A Multi-Case Study of Inclusive Schooling in Taipei: Its Current Status, Barriers and Supports, and the Expected Role of Educational Leaders

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Abstract

This study attempted to examine the current status of educational leaders, the barriers they face and their supports, and what they can do to fully include students with special needs. The researcher interviewed principals, special education and general education teachers at three elementary schools. According to the results, the participants encountered three major barriers: (1) incomplete teams of special education professionals; (2) a lack of concepts about inclusive schooling; and (3) limited time for planning and training. Participants thought that educational leaders and the committee for promoting special education can support the implementation of inclusive schooling. In order to fully implement an inclusive schooling program, they suggested that educational leaders should promote such a program, enhance teachers’ capacity, and organize a team of special educational professionals. This study thus clearly shows the need for an inclusive schooling implementation plan for educational leaders, a plan with three goals: (1) before educational leaders convey the idea of inclusive schooling to teachers and to the public, they should modify their reform ideology; (2) by encouraging professional development and reinforcing collaborative relationships, educational leaders need to strengthen teacher capacity to prepare the staff for inclusive schooling; (3) educational leaders should propose strategies for reallocating school staff resources, reducing large class size and mandating inclusive schooling, as well as provide more opportunities for planning and training. This is probably the first study to discuss the issue of inclusive schooling in Taipei based on the ICS model. In terms of the roles of educational leaders, the researcher hopes this study can lead to further study of, and also better implementation of, inclusive schooling in Taiwan.

Keywords: inclusive schooling, Integrated Comprehensive Service (ICS) model, leadership in special education, resource rooms, teachers’ professional development

Introduction

As an echo to the world-wide movement of inclusive education and because of the conviction of inclusive ideas, special education in Taiwan is moving toward a goal of inclusion, though not necessarily full inclusion (Wu, 2005). Taipei started to promote inclusive schooling in
the middle of 1990’s, students with special needs receive pull-out services at resource rooms from elementary school to high school. This study attempted to examine current status, barriers, and supports of inclusive education in Taipei, aiming at a role clarification of educational leaders in this regard. Three research questions were examined: (1) What is the status of inclusive schooling in Taipei? (2) What barriers and support exist for including students with special needs more fully? (3) What should the role of educational leaders be to include students more fully in present inclusive schooling?

Capper, Frattura, and Keyes (2000) state that inclusive schooling can pave the way for successful education for all students because inclusive schooling can integrate educational resources and eliminate labeling of students with special needs in an educational setting. The concept of inclusive schooling is that students with special needs should be assigned to a general classroom where permanent special education support and services are provided. In school-wide inclusive programs, no self-contained, special education classrooms exist.

First, “Zero rejection” is the most significant concept of inclusive schooling (Biklen, 1992; Kubicek, 1994; Sailor, 1991). Children with disabilities need to belong and to feel accepted by their peer group (Sailor, Anderson, Halvorson, Doering, Filler, & Goetz, 1989). Halverson and Neary (2001: 3) also point out, “It is incumbent upon those of us who support this shift to inclusive schooling to demonstrate to families and staff that not only can students of diverse abilities learn together but that specific student needs will be met”

Second, Kennedy (2004) discusses four ideas for active facilitation of social interactions for elementary school children. The first is cooperative grouping, which helps students with profound disabilities to be included in various activities. Second is collaborative problem solving, which can help students overcome social and academic problems. Next is peer tutoring and classroom roles which can enhance sympathy and active relationships among students. The last point is structuring time and opportunity, which helps to connect the students to each other. Segregated schools take students away from their families, but inclusive schools let students stay at home and interact with others having different backgrounds within their own community.

Third, inclusive schooling environments are based on the premise that the current practice of classifying or certifying special education students is unreliable, unnecessary, demeaning, and damaging to students with special needs (National Association of State Boards of Education, 1992; Reschley, 1988; Sailor, 1991). There is “evidence that certain norm-referenced standardized tests are inherently discriminatory toward students from minority racial and disadvantaged socioeconomic groups” (Dowdy, Smith, Patton, & Polloway, 2004: 14).

Fourth, inclusive schooling is often justified from a civil rights perspective (Leinhardt & Pallay, 1982). The implementation of inclusive schooling requires changes in teaching practices, administration, and funding formulas (Sailor, 1991). Principals, general education teachers, and special education teachers must adopt
different roles in an inclusive setting, initially creating discomfort, fear, and conflict for many (Sailor, 1991). Halverson and Neary (2001: 126) give one example of implementing staff changes without conflict: “Collaborative consultation is one vehicle for operationalizing the interactive teamwork required when schools strive to improve their practices for the benefit of all students.”

Method

Based on the Integrated Comprehensive Service (ICS) model and by means of qualitative approach, the researcher used a multi-case design containing the case studies of three elementary schools, Renai, Shipai, and Wuchang, in Taipei City. Multi-case studies, having more than two settings, subjects, and sets of data, couldn’t serve a variety of research purposes. This study used these three elementary schools for the case study so that the researcher not only expanded the generalizability and diversity of the data, but also compared the distinctions among the three schools.

The researcher chose Renai, Shipai, and Wuchang elementary schools, because they have been selected by the Taipei Department of Education as key schools for serving students with visual impairments. The study participants included principals, special education and general education teachers of the three elementary schools. For this study, interviews of at most seven participants from each of the three schools chosen were conducted. For each of the three schools, two or three general education teachers, two or three special education teachers and the school principal were interviewed.

The researcher used archival records, documents, and interview questions to answer the first research question. The researcher interviewed study participants to answer the second and the third research questions. Additionally, the researcher collected data by conducting approximately ninety-minute interviews with three principals and fifteen teachers in the three elementary schools. These interviews allowed the researcher to focus directly on the case study topic by following a certain set of questions derived from research questions (Yin, 1994).

Moreover, a constant comparative method (Glaser & Strauss, 1967; Strauss, 1987) was used to analyze the collected data. The constant comparative method is a systematic method of collecting data, generating common categories, and evolving a theory in an analytic manner for further testing (Glaser & Strauss, 1967; Strauss, 1987).

Findings

The Status of Inclusive Schooling

Based on the findings from these three case studies, Taipei City is promoting, supporting, and
making progress toward inclusive schooling. Fewer students are being placed in special schools. Within the public schools, more students with special needs are being educated in the general education classroom. Figure 1 shows that, in 2004, 64.97% of all students with special needs in Taipei were placed in the resource rooms; 19.60% were in the self-contained classes; 11.81% were in the special schools; and 3.62% were placed in other environments. However, many barriers continue to exist that prevent fully including students with special needs in Taipei City public schools.

![Diagram showing placement percentages for special education in Taipei.]

Figure 1  Major placements for special education in Taipei. (Source: Department of Education, Taipei Municipal Government, 2004)

Barriers to Inclusion

Analyzing the results using the constant comparative analysis method, the researcher found common barriers to inclusive schooling in the three schools, including (1) limited time for planning and training, (2) lack of concepts in inclusive schooling, and (3) incomplete team of special education professionals.

Limited time for planning and training

Study participants identified that a lack of agreement on course designs and educational philosophy affected inclusive schooling. Instructional strategies also did not address learning discrepancies between general students and students with special needs. Participants also noted limited time to spend on instructional strategies. Teachers have heavy workloads. As study participants in Renai pointed out, general education teachers had their own pressure due to the curriculum, class design, and homework corrections. They were not able to co-design an appropriate teaching strategy with their special education counterparts. As interviewees in Shipai said, workloads for general education teachers were enormous, thus they were not able to cooperate with special education teachers to design courses. Interviewees in Wuchang believed that it was difficult for general and special education teachers to find spare time for discussing course design in collaborative
teaching.

Additionally, there are different educational philosophies between general education and special education teachers. Many general education teachers did not welcome special education teachers to collaboratively teach with them in the same classroom. General education teachers lacked experience with teaching with others. Teachers from resource rooms paid more attention to the individual needs of students with special needs, while general education teachers put emphasis on the fluency of teaching and the learning progress of the majority of students.

One special education teacher in Shipai pointed out that there were few opportunities for general education and special education teachers to exchange experiences and to develop new thoughts about teaching. Therefore, they could not reach a consensus on collaborative teaching. Interviewees in Wuchang explained why general education and special education teachers had different thoughts toward teaching. General education teachers care about the progress of learning for students without special needs in their classes. It was easier for general education teachers to ignore students with special needs who had individual needs and problems with learning. On the other hand, special education teachers were more concerned about individual needs of students, especially students with special needs. Without agreement on how to teach curriculum to all students, it was difficult for special education teachers to assist students with special needs in ways that prevented them from falling behind the general students in terms of curricula progress.

Lack of concepts in inclusive schooling

This study also found that all study participants indicated that general education teachers and special education teachers lack of concepts that are valuable for inclusive schooling. This study also revealed that teachers did not try to obtain this knowledge from each other. When promoting inclusive schooling, professional training provided for special education and general education teachers is insufficient. Interviewees in Renai said that special education teachers did not have enough professional training, thus they could not offer homeroom teachers efficient support systems. Special education teachers in Shipai also said that they were worried about not having the required abilities to collaborate with general education teachers because they did not have the necessary knowledge of specific content areas. When some general education teachers in Wuchang knew that there will be students with visual impairments in their class, they felt anxious, worried, or formed a negative attitude, primarily because they did not have sufficient training to provide appropriate assistance to students with visual impairments. Some of the general education teachers in Renai confessed that when facing problems, they were not willing to ask others for assistance. In their opinion, asking others to help proved that they lacked professional skills. General education teachers were unsure on how to exchange information and experiences with colleagues. These reasons all affected their willingness to request help from special education teachers.
Incomplete team of special education professionals

Study participants agreed that the current team of special educational professionals cannot provide appropriate services for students. Their comments addressed the composition of the team, the school budget, and the availability of trained professionals. Both general education and special education teachers in Renai, Shipai, and Wuchang complained about the insufficient number of professionals in special education teams, which lacked psychologists, qualified Orientation and Mobility specialists, consultant, and social workers. Additionally, insufficient teaching assistants, often the result of a shortage of funds, caused difficulties for teachers. With limited budgets, the schools could not hire and train enough specialists. Wuchang Elementary School did not have enough funds to employ the required number of therapists. Shipai Elementary School also faced similar pressure because of financial considerations. Students with visual impairments definitely needed qualified Orientation and Mobility specialists. However, the government was unable to provide sufficient funding to these schools to hire special education professionals. University departments are unable to increase student populations in professional schools to train more specialists, such as vocational and physical therapists. The limited number of trained specialists also increases the staffing problem for the schools.

In addition to these three common barriers, this study identified unique barriers such as high student teacher ratio, large class size and school size among the three schools. Therefore, the findings of this research help educational leaders in Taipei understand what barriers exist in inclusive schooling.

Support for Inclusive Education

Renai and Wuchang elementary schools believed that the committee to promote special education was valuable to help implement inclusive schooling. Interviewees from Renai and Shipai elementary schools identified that positive perspectives towards inclusive schooling from the principals was valuable to implement inclusive schooling. The principal’s support not only built a positive atmosphere, but also affected the attitude of teachers.

Committee to promote special education

Study participants from Wuchang and Renai indicated that the Committee to Promote Special Education founded in each school and the Taipei Department of Education played an important role to promote the concepts of special education and to help educational leaders and teachers work toward building a consensus on inclusive schooling. The committees helped to exchange experiences, integrate resources, and promote beneficial policies for inclusive schooling. For example, the committee in the Department of Education made a policy to reduce teacher’s workload in inclusive schooling. This policy recommended that general education students be transferred to other classes according to the number of students with special needs and the severity of these disabilities. The number of general education students transferred for each student with special needs varied from one to five. This helped schools achieve the goal of
smaller class size.

Promote inclusive schooling

Many participants believe that educational leaders can use various opportunities to promote inclusive schooling concepts. The finding from Renai Elementary School shows that the Department of Education in Taipei should make a clear policy for inclusive schooling, so that society will understand it correctly, and teachers will realize how it works and what they can do. The researcher also found that educational leaders should form a positive atmosphere to help promote inclusive schooling. It was deemed important that educational leaders have consistent behaviors, attitudes, and thoughts so that teachers can learn from their superiors with little difficulty and begin to implement such behaviors in their individual classrooms.

Study participants in Shipai Elementary School argued that educational leaders should promote inclusive schooling at every possible opportunity, such as administrative and board meetings, so that teachers would not have to spare extra time attending special meetings. According to the findings at Shipai, educational leaders should promote inclusive schooling to reduce teacher resistance to gaining a better understanding about students with special needs. When implementing inclusive schooling, they believed leaders should seek opinions from teachers and treat them with importance. This is because teachers are on the true front line and understand what students need most from inclusive schooling.

The finding at Wuchang Elementary School suggests that educational leaders should often praise students who help their classmates with
disabilities. Study participants hoped that educational leaders encourage teachers who voluntarily teach students with special needs in order to create a better environment for inclusive schooling. In addition, they believed that educational leaders need to show their interest in inclusive schooling through reading groups and publications, giving parents and others in the community a sense of what inclusive schooling is.

Interviewees from Renai pointed out that educational leaders should invite teachers with successful experience into an inclusive schooling setting in order to share their insights. By learning from practical examples, they thought that teachers would better understand what inclusive schooling is and how it works. Interviewees also suggested that educational leaders invite successful people with disabilities to give speeches. Therefore agreeing that educational leaders should hold more activities so that the public’s understanding of the disabled will be strengthened. At Renai and Wuchang elementary schools, the researcher found that both advised educational leaders to participate and hold special education activities in order to help teachers and students experience how students with special needs feel and what difficulties they experience.

*Enhance teacher capacity*

The study participants at the three schools agreed that educational leaders should work to enhance teachers’ capacity, aiding them to strengthen or reinforce their professional knowledge in inclusive schooling. Professional development training includes both pre-service and in-service training for general education and special education teachers together. Before offering this training, study participants recommended that educational leaders should assess the expectations of teachers and needs toward in-service training. Teachers need to learn different skills to teach students with different disabilities. This knowledge will help educational leaders to design a curriculum for professional development that meets the needs of teachers.

Study participants hoped to learn how to design activities in general classes that are suitable for both general education students and students with special needs. They needed more effective ways to help students with special needs deal with behavioral and learning difficulties while not interrupting the entire classroom. Teachers also wanted to learn techniques to motivate students to learn. They also needed the ability to assess student skill levels in order for them to determine if curriculum prerequisites have been attained. Teachers also wanted to learn Braille and sign language to accommodate students with different disabilities.

Wuchang teachers also believed that educational leaders should arrange professional development for teachers of students with visual impairments, particularly in the areas of Braille and orientation and mobility. After interviewing the study participants, the researcher found that professional development can alleviate a teacher’s doubts and anxiety toward students that may be caused by unfamiliarity and insufficient professional skills.
Organize the team of special education professionals

The educational leader would be responsible for determining which specialists are on the team and the activities performed by the team members. While interviewing the Renai educators, they noted that there should be more therapists, physical education teachers, and art teachers with a special education background on the team. They thought that therapists should provide advice during individualized education program meetings. They also thought that educational leaders should form the team to help parents and special education teachers reach a consensus about the needs of children; in addition, educational leaders ought to increase the number of special education teachers and teacher assistants. Also, they agreed that educational leaders should invite psychologists to help teachers understand the mentality and self-esteem of students with visual impairments. Finally, they thought that it would be helpful to have qualified orientation and mobility specialists on the professional team to provide assistance to students.

Shipai educators wanted to see more professionals, such as therapists, physicians, orientation and mobility specialists, and psychologists join the professional team. They also hoped that these professionals would be able to spend more time in the school.

Wuchang educators also suggested that educational leaders should include therapists, orientation and mobility specialists, and psychologists on the professional team. They hoped that these qualified specialists would use their professional skills to help students, allowing resource room teachers more time to provide other services. For example, psychologists would better understand the behavior problems of students with special needs. In addition, they believed educational leaders should schedule more frequent school visits by therapists to help more students with special needs.

Research Findings and the ICS Model

The researcher employed the Integrated Comprehensive Services (ICS) model (Capper, Frattura, & Keyes, 2000) as the analytical framework for this study. The ICS model provides the criteria to pave the way for successful inclusive schooling for all students. This model was used to evaluate the strengths and weaknesses of inclusive schooling in an educational setting. It provided an alternative point of view with which to examine the areas in Taipei that currently needed improvement. Many of the findings from this study are related to goals of the ICS model. However, some findings are not directly related to the ICS model, but could be explored as possible extensions of the ICS model. This section indicates a comparison between the findings and the ICS model.

The first part of the ICS model addresses Core Principles. This first core principle of segregated programs suggests that the source of the student failure is ascribed to the student, hence the student needs to be “fixed” to fit the
system. At this point in time, inclusive schooling in Taipei, as reflected in these three case study schools indicates that though more inclusive schooling is taking place, practices tend to focus on remediating the student rather than on changing the system to meet student needs. Similarly, ICS suggests that in segregated programs, students are helped only after they fail. Again, in this study, this seems to be the case. Finally, ICS argues that in segregated programs, student individual needs are not addressed, and instead, students are placed in predetermined programs. At Renai, it seemed that staff, under pressure from parents, were trying to place students in resource rooms and in general education classrooms more frequently than automatically placing these students in segregated schools or classrooms. Though, among the three cases, this practice seemed to be the exception, not the rule.

Clearly, the common barrier preventing the current state of inclusive schooling from meeting the goals of the ICS model is the lack of professional knowledge of the teachers. Study participants, particularly the general education teachers, were concerned about meeting the individual needs of the students with special needs, and identified one barrier as their lack of professional knowledge. Most teachers stated that they need educational leaders to provide professional training opportunities to address their lack of professional knowledge and increase their teaching capacity. The study participants believed that professional knowledge would give them the confidence and skills needed to teach in the inclusive schooling environment. Teachers in this study also noted the high student-teacher ratio, which also can be seen as a barrier to reaching the ICS core principles.

The second component of the ICS model is location, which addresses the physical organization of students within a school. Study participants noted a barrier of high student-teacher ratios, which prevented their schools from reaching the ICS model location goals. These schools continued to use the pull-out programs to place students with special needs in resource rooms, although the ICS model eliminates resource rooms. Both resource rooms and the general education class faced high student-teacher ratios.

The third component of the ICS model addresses educator roles. The ICS model addresses the roles of teacher and staff, but not the roles of the educational leader. According to the ICS model, general education teachers need to be experts in inclusive schooling and help one another handle special education teaching functions. For example, the Orientation and Mobility (O & M) specialists should train special education and general education teachers to lead O & M exercises, rather than delegate all instruction to the O & M specialists. Several barriers identified in this study prevent these schools from attaining the ICS goals for educator roles. Study participants who were general education teachers were definitely concerned about their roles in inclusive schooling and their professional relationships with special education teachers. The study participants felt the need to attain the ICS model goal of collaborative, sharing relationships among all teachers. Effective instruction was sometimes obstructed
by parents who volunteer in the classroom, another barrier identified in this study.

The last component of the ICS model addresses Curriculum and Instruction. This study discovered a common barrier identified as limited instructional strategies. Teachers understood the need to develop and employ different instructional strategies under inclusive schooling, but did not have enough time or skill to address this issue to reach the ICS goals.

The findings from this research study identified barriers that prevent these schools from reaching several goals of the Integrated Comprehensive Services (ICS) model. However, some of the barriers and supports found in this study are not directly related to the ICS model. This study identified a barrier stemming from the lack of knowledge about inclusive schooling on the part of the school principal, which affected the ability to develop teacher capacity. This study recognized the value of the educational leader's attitude in attaining ICS goals. In Taipei, the Department of Education also created a committee to promote special education in each school, which was identified as an important organization to assist the schools reach the goals of the ICS model.

Implications

The data suggested recommendations for the promotion of inclusive schooling, staff preparation, and policies for inclusive schooling that will help the three schools in this study implement inclusive schooling. These recommendations are addressed in the design of an implementation plan for inclusive schooling in an elementary school.

Goal 1: Plan for Promoting the Idea of Inclusive Schooling

The first step in the inclusive schooling implementation plan is a two- to three-year promotional effort. Educational leaders need to promote and convey the idea of inclusive schooling to teachers, parents, and educational groups, in order to assess interest in inclusive schooling and gain consensus to support inclusive schooling. To begin with, educational leaders must transform their ideology to develop personal support for inclusive schooling. "As important as the monetary support is the ideological support for school reform" (Odden & Archibald, 2001: 87). To promote this new ideology, principals and officials can hold conferences for teachers, parents, and educational groups to explain how all students can benefit from inclusive schooling, who will be included, when to implement inclusive schooling policy, how the role of classroom teachers will change, and how to deal with the challenges of inclusive schooling (McLeskey & Waldron, 2000). To eliminate these concerns, principals and officials need to guarantee the teachers that they are the primary decision makers when implementing inclusive schooling, and plan to provide the teachers with in-service training (McLeskey & Waldron, 2000).

Goal 2: Prepare Staff for Inclusive Schooling
The second step in the inclusive schooling implementation plan is a two-year effort to prepare school staff. Educational leaders must develop collaborative relationships and co-teaching strategies to prepare for inclusive schooling.

Study participants at three schools indicated that they do not have time to discuss curriculum design or engage in professional development relevant to inclusive schooling. Therefore, educational leaders should provide more opportunities for time planning and professional development for teachers. According to Odden and Archibald (2001), teachers can discuss curriculum design and engage in professional development when strategies exist for scheduling time in a way that allows teachers to work together. To provide teachers with more time, some of the following six strategies can be adopted.

Under the first strategy, homeroom teachers are assigned into teams and scheduled to have the same free periods. Then the teachers on the same team can meet during the same period while the students visit the content area teachers. This scheduling strategy permits the teachers on the team to engage in various planning and professional development activities together.

A second strategy involves rearranging the school days. The school day can be extended for 30 minutes on four days and shortened by two hours on the fifth day by releasing students early. This approach provides all teachers with two hours of uninterrupted planning time once a week, and at no additional fiscal cost.

The third strategy involves using time when the homeroom teacher does not supervise the students. During the self-study period, already present in schools in Taipei, the teacher does not need to supervise the class and can use this time for professional development or discussion about curricular design. The homeroom teachers do not need to supervise the students during the time required for students to perform extracurricular service and off-campus learning activities, so they can use the time for professional development or curricular design.

A fourth strategy involves the use of additional part-time teaching assistants to supervise students. The part-time teaching assistants would supervise students during a two-hour period, allowing the homeroom teachers to have more time for professional development. To budget for more teaching assistants, schools can take three full-time content area teacher positions that are part of its regular budget, and convert them into 10 part-time teaching assistant positions that are about one-third of the full-time equivalent for each part-time position.

The fifth strategy schedules a normal planning period right before or after the teacher’s lunch period. The teacher’s lunch period will increase to 90 minutes, with the teachers eating and collaborating at the same time. However, teachers have to voluntarily use their lunch period for planning.

The sixth strategy will be to implement a 90-minute period where students had lunch and recess or other content area classes, scheduled at different times for each grade level. For example, in an elementary school in a U.S. Midwestern city, grades K and 1 had lunch from 11:05 to 11:45 am, followed by a period from 11:50 am to
12: 35 pm when the students were at recess or a specialty class. This extended lunch schedule gives teachers time for planning activities and professional development.

In addition to finding time for planning at schools the Department of Education in Taipei should require current teachers to receive short-term training and certificates in special education. Teacher training for inclusive schooling may take up to two years. The educational leaders should first assess each teacher’s training and skills in special education. This assessment should be done during one-on-one sessions plus teacher self-evaluation. Using the results of the assessments, the educational leaders should group teachers with similar training needs. Then the leaders can develop a training plan for each group which will include measures of training results. Then the leaders needs to determine how the training will be provided, looking for training programs that already exist through conferences or a teacher education center. When training programs do not exist, the educational leaders must develop conferences or training programs to be delivered in the school.

Goal 3: Plan to Mandate Inclusive Schooling

The third step in the inclusive schooling implementation plan is a three to four year effort to mandate inclusive schooling so that a general education school can serve students with a variety of disabilities without pull-out services or self-contained classrooms. To move toward inclusive schooling, the staff in these schools must increase their capacity to handle students with visual impairments as well as other disabilities in the general classroom.

Study participants identified many barriers faced when implementing inclusive schooling. The barriers included incomplete teams of special education professionals, large class sizes, and large school sizes. First, the study participants believed that the incomplete team of special education professionals was a barrier to inclusive schooling. Most of the study participants hoped to include teaching assistants, special education teachers, therapists, Orientation and Mobility specialists, and psychologists. In order to form an effective team of special education professionals, educational leaders should reallocate staff resources from the current organization of the school. It may be possible for educational leaders to complete a reallocation of staffing resources without affecting the school budget.

Odden and Archibald (2001) identified several categories of educational staff and explained where they would be the most effective within the schools. The categories include categorical program teachers, pupil service specialists, and other support staff. The three schools in this study have staff in all of these categories.

A categorical teacher is a special education teacher who works in a resource room. Special education teachers provide pull-out services for students with special needs during the school day. When schools integrate special education students into the regular classrooms, the funding for resource room teachers and pull-out services can be reallocated. A great way to reallocate resources is to assign special education teachers
who are dual-certified in both special and regular education to be homeroom teachers. With additional homeroom teachers, schools can also reduce class size (Odden & Archibald, 2001: 68). Educational leaders in Taipei can eliminate pull-out services and use those teachers in regular classrooms, as well as use the money saved for training the teachers to be dual-certified in special education and general education.

Pupil service specialists do not teach students in the classroom. Pupil service specialist included counselors and nurses in the schools involved in this study. Study participants hoped to add psychologists, O & M specialists and occupational therapists as pupil service specialists. To add these specialists needed by the schools, educational leaders should reallocate current pupil support services. According to Odden and Archibald (2001), some schools have already begun implementing this type of resource reallocation. For instance, some districts suggest that schools cut back on the hours that their nurses or guidance counselors are on staff and use the money they save to hire staff with other specialties. Educational leaders in Taipei should be allowed more flexibility when deciding what pupil service specialists should exist at a school, and should use school need to make these decisions.

Other support staff includes teaching assistants and custodial workers. Teaching assistants usually help homeroom teachers and content area teachers with tasks such as one-on-one work with students as well as nonacademic work like supervising the playground, extracurricular activities, and cafeterias. This category is one where educational leaders might consider reducing staff or hours. “One school eliminated four instructional aide positions in order to hire two additional regular classroom teachers to reduce class size.” By cutting the hours of custodial workers by four per week, this school saved money throughout the year and now had the option to reallocate this money towards another program or other services, such as O & M specialists (Odden & Archibald, 2001).

The Department of Education and schools should review and modify recruitment and hiring policies so that the process considers the formal education and experience in inclusive schooling of applicants for the positions of teacher or principal. The formal education may include credit courses or a degree in special education. Additionally, educational leaders need to work with teacher education institutions to make special education courses required for all students to better prepare candidates for teaching positions. In summary, educational leaders need to examine the staff resources in each category to determine if school needs are met. Educational leaders in Taipei can apply various resource allocation strategies to hire additional members in the professional team to maximize its function.

Some study participants suggested that smaller class sizes would provide additional benefits for inclusive schooling. For example, Odden and Archibald (2001) presented a good case for the reduction of class sizes in inclusive schooling. The principal at Farnham Elementary School in the mid-west decided to eliminate pull-out service teachers in order to hire more
homeroom teachers for inclusive schooling. His allowed the school to decrease its average class size to sixteen students. Achilles (1999) did an experiment in Tennessee using kindergarten to grade three classes as a sample selection and showed that students in a class size of thirteen to seventeen learned more than students in a class size of twenty-two to twenty-six. Educational leaders should realize the importance of reducing class sizes when implementing inclusive schooling.

To realize the benefits of inclusive schooling and reduced class sizes, educational leaders should take three strategies into consideration to decrease class size (Odden & Archibald, 2001). The first strategy calls for the elimination of pull-out services. This enables the resources to be reallocated for additional staff to reduce student/teacher ratios effectively and inexpensively. When a school implements inclusive schooling, pull-out services are eliminated, and educational leaders in Taipei can use those teachers and funding towards class size reduction under inclusive schooling.

A second strategy to reallocate teachers and funding is to reduce class sizes for specific subjects. This is demonstrated in another example from Odden and Archibald (2001: 34):

"Other schools that we studied reduced class sizes only for particular subjects, mainly reading. [One school] provided reading class sizes of 10 to 12 for the students who were having the most difficulty learning how to read". Similar to the idea in this example, this study recommends educational leaders in Taipei form smaller study groups for specific subjects to reduce class size. In this situation, students with special needs who are in a smaller group will get more attention from teachers and improve their learning.

A third strategy to address class size calls for specific content area teachers to travel from one classroom to another during the day, rather than reserving rooms for specific content instruction. Odden and Archibald (2001: 34) find that in some schools only 65% of the classrooms are being utilized and schools can increase their use to 100% to reduce class size. Odden and Archibald (2001: 35) found that "by having the art and music teachers travel to the classroom for the specialist classes [schools were able to free up] art and music rooms for other classes". The teacher’s willingness to shift classrooms will greatly benefit students with special needs. Based on these findings, educational leaders in Taipei should eliminate some specific content rooms and reuse this space to reduce class size.

**Future Research Direction**

Taipei has been implementing new educational reform for ten years. Due to the expectations of parents and pressure groups, the Department of Education regards small school size and small class size as important policies for new educational reform. Over the past decade, the elementary school population decreased by 1,145 students, with class size reduced from 44 to 33 students, and the junior high school population decreased by 1,911 students, with class size reduced from 43 to 36 students. The Tennessee class size reduction experiment
showed that "small classes of around 15 students for K-3, in and of themselves, were associated with improvements in student learning" (Odden & Archibald, 2001). From this perspective, a class size of 33 students is still too large and will interfere with implementing inclusive schooling. In addition, Borman and D'Agostino (1996) and Vinovskis (1999) question whether traditional pull-out service is an effective method in implementing inclusive schooling. Wasik and Slavin (1993) offer an alternative and suggest that one-to-one tutoring is the most effective educational strategy for helping young students learn to read. Because licensed teachers receive in-service training in literacy, they are more qualified than teachers' aides to work in classrooms as one-to-one tutors for students with special needs. Therefore, less money needs to be spent on hiring teachers' aides, and students will receive professional one-to-one tutoring.

The last time that the Republic of China (Taiwan) government, including the Taipei city government, identified the population of students with special needs was 1992. According to the recent statistics (Table 1), approximately 2% of the students have special needs in Taipei.

Table 1 Percentages of students with disabilities and gifted students

<table>
<thead>
<tr>
<th>Pre-School</th>
<th>Elementary School</th>
<th>Junior High School</th>
<th>High and Vocational School</th>
<th>Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number of Students</td>
<td>Percent</td>
<td>Number of Students</td>
<td>Percent</td>
</tr>
<tr>
<td>Total</td>
<td>32,828</td>
<td>100%</td>
<td>198,465</td>
<td>100%</td>
</tr>
<tr>
<td>Students with Disabilities</td>
<td>494</td>
<td>1.5%</td>
<td>3,844</td>
<td>1.9%</td>
</tr>
<tr>
<td>Gifted Students</td>
<td>0</td>
<td>0%</td>
<td>2,811</td>
<td>1.4%</td>
</tr>
</tbody>
</table>

Source: Department of Education, Taipei Municipal Government, 2004

The percentage of students with special needs in the schools in this study was also approximately 2% of the student population. It is possible that a new effort to identify students with special needs could uncover a higher percentage of students to be served. Therefore, the researcher recommends that educational leaders in Taipei conduct a new investigation to identify students with special needs to ensure that all students receive appropriate services and support.

The ICS model eliminates all segregated educational settings. Since this research study included general education teachers and resource room teachers, other research studies should explore the concerns about inclusive schooling from other teaching perspectives. One possible study could use the same research questions with research participants from the four segregated special schools in Taipei. A second study could use the same research questions with research participants from self-contained classes, another
segregated educational setting.

An additional study could focus on the concerns of parents and examine the roles of parents in inclusive schooling. This research study could explore how teachers and parents can communicate effectively and establish consensus about inclusive schooling for students with special needs. These research studies will help provide further insights to help educational leaders implement inclusive schooling in Taipei.

Conclusion

The purpose of this study was to examine the barriers and support for inclusive schooling found in three schools in Taipei. This study also examined the roles of educational leaders to fully include students with special needs. This study found three common barriers to inclusive schooling: (1) incomplete team of special education professionals, (2) lack of professional knowledge, and (3) limited instructional strategies. The researcher identified two support areas for inclusive schooling: (1) the Committee for the Promotion of Special Education and (2) principal’s attitudes. The study identified the role of the educational leaders to include students with special needs fully involves these activities: (1) promote inclusive schooling, (2) provide training for professional development, and (3) organize the team of special education professionals.

Based upon the results of this study, the researcher developed a plan to be used by educational leaders to implement inclusive schooling in Taipei. This implementation plan has three goals: (1) promote inclusive schooling, (2) prepare staff for inclusive schooling, and (3) mandate inclusive schooling.

This is probably the first study to discuss the issue of inclusive schooling in Taipei based on the ICS model. In terms of roles of educational leaders, the researcher hopes this study could be a stepping stone for further study and better implementation of inclusive schooling in Taiwan.
References


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台北市融合教育之研究：
探討現況、障礙與支持，以及教育領導者之角色

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摘要

本研究檢視當今台北市實施融合教育的障礙、支持，以及教育領導者應如何將身心障礙學生融入一般教育環境。本研究採質性研究法，訪談台北三所視障重點學校的校長、普教和特教教師。

本研究發現，目前融合教育的困境：(1)不健全的特教專業團隊；(2)教育人員缺乏融合教育理念；(3)缺乏時間做專業發展。為了有效實施融合教育，教育領導者應促進融合教育的實施、加強教師專業能力，並健全特教專業團隊。

本研究建議實施融合教育應注意：(1)教育人員需先轉換融合教育改革的意識型態；(2)鼓勵教師專業發展及強化教師的合作關係，以增強教師的教學能力；(3)應提供教師訓練機會、重新分配教育資源，並降低班級學生數，使融合教育的實施更为有效。

關鍵字：融合教育、統合性的全面服務模式(ICS Model)、特殊教育領導、資源教室、教師專業發展