data showed that the majority of teachers who work in special education schools were temporary staff. As for schools that provide inclusive classrooms, the data revealed that large numbers of schools did not include all types of students with special needs. However, on a positive note, it was found that students with AD/HD, LD and high functioning autism were included in general education classrooms. Schools also are faced with various problems, namely a lack of trained teachers, appropriate facilities and inadequate funding. Similarly, Thawiang (2006) studied the management of inclusive education in a school in Northeast Thailand and found that schools were not ready to provide inclusive education for students with special needs. Like ONEC, Thawiang found that the problems encountered included a lack of curriculum adjustments, individualized learning and teaching approaches, gaps in teachers' knowledge in special education and lack of experienced personnel for supervising and monitoring the instruction.

Method

Program Participants

Participants selected for this study were drawn by simple random sampling from four regions in Thailand. Khon Kaen province was the representative of the Northeast region and Suphanburi province was recruited as a representative of the Central region. Eight schools from each province were sampled based on their size and location. The participating inclusive schools were at the elementary level and contained no more than 25 students in a class. In each province, four schools were assigned to an experimental group and four were kept as a control group.

One hundred and six school teachers, 16 administrators and 68 parents from these 16 schools were selected to participate. The school administrators and parents received one day training (six hours), while the teachers attended a five day training work shop. After the pretest, a training session was conducted for the teachers and administrators in the control group.

Research Tools

The research tools used in this study were:

1. A needs assessment interview form for teachers, parents and school administrators.
2. A framework for interview for classroom evaluation and following-up interview.
3. An observation framework.
4. An achievement test for reading, spelling and arithmetic, for pre and posttest.

Data analysis

Data analysis involved a 3 step process. These steps included:

1. The data from the needs assessment were analyzed by content analysis and developed into a PL program.
2. The data from classroom evaluation, observation and following–up interviews were also analyzed by content analysis.
3. The test scores were analyzed based on standard score of the achievement test.

Professional Learning Program

The PL program, developed by a team of 14 researchers and consultants, was based on the needs assessment completed by the program participants and the professional literature related to effective instructional practices. Participants selected a specific disability category and received parallel lesson plans related to effective interventions for that disability category. The parallel lesson plans were designed to help teachers who work in inclusive classrooms with no assistant teachers. With these parallel lesson plans the teachers planned and conducted their instructional activities to accommodate the learning strengths and challenges of students with and without special needs. The conceptual framework for the content of the PL program for the different interest groups focused on three areas:

1. Intervention techniques for students with autism: behavioral strategies, task analysis, prompting, TEACCH, and PECS. (Arayawinyoo, 2003; Lerman, Vornedron, Addison, & Kuhn, 2004).
2. Intervention techniques for students with AD/HD: classroom environment accommodations; behavioral strategies; games/ play; task analysis; basic skill; speech and language; problem solving, organization and study skills; meta–cognition; creativity; and providing immediate feedback (Salend, Elhoweris, & Van Garderen, 2003).
3. Intervention techniques for students with LD: conducting a task analysis, meta cognition, highlighting, providing immediate feedback, & using peer–mediated techniques (Arayawinyoo, 1999; Ward, as cited in Frengut, 2003).

The PL program, which was differentiated for teachers, administrators and parents, involved an initial whole group session addressing the concept of inclusive education and effective interventions which was attended by teachers, administrators, and parents. Subsequently, teachers were asked to choose a specific disability workshop related to students with autism, AD/HD, or LD. Forty–seven teachers choose the LD workshop and viewed a video related to cases of students with learning disabilities. Nineteen teachers selected the Autism workshop and learned about brain exercise activities and 40 teachers selected the AD/HD group and viewed a video and attended lectures about AD/HD. Guest speakers presented to the whole group on effective interventions for people with autism, LD and AD/HD (Parents were provided with a handbook for helping their children at the end of the day).

The details of the PL included six hours of learning activities on content, curriculum analysis, development of instructional approaches, and IEP development for the groups focused on learning disabilities and autism while the AD/HD group learned about behavioral modification and communication techniques. All groups participated on the development of parallel lesson plans, a learning and teaching strategy designed to guide teachers in accommodating a range of learners in inclusive classrooms. Sets of teaching

materials were displayed and procedures for developing and implementing parallel lessons were modeled. Each group developed at least three sets of teaching materials and lesson plans, presented their lesson plans and teaching materials to the other groups and received immediate feedback from the presenters and participants.

Teachers received handbooks for enhancing students' abilities and were asked to spend three months developing their own teaching materials and parallel lesson plans. Presenters were available to assist teachers via phone or e-mail. During this time, the parents made use of the manual designed to guide them provided to help their children after the training.

Program Evaluation

Several activities were conducted to examine various aspects of the PL program. A pre-test was given to both experimental and control groups prior to the implementation of the PL. The post-test was conducted after the teachers completed the implementation of the program in their schools. The test was developed by Uthairattanakij et al. (2007), which included items related to mathematics, reading and spelling in the Thai language.

Results

The post-test scores revealed that there was slight improvement in the reading, spelling and mathematical skills of the students taught by the teachers who participated in the PL program. Of the 97 students in the experimental group, 73 students (72.25%) improved. When considering subject areas, it was found that 43 students (44.32%) improved in mathematics, 37 students (38.14%) improved in reading, and 36 students (37.11%) improved in spelling. As for the control group of 50 students, 24 students (56.25%) showed slight improvement and 26 students (43.75%) showed no improvement. When considering subject areas, 26 students (52%) improved in reading, 20 students (40%) improved in spelling, and 19 students (38%) improved in mathematics. These scores were based on standard score of the achievement test.

A classroom observation was conducted as a follow-up evaluation after the three months. Researchers observed 40 teachers teaching their classes and provided feedback and reflected collaboratively with the teachers on the successes and challenges they observed. These 40 volunteer teachers also demonstrated and reflected on their parallel lesson plans and teaching materials implemented in actual classroom settings. Researchers then looked for the best practice from an examination of the parallel lesson plans. Finally, a collaborative meeting between school administrators, parents and teachers was conducted to discuss the program. The results of these program evaluation activities are presented below.

Knowledge and Understanding Development

Participating teachers reported that they felt that they could practically use the knowledge gained from the PL to enhance their work with students with a range of disabilities. Several teachers commented on the value of the directed learning experiences which provided them with the opportunity to practice and develop new instructional skills.

In case of the PL focused on Autism, teachers and parents reported that they tried to implement TEACCH and PECS techniques to enhance students' social skills. Though time did not allow the collection of data related to the development of these skills, teachers and parents both agreed that their students improved their social skills by

participating in group work and interacting positively with their friends. Parents also indicated that their participation in the program enhanced their confidence in helping their children develop new skills. Some parents asked for advice about financial resources since they had to spend a considerable amount of money taking care of their children. They also reported that they gained more hope when learning about methods of intervention from the project. The school administrators expressed their satisfaction with the PL program and encouraged their teachers to participate in this project. Teachers and parents asked the researchers to continue to help them learn new pedagogical techniques.

Results from classroom observations showed that the training helped teachers reflect on the ways they could improve their instruction, which was beneficial for their students. As for the parents, teachers reported that they viewed the parents of their students as being more open and responsive to school activities than they were before after the training. Similarly, parents noted that they were more hopeful and assured that there were professionals out there to give them guidance on how to assist their children. According to interviews conducted before the training, most of the parents showed an interest in the training because they wanted to help their children. After the training, many of the parents reported that they had implemented the knowledge gained. For example, with the assistance of the manual and the PL program, several parents reported that they played learning games with their children which helped their children develop necessary skills.

Ainscow, Booth, & Dyson (2006) stated that the success of this educational approach was based on schools establishing a culture of understanding and good relationships with students. To achieve these, it must begin with the school principal, then, to teachers, and parents.

Discussion

From teachers' reflections as well as researchers' observations, it was found that teachers in inclusive classrooms who participated in the PL had well-prepared lesson plans with clear directions and explanations. They also applied various strategies such as using peer-mediated techniques, games and feedback, which were taught during the PL program. As for the classrooms with students with learning disabilities, students, teachers and parents used games and story telling techniques. It was also evident that teachers used task analysis and divided one lesson plan into many segments with smaller sequential steps. They motivated students by using diagrams and pictures, giving positive feedback, as well as encouraging students to participate in asking and answering questions (Fregut, 2003). Highlighting was also used for reading skill development.

The test scores of students with special needs in the experimental group increased. Although there were not significant differences between the pre and post test scores, there were distinctive results in the development of teaching and learning activities. After participating in the PL, teachers were more active in developing their lesson plans that employed effective inclusive education practices and more likely to reflect on their teaching and participate in meetings. The researchers provided feedback to the teachers after observing them which was helpful in offering teachers clarification of lesson planning and the application of teaching techniques. In addition, teachers gained more confidence and motivation in applying their knowledge to assist students with special needs, though this might mean that they have more work to do even though there were

only 5–6 students in each classroom. They also reported that their students without disabilities enjoyed and benefited from learning activities provided to accommodate students with special needs.

Parents realized the importance of teaching. Because of their education background and socioeconomic status, some parents struggled to help their children, even though they received a manual and learned some games from the PL program. The underlying reasons were that they did not have time to read, or they were illiterate, or not very proficient in reading. After the PL program, they gained a greater understanding and more positive feelings towards their children and their efficacy in helping their children learn. Before the PL, they reported feeling very stressed when their children did not perform well at school or behaved badly and differently from other students. The knowledge gained from the training encouraged them to be more patient and sensitive. For example, a mother of a child with learning disabilities noted that games helped them talk to each other more than before and that the games could draw attention from her child, so she could teach him how to read and write. This mother, however, felt that she wanted to learn more since she only gained guidelines from the PL program, but when she had problems, she could not do much due to lack of knowledge. This reflected that even though parents gained a small amount of knowledge, suggestions, and strategies, they were willing and tried to help their children as much as they could. Most importantly, about half of the parents who participated in the PL program felt that it made them realize that they were not alone, or abandoned by society.

Teacher and parents had greater communication and increased their knowledge. A “Loving and Care” notebook was created and introduced for teachers to use as a means of communication. Lim and Quah (2004) pointed out that students with learning difficulties are often given fewer opportunities to develop important thinking and study skills. From the reflective interview after the PL implementation, teachers and parents who participated in the PL program increased their knowledge related to children with special needs (Autistic, AD/HD, LD). It did not matter whether the parents were employed or unemployed or if they were of a highly respected occupation or not. Not only teachers and parents, school administrators also received the training. School administrators were one of the key factors in implementation of inclusive classrooms since they could give support and guide the way to sustainable development of inclusive classrooms.

Teachers and administrators reflected that Thai teachers extended kindness to students with special needs. However, they noted that they did not know how to handle problems and organize lessons and activities for students with special needs. Participation in this project was useful for them as it helped them understand aspects of working with students with special needs.

At the same time, other teachers who did not participate in the PL should be aware of and understand the importance of teaching these groups of students. They should also have knowledge and an understanding of how to create inclusive and supportive classrooms (Forlin, 2008; Salend, 2008). In this research, almost one-third of the teachers (4 out of 15, 6 out of 20, 6 out of 21) from almost all of the experimental schools were trained in intervention techniques and teaching materials development. In some schools, every teacher participated in the project. This assured us that we were on the right track to

begin the process in helping students with special needs in schools (Ainscow et al., 2006; Lim & Quah, 2004).

Recommendations

The PL model presented here was an attempt to help professionals and parents implement inclusion effectively. Since inclusion is a relatively new concept in Thailand, we have not yet sufficiently trained teachers in the fields of special education and the majority of teachers do not understand and have enough knowledge to work with students with special needs. It also is important to note that the vast majority of teachers do not have assistants in inclusive classrooms. The move toward effective implementation of inclusion will require various parties including teachers, principals, parents, community members and organizations, in addition to institutions from the public and private sectors, to work together to support the implementation of inclusive programs.

The findings have implications on a school level, higher education level, and a policy level. On a school and higher education level, the results suggest that schools and teacher education programs need to work collaboratively to provide all teachers with an understanding of the strengths and challenges of students with special needs and the use of research-based pedagogical practices for teaching these students effectively. Similarly, PL for school administrators designed to help them create and support effective inclusive educational programs is needed. In addition to collaborating on preparing educators to work successfully in inclusive settings, school and higher education partnerships can enhance the efforts to conduct research on inclusive education policies, practices, and procedures. These efforts can be fostered by governmental policies such as funding projects like the PL program described in this article, disseminating information relating to policies on education for people with special needs via publications and conferences for teachers, administrators, families, and communities. Further, the government can create and maintain a database that provides resources for teaching people with special needs, including assessment and identification instruments, knowledge and training organizations as well as schools that can be a model for exchanging ideas on how to organize inclusive education.

Conclusion

The five days PL program inservice training for enhancing the learning of students with ASD, AD/HD and learning disabilities in inclusive classrooms appeared successful. With no teaching assistants and limited access to appropriate teaching materials, intervention techniques, teaching materials and parallel lesson plans were introduced. Teachers gained practical and hand-on experiences which led to their confidence in developing and enhancing their own work. The classroom observations conducted by the research team created good collaboration between teachers and researchers. As for those teachers who did not demonstrate their teaching for feedback and evaluation, they gained some knowledge and understanding related to helping students with special needs in inclusive classrooms.

As Thailand works towards achieving the goal of “Education for all”, efforts to implement systematic PL to provide teachers, principals, students, and family members with the preparation to create effective inclusive education programs need to be conducted. In addition, these PL efforts need to be evaluated to ensure that they are

achieving their intended outcomes and to inform best practices in designing PL programs. These programs and data can help ensure that the goals of Education for All become a reality and foster the sustainability of inclusive education in Thailand.

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