

SHOULD INCLUSIVE EDUCATION BE MADE COMPULSORY IN SCHOOLS?: A STUDY OF SELF-EFFICACY AND ATTITUDES REGARDING INCLUSIVE EDUCATION AMONG A DIVERSE GROUP OF SENA (SPECIAL NEEDS ASSISTANCE) TEACHERS

**Emma Claire Pearson
Jennifer Tan**

Universiti Brunei Darussalam

This paper reports a survey conducted with the intention of responding to recent calls for more evidence on the experiences of SENA teachers since implementation of policies around inclusive education. The data provide a tentative information about perceptions among teachers currently employed by the Ministry of Education as SENA teachers. The data were collected through the use of questionnaires distributed during a series of professional development workshops held with SENA teachers throughout the country.

On the global front, at the heart of education policy and planning (Savolainen, Engelbrecht, Nell & Malinen, 2012), is a concern with inclusion of students with different needs in mainstream schooling. This emphasis is no different in Brunei Darussalam, where *inclusive education* policies were introduced in 1994. The new policies led to the establishment of the Special Education Unit (SEU) of the Ministry of Education and a major turning point in the development of special education in Brunei Darussalam away from segregation of children with disabilities towards a focus on inclusive education (Koay et al., 1996; 2006).

As part of its inclusive education initiative, whose primary goal is to support the success in school of struggling students by providing needed assistance, the Ministry of Education has in place *special education* support in mainstream regular schools (Csapo & Omar, 1996, cited by Koay et al., 2006). Support for children with additional needs in mainstream settings is provided by SENA (Special Educational Needs Assistance) teachers with specialist education in catering for additional needs and inclusive education.

Studies of student teachers suggest somewhat ambivalent attitudes towards inclusion among *mainstream* teachers (Bradshaw & Mundia, 2006; Koay, 2003) and among teachers who have received training in special education in Brunei Darussalam (Tate & Mundia, 2010). An historical time line of developments in *inclusive* and *special* education since 1994 also indicates a level of fluidity in the education and preparation of professionals working in inclusive education, due to qualification upgrading efforts and to changes in teacher training generally (Koay, 2007).

As in most parts of the world, there is debate around the nature and relevance of *inclusiveness* in education in Brunei Darussalam (Fitzgerald, 2010). Indeed, the situation in Brunei Darussalam reflects what Armstrong, Armstrong and Spandagou (2011) refer to as the necessary contextualisation of *inclusivity* in education. While there is a body of evidence, centred largely around comparison between specialist and non-specialist (or mainstream) teachers, that points to some perceived benefits associated with education in inclusive practices (Koay, 2006; Bradshaw & Mundia, 2006). Recent discussions have therefore called for more in-depth research into the situation of SENA teachers in Brunei Darussalam. The research reported here was designed to shed some light on SENA teacher experiences in the country, by gathering information related to teacher self-efficacy and attitudes towards inclusive education among practising SENA teachers, with a focus on comparisons across years of experience and qualification.

Inclusive Education in Brunei Darussalam

According to Kozleski et al., (2007), inclusive education is all about schools ensuring that every student

member, regardless of social, physical and economic differences, receive learning experiences that include a non-differentiated sense of belonging, nurturing and education. In the mid-1990s, the Ministry of Education introduced several key educational reforms including the development of specialized teacher education programs at certificate level, in line with recognized mainstream teacher-training qualification levels, to help prepare and train teachers for inclusive education.

Besides preparing schools for the recommended changes, the initiatives served to generate interest and support for developing a new core of personnel – known as Special Educational Needs Assistance (SENA) teachers – to assist regular teachers to support children with additional learning needs. This certification of a new category of teachers was the result of a joint collaboration between the Sultan Hassanah Bolkiah Institute of Education at Universiti Brunei Darussalam (UBD) and the Special Education Unit at the Ministry of Education. The new SENAs were awarded a Certificate in Special Education, and their roles were to administer screening tests to identify students with special needs, develop individualized educational plans (IEPs), and collaborate with regular teachers in helping them implement IEPs for individual students. In Brunei Darussalam, the special education program implemented in regular schools is based on the Learning Assistance Teacher (LAT) model, with SENAs providing support in *special education* within the regular education system. By the end of January 2002, 1,303 students across the primary and secondary school system with IEPs were receiving assistance from SENAs in regular school settings. In addition, for students who achieved a score within a particular range in screening tests at their respective grade levels but were without IEPs, SENAs play an important role in supporting their learning by sharing and demonstrating appropriate teaching strategies for regular teachers (Koay, 2004).

There have been a number of developments in teacher preparation programmes since the first programmes for SENAs were introduced. According to Koay (2007), 1995 marked the first intake of candidates for the Certificate of Special Education. Following the distribution of Special Education Handbooks for Headmasters, teachers and SENAs in 1998, a core course on *Inclusive Education* was introduced to the BEd preparation programmes for all mainstream primary teacher candidates. In the same year, UBD received its first intake of BEd (Special Education) and MEd (Special Education) teacher candidates. Most recently, in line with broader developments in teacher preparation in the country, undergraduate teacher preparation programs have been replaced by multi-disciplinary undergraduate degrees, after completion of which teacher candidates are required to obtain a Masters in Teaching qualification. Implications of these developments are discussed in detail by Koay (2012). For the purposes of this article, attention is drawn to the changes for purposes of contextualisation and in order to highlight the importance of better understanding possible variations in SENAs' perceptions related to years of service in the field and level of qualification / type of preparation programme attended.

To date, since implementation of the learning assistance programme, not much research has been conducted on practising SENAs' views or perceptions of inclusive education. This is especially pertinent given the sizeable number of SENAs who have been providing support in regular schools for almost two decades and a valid number of them having the intention to or currently undergoing further training and upgrading. SENAs are an important group of teachers who, having received comprehensive training in special needs education, have the potential to be strong advocates for inclusive education compared with their counterparts, mainstream teachers. However, little is known about the extent to which this group of practitioners as a whole feels empowered to promote inclusive education, particularly given the contextual characteristics of their working environments and changes to their education and training since programmes were first offered at UBD. Their views or perceptions towards inclusive education, as well as their feelings of empowerment and efficacy, must be considered so that they can, through their work with regular teachers and in classrooms, influence the degree to which students with additional learning needs are accepted and accommodated within regular schools (Koay et al 2006).

The Need for Self-Efficacy

Among the areas of concern for inclusive education that have been expressed recently, is a need for shared understandings and community-wide commitment to inclusive practices (Fitzgerald, 2010). Several studies, both recent and dated, on teachers' beliefs about inclusive education and special education (Savolainen, Engelbrecht, Nell & Malinen et al., 2012), provide evidence to support the idea of a positive relationship between teacher self-efficacy and attitudes towards inclusive education (Weisel and Dror 2006). In order for inclusive education to be successfully implemented, research has shown

that the teacher plays a critical role (Forlin et al., 2010). Teachers, according to Oswald (2007) are at the forefront of the schools' transformation to embrace being inclusive or not.

According to Bandura (1995) self-efficacy refers to *the belief in one's capabilities to organize and execute the courses of action required to manage prospective situations*. The theory of self-efficacy has been applied to education systems generally, teachers' perceptions about their efficacy are important to consider, given established correlations between teaching efficacy and students' learning outcomes in the past three decades (Tschannen-Moran & Woolfolk Hoy, 2001; Woolfson & Brady, 2009). Teachers with higher levels of self-efficacy experience lower levels of perceived feelings of burnout (Viel-Ruma, Houchins,

Jolivette & Benson, 2010). Teacher efficacy is related to a teacher's degree of persistence, enthusiasm, commitment, willingness to vary instruction techniques, and motivation to reach all students. Each of these traits is necessary for practising inclusive education. Teachers with a high sense of efficacy are also more likely to feel personal accomplishment, have high expectations for students, feel responsibility for student learning, have strategies for achieving objectives, a positive attitude about teaching and believe they can influence student learning. Teachers who perceive themselves efficacious will spend more time on student learning, support students in their goals and reinforce intrinsic motivation (Bandura, 1993, p. 140). Teacher efficacy has a significant impact on students and is one variable often associated with student achievement, student engagement, and student motivation.

Given the evident importance of teacher-self-efficacy in terms of self-esteem, impact on students and attitude towards inclusive practice, and the need for more in-depth understandings of SENA teachers and their work in order to enhance current service provision, the goal of the research reported here is to examine the interrelations among teacher self-efficacy, number of years in the profession and certification/qualification levels among SENA teachers in Brunei Darussalam.

Research Questions and Design

This research was conducted with the intention of responding to recent calls in Brunei Darussalam for more evidence on the experiences of SENA teachers since implementation of policies around inclusive education in Brunei Darussalam (Koay, 2006; Fitzgerald, 2010; Bradshaw & Mundia, 2012). The data provides a tentative set of data providing information about perceptions among teachers currently employed by the Ministry of Education in Brunei Darussalam as SENA teachers. The data was collected through the use of questionnaires distributed during a series of professional development workshops held with SENA teachers throughout the country.

Given the contemporary focus on self-efficacy in understanding attitudes of teachers towards inclusion in education (Savolainen et al. 2012) as an important factor in effective implementation of inclusive education, the research was designed to investigate interrelations among attitudes towards inclusive education, teacher self- efficacy, number of years in the profession and certification/qualification levels in the area of special education. In line with the fluidity of SENA teacher preparation cited earlier and the fact that many in-service teachers received their certification close to 20 years ago, the study addressed the following research questions:

- i. Do levels of self-efficacy vary across the 5 key districts of Brunei Darussalam?
- ii. Are levels of self-efficacy associated with years of work experience and/or qualification levels?
- iii. How are scores on the self-efficacy scales statistically related to reported attitudes towards inclusion?

Method

Data Collection Method

Data for this research was collected as part of a series of in-service workshops conducted at the request of the Special Education Unit at the Ministry of Education. Two-hour workshops were conducted in four key districts of Brunei Darussalam (Brunei-Muara I and II; Kuala Belait and Tutong), as part of a professional development programme for all SENA (Special Educational Needs Assistant) teachers working in primary schools across Brunei Darussalam.

The workshops were designed to promote the importance of self-efficacy for teachers working in inclusive education settings. Following a brief introduction to key concepts underpinning self-efficacy,

teachers participated in group activities focussed on challenges faced in their respective contexts and possible solutions offered by the range of resources available. A questionnaire consisting of the short form of the Teacher Sense of Self Efficacy Scale (Tschannen-Moran & Woolfolk-Hoy, 2001) and three additional open-ended questions on challenges; solutions and personal opinions regarding inclusive education was also distributed to participants as part of a post-workshop activity. Data from the questionnaires, including demographic information for each participant, was analysed using the statistical package SPSS Version 20.

Participants - Demographic Information

Of the 114 teachers currently registered with the government's Special Education Unit, 76 attended the workshops and completed the shortened version of the self-efficacy questionnaire (Tschannen-Moran, & Woolfolk Hoy, 2001). A summary of key demographic data from the sample is provided in Tables 1 and 2.

Table 1. Demographic Information on Participating Bruneian SENA Teachers

Demographic	
Gender (female / male)	69 / 6
(Missing data)	1
Years of teaching experience as a Special Educational Needs Assistant (SENA)	32
1-5 years	9
6-10 years	18
11-15 years	15
16+ years	
(Missing data)	2
Highest Qualification (Specialist qualification as SENA)	
Certificate	26
Degree	21
Masters	16
(Missing data)	13
Location in Brunei Darussalam	
Kuala Belait	10
Brunei Muara I & Temburong	17
Brunei MuaraII	31
Tutong	18

As indicated in Table 1, this cohort of teachers includes a wide range of qualifications and years of work experience, supporting the need for insights into the similarities and differences in their perceptions and experiences. The years of teaching experience reported ranged from less than one to over 25. The majority of participants held either a certificate or degree-level specialized qualifications, with a smaller number holding masters-level qualifications. There was missing data on qualifications for 13 out of our 76 participants, meaning that the sample size was reduced for analyses related to teacher qualifications. There was also missing survey data on two further cases, further reducing the number of participants whose data was included in analyses.

Questionnaire

SENA teachers' self-efficacy was measured using the short form of the Teachers' Sense of Efficacy Scale developed by Tschannen-Moran and Woolfolk Hoy (2001). The scale consists of 12 statements designed to assess self-efficacy in three key areas: Classroom Management; Student Engagement and Instructional Strategies. The Classroom Management statements focus on management of disruptive behaviour; the Student Engagement scale focuses on promoting student confidence and motivation in learning, and the Instructional Strategies scale measures teachers' efficacy in relation to using a variety of *tools* and strategies for teaching. The statements, which measure *how much* teachers feel they can respond to challenges and/or achieve goals, are measured using a Likert-type scale with a 9-point response range, from 1 for *Nothing*, to 9 for *A Great Deal*. The sum score of the scale has also been used to provide a measure of Overall Self-Efficacy (Tschannen-Moran, M. & Woolfolk Hoy, 2001).

In addition to the scale, we included a second section designed to collect open-ended responses regarding challenges and strategies used by SENA teachers in Brunei Darussalam. As part of this section, an item gauging perspectives on inclusive education was included. Responses to this item (*In your personal opinion, do you think inclusive education should be made compulsory in the school system?*) were used to explore links between self-efficacy and attitudes towards inclusion.

The questionnaire was presented to participants at the workshops in English. Since English is the primary medium of instruction in Brunei schools, levels of English fluency are relatively high in the nation and we assumed that, since the workshops were being conducted in English, participants would have proficiency in the language. However, as one of the authors speaks Bahasa Melayu (the official language of Brunei Darussalam) we invited participants to approach her with any queries related to language / translation.

Findings

Our intention in collecting this data was to investigate whether levels of self-efficacy vary across the 5 key districts of Brunei Darussalam; whether levels of self-efficacy are associated with years of work experience and / or qualification levels, and whether scores on the self-efficacy scales are statistically related to reported attitudes towards inclusion. Our analyses also included examination of the relevance and appropriateness of the short version of the self-efficacy measure developed by Tschannen-Moran and Woolfolk Hoy (2001) for assessing self-efficacy among SENA teachers in Brunei Darussalam

Preparation of the data involved coding the demographic data and assessing applicability of the questionnaire in the Brunei Darussalam context through factor analysis of the Teacher Sense of Self Efficacy Scale. Table 1 reflects the range of years of teaching experience included in this sample. The range was coded as follows: 1 = 1-5 years; 2 = 6-10 years = 3 = 11-5 years, and 4 = 16+ years. Specialist qualifications were coded as 1 = certificate; 2 = degree, and 3 = masters level.

Factor Analysis

To establish structural validity and reliability of the three self-efficacy scales (Classroom Management; Instructional Strategies and Student Engagement), a Principal Components Analysis (PCA) retaining items with minimum eigenvalues of one and employing varimax rotation was conducted. Three factors were generated, closely reflecting the structure outlined by Tschannen-Moran and Woolfolk Hoy (2001), with eigenvalues of 6.365, 1.254 and 1.085 for Classroom Management; Student Engagement and Instructional Strategies, respectively. Reliabilities for the sub-scales ranged from 0.83- 0.89 (see table 2).

Table 2: Factor Structure, Loadings and Reliability of the Classroom Management; Student Engagement and Instructional Strategies Sub-Scales of the Teachers' Sense of Efficacy Scale (Tschannen-Moran, M. & Woolfolk Hoy, 2001)

Item description	Classroom management	Student engagement	Instructional Strategies
How much can you do to control disruptive behaviour in the classroom?	0.80		
How much can you do to get children to follow classroom rules?	0.73 0.83		
How much can you do to calm a student who is disruptive or noisy?			
How much can you do to motivate students who show low interest in school work?		0.71 0.83	
How much can you do to get students to believe they can do well in school work?		0.71	
How much can you do to help your students to value learning?		0.57	
To what extent can you craft good questions for your students?			0.70
How well can you establish a classroom management system with each group of students?			0.74
How much can you use a variety of assessment strategies?			0.75
To what extent can you provide an alternative explanation or example when students are confused?			0.76
How much can you assist families in helping their children do well in school?			0.81
How well can you implement alternative strategies in your classroom?			
<i>Cronbach's alpha for sub-scale</i>	0.83	0.84	

Two variations to the original structure are noted: the item *How well can you establish a classroom*

management system with each group of students loads on the Classroom Management scale in the original factor structure. For our sample of Bruneian teachers, this item loads clearly on the Instructional Strategies factor, indicating that classroom management may be associated more closely with teaching strategies than with mechanisms of control among this group of teachers. The second variation concerns the item *How much can you assist families in helping their children do well in school?*, which in our sample, again, loaded on the Instructional Strategies scale, whereas it loads on the *Student Engagement* scale in the original version.

Profile of SENA Teachers in Brunei Darussalam

Bruneian SENA teachers report generally high levels of self-efficacy across all three factors measured by the Teacher Sense of Self-Efficacy scale (out of a high possible score of 9, scores of 6.5, 6.6 and 6.7 were generated for the Instructional Strategies; Classroom Management and Student Engagement scales, respectively). A mean of 6.6 for Overall Self-Efficacy was reported for the whole sample, with no significant differences in scores for the whole sample across the three factors.

Do levels of self-efficacy vary across the 4 key districts of Brunei Darussalam?

No significant differences in mean scores for any of the three sub-scales or the Overall Self-Efficacy scale were found across the four district groups who participated in the workshops and associated research. Mean scores on the Overall Self-Efficacy scale ranged from a high of 6.66 (SD = 1.20) for Brunei Muara II to a low mean of 6.50 (SD = .92) for Kuala Belait. Subsequent analyses therefore examined variations based on other factors, such as qualification and years of working experience.

Variations in Self-Efficacy Levels Based on Years of Experience and Qualification Levels

In order to test for differences in reported self-efficacy attributable to years of working experience, a one-way ANOVA was conducted on the three sub-scales, as well as the Overall Self-Efficacy scale, with years of experience as the between groups factor. Scores on the Student Engagement scale differed significantly across the categories of years of work experience, $F(3, 67) = 3.043$, $p = .035$. However, Tukey post-hoc comparisons of the 4 years of experience groups indicated only a marginally significant difference between participants with 1-5 years of experience ($M = 6.23$, 95% CI [5.78, 6.69]) and those with 16+ years, scoring higher on the Student Engagement sub-scale ($M = 7.17$, 95% CI [6.55, 7.78]), $p = .051$.

A one-way ANOVA was also used to test for differences in scores on the sub-scales and overall scales based on qualification levels. Significant differences were generated for the Student Engagement sub-scale ($F(2, 61) = 3.72$, $p = .030$) and the Overall Self-Efficacy scale ($F(2, 61) = 3.30$, $p = .044$) across the three levels of qualification. Tukey post-hoc comparisons of the three qualification groups for self-efficacy scores in Student Engagement indicated that participants with certificates ($M = 6.27$, 95% CI [5.83, 6.71]) were significantly less likely to report high levels of self-efficacy on this sub-scale than participants with degrees ($M = 7.15$, 95% CI [6.68, 7.62]), $p = .012$. A similar pattern was found between certificate holders ($M = 6.24$, 95% CI [5.81, 6.68]) and degree holders ($M = 7.00$, 95% CI [6.56, 7.45]), $p = .034$ in Overall scores on the Self-Efficacy Scale.

Are scores on the self-efficacy scales statistically related to attitudes towards inclusion?

The intention of this research was to conduct preliminary investigations into levels of self-efficacy among SENA teachers working in Brunei Darussalam, and to explore whether self-efficacy levels among Bruneian SENA teachers may be, as reported in previous studies, related to attitudes towards inclusive education. Although the level of analysis available to us is restricted by our method in collecting this data (we included the following question in Section B of the questionnaire: *In your opinion, should inclusive education be made compulsory in the school system?*), there are noteworthy findings to report, which indicate that further research in this area would be valuable. Responses to the question, for the purposes of quantitative analysis, were coded according to whether they indicated agreement with the idea that inclusive education should be compulsory (Yes), disagreement (No), neither agreement nor disagreement (Maybe), or no answer (No answer).

Initially, our interest was primarily in understanding the nature of self-efficacy among SENA teachers in Brunei, as we assumed that previous findings relating to links between self-efficacy and positive sentiments towards inclusion reported in the Introduction section would be replicated in our sample. However, the data from this group of SENA teachers suggests that the positive association between self-efficacy and attitudes towards inclusive education is not straightforward. Unexpectedly, the data suggest that participants with high levels of self-efficacy, across all aspects of teaching, are not in favour of

compulsory inclusive education. In attempting to shed light on this finding, we turn later in this discussion to some recent work that highlights the complexities of *inclusion*.

Discussion

Our findings indicate that there is quantitative support for the validity of the original Teacher Sense of Self-Efficacy Scale (Tschannen-Moran, M. & Woolfolk Hoy, 2001) among SENA teachers in Brunei Darussalam. In terms of the slight variations to the three sub-scales, with two items shifting to the Instructional Strategies factor, this difference might be explained by the unique position of *teachers* in our sample. It is perhaps not surprising that teachers who are focused specifically on providing intervention for children attending a mainstream school who have been identified as having *special needs* see classroom management and working with families as *instructional strategies*. Anecdotally, many of the teachers that attended the workshops that formed part of this research referred to pressure on them to *manage* children's behaviour by working with parents. This feeling reflects what Harvey-Koelpin (2006, cited in Armstrong) identifies as a major challenge of inclusive education, which is that the particular academic goals of *mainstream* education preclude inclusive practice as the focus tends to be on *reforming* children with disabilities to perform in class, rather than the converse.

We had expected, in preparing for the workshops, that there might be variations in self-efficacy among SENA teachers in Brunei Darussalam based on location. We had assumed that resources might be more plentiful in Brunei Muara I and II, which are more located nearer to the nation's capital and ministry offices. However, in conducting the workshops, we discovered a strong network of SENA teachers within each location, which might account for the lack of variation. Labone (2004, cited in Tschannen-Moran & Woolfolk Hoy, 2006) suggests a need for greater understanding about the kinds of context variables linked to high self-efficacy and Tschannen-Moran et al. (1998) included contextual variables in their model of teachers' self-efficacy.

We expected, on the basis of previous research on self-efficacy (Klassen & Chiu, 2010) that practitioners with more years of experience in the field would report higher levels of self-efficacy. However, previous research also indicates that experience may not necessarily enhance self-efficacy. Hoy and Woolfolk (1990) and Spector (1990), for example, noted that for pre-service teachers, general teaching efficacy appears to increase during college coursework, then decline during student teaching. Both studies seem to suggest that the optimism of young teachers may be somewhat tarnished when confronted with the realities and complexities of *real-life* teaching tasks. This assumption was partially supported by our data, with an indication of significant differences across groups with varying levels of experience, specifically on the Student Engagement sub-scale of self-efficacy. The fact that less-experienced SENA teachers might feel less confident about being able to motivate and build self-confidence in their students' learning could be explained by the greater length of time that these goals take to achieve, in comparison with classroom management and the use of strategies, which are more immediate. However, the findings suggest that this pattern is not linear, which also fits with a previously reported possibility that self-efficacy may peak at mid-career, with a plateau and reduction towards late career.

The finding that self-efficacy levels were influenced by qualification was not unexpected either, based on previously reported findings (Williams, 2009). A significant difference in levels of self-efficacy for both the Student Engagement and Overall Teacher Sense of Self-efficacy Scale were found between degree and certificate holders, with degree holders reporting higher levels of self-efficacy. However, again, there were unexpected patterns in this data. No significant differences between the most highly qualified Masters degree holders and Certificate holders were found. Descriptive data on each of the groups indicates that both the Certificate- and Masters degree-holders belong to the group with the least amount of experience working in the field, suggesting an interaction between qualifications and experience. While regression analyses revealed no significant patterns to this effect, this finding is worthy of further exploration, either through qualitative investigation or further surveys that involve all 114 SENA teachers in the country.

The most surprising and, perhaps, noteworthy finding was the apparent link between self-efficacy and negative response to the item *In your opinion, should inclusive education be made compulsory in the school system?*. Based on data from this sample of SENA teachers, it appears that high self-efficacy may not, as widely assumed, necessarily result in a positive outlook on inclusive education. In order to shed further light on this finding, we turned to some of the descriptive data emerging from our survey and to the context. We also looked in more depth at some of the literature emerging in this area and found possible explanations for this pattern.

The statistical analyses that we were able to perform were limited due to the nature of our *measure* of attitudes towards inclusion: an open-ended question that asked for personal opinions about whether inclusive education should be made compulsory in the school system. Notwithstanding this drawback, some explicable and potentially interesting findings emerged. For example, given that degree holders in our sample generated the highest scores on the Overall Self-Efficacy scale and high scores on this scale were associated with negative responses to the item on inclusive education, there may be unique characteristics among degree holders that are worthy of investigation.

Crosstabs analyses revealed that the degree holders in this sample are, predominantly, also the most experienced teachers (out of 25 teachers who reported having more than 11 years of experience working in schools, 14 were Degree holders, 10 were Certificate holders and 1 held a Masters degree). In a cross-cultural study of self-efficacy and attitudes towards inclusion among Finnish and South African teachers, Savolainen, Engelbrecht, Nell & Malinen, (2012) found that, in both cultural groups, more teaching experience predicted negative attitudes towards inclusion. As these authors suggest, it is important that programmes preparing teachers for work in inclusive education settings provide sufficient support in development of knowledge and skills that empower them to act as effective practitioners in inclusive practice

It is also important to note that the *teachers* represented in our research are unique as they have been working as special educational needs assistants in mainstream settings, in the case of degree holders for ten years or more, since the inception of the LAT programme that was highlighted in our Introduction. The LAT programme, implemented in response to Brunei Darussalam's acknowledgement of *inclusive education* at the level of policy, represents a unique approach to involving children who are identified as having particular learning needs in mainstream school settings. The particular context within which experienced SENA teachers with high levels of self-efficacy in our study have been working is important to highlight in understanding possible explanations for their apparent caution about inclusive education.

Armstrong et al (2011) detail the various challenges associated with conceptualising and implementing *inclusive education*, particularly across diverse social and cultural contexts. As these authors point out, there are variations in perspective on *inclusive* practice based often on the concept of *need*: often the school's *need* for order is translated into the *needs* of individual children with *difficult* or *disruptive* behaviour. As Armstrong and colleagues (p. 102) suggest, this approach results in *additional support (which) may diversify in alternative paths of provision that take the student outside the mainstream classroom and school, removing in the process the need or problem of the student*. The difficulty with this approach, while it does serve to address both the needs of schools and children who have difficulty adjusting to formal study, is that in some cases classrooms are insufficiently equipped to cope with students who are removed for intervention and then returned. This challenge was highlighted in the 1990's by Moeller and Ishi-Jordan (1996, p.2) in a review of similar systems in the United States:

The basic premise of inclusion was evident in LRE (Least Restrictive Environment), but the motivation seemed more solidly based on first segregating students for necessary special service, then allowing those who could learn in the same manner as their nondisabled peers to enter classrooms without the special services.

Working within such a system is likely to prove challenging in terms of convincing teachers of the value of a model of inclusion that promotes full immersion of children with disabilities and diverse needs into the mainstream, regardless of their education and training. Anecdotally, during our workshops, many of the daily challenges that were referred to revolved around disruptive behaviour in mainstream classrooms and returning children from the SEN centres into mainstream classrooms. Perhaps the indication that teachers with high self-efficacy and more years of work experience in the field are less likely to be supportive of *compulsory* inclusive education reflects their clear understanding of *inclusive education* and implications associated with its full implementation in the current system.

It is important to re-iterate Armstrong et al. (2011) assertion that contextual variations in approaches to including children with disabilities will and should exist and that no single *model* should be viewed as ideal. What is important, however, as the findings reported here suggest, is that the goals of any particular model are shared amongst stakeholders and that the vision, or interpretation, of *inclusion* is clear. Much has, and is being done in Brunei Darussalam to promote inclusive practice in educational settings. These efforts will be enhanced by current moves towards coherence and shared understanding

between educational providers (both at the level of schools and tertiary institutions) about the nature and purpose of *inclusive* education. The findings reported here provide some answers, in terms of levels of self-efficacy among SENA teachers in the nation. They also point to the considerable need for further research that seeks to better understand perceptions of, attitudes towards and barriers posed in working towards fulfilment of the nation's inclusive education policies.

References

- Armstrong, D., Armstrong, C., & Spandagou, E. (2011). Inclusion: by choice or by chance? *International Journal of Inclusive Education* 15(1), 29-39.
- Bandura, A. (1993). Perceived self-efficacy in cognitive development and functioning [Electronic Version]. *Educational Psychologist* 28(2), 117-148.
- Fitzgerald, K. W. (2010). Enhancing inclusive educational practices within secondary schools in Brunei Darussalam. *The Journal of International Association of Special Education*. 11(1) 48-55.
- Klassen, R. M. & Chiu, M. M. (2010). Effects on teachers' self-efficacy and job satisfaction: Teacher gender, years of experience, and job stress. *Journal of Educational Psychology*, 102(3), 741-756.
- Koay, T. L. (2007). Inclusive education in Brunei Darussalam. Commonwealth Education Partnerships 2007. <http://www.cedol.org/wp-content/uploads/2012/02/197-202-2007.pdf>
- Labone, E. (2004) Teacher efficacy: Maturing the construct through research in alternative paradigms *Teaching and Teacher Education*, 20, 341-359.
- Milner, R. & Woolfolk Hoy, A. (2003) A case study of an African American Teacher's self-efficacy, stereotype threat, and persistence. *Teaching and Teacher Education* 19, 263-276.
- Podell, D., & Soodak, L. (1993). Teacher efficacy and bias in special education referrals. *Journal of Educational Research*, 86(4), 247-253.
- Sari, H., Celikoz, N., & Secer, Z. (2009). An Analysis of Pre-School Teachers' and Student Teachers' Attitudes to Inclusion and Their Self-Efficacy. *International Journal Of Special Education*, 24(3), 29-44.
- Savolainen, H., Engelbrecht, P., Nell, M. & Malinen, O. (2012). Understanding teachers' attitudes and self-efficacy in inclusive education: implications for pre-service and inservice teacher education. *European Journal of Special Needs Education*, 27(1), 51-68.
- Soodak, L., & Podell, D. (1993). Teacher efficacy and student problem as factors in special education referral. *Journal of Special Education*, 27, 66-81.
- Spector, J. E. (1990). Efficacy for teaching in preservice teachers. Paper presented at the Annual Meeting of the American Educational Research Association, Boston, MA.
- Tate, K. & Mundia, L. 2010. Preparing teachers to meet the challenges of inclusive education in Negara Brunei Darussalam. In *Future directions for inclusive teacher education: An international perspective*, ed. C. Forlin, 61-70. Oxon, UK: Routledge.
- Tschannen-Moran, M & Woolfolk Hoy, A. (2006) The differential antecedents of self-efficacy beliefs of novice and experienced teachers. *Teaching and Teacher Education*. 23 (6), 944-956.
- Tschannen-Moran, M., & Hoy, A. W. (2001). Teacher efficacy: Capturing an elusive construct. *Teaching and Teacher Education*, 17, 783-805.
- Kim Viel-Ruma1, David Houchins1, Kristine Jolivette1, and Gwen Benson (2010). Efficacy Beliefs of Special Educators: The Relationships Among Collective Efficacy, Teacher Self-Efficacy, and Job Satisfaction. *Teacher Education and Special Education* 33(3), 225-233.
- Whittington, M. S., McConnell, E. A., & Knobloch, N. A. (2003). Teacher efficacy of novice teachers in agricultural education at the end of the school year. *Proceedings of the 30th Annual National Agricultural Education Research Conference*, Orlando, FL, 204-215.
- Williams, R. (2009). Gaining a degree: the effect on teacher self-efficacy and emotions. *Professional Development in Education*. 35(4).
- Woolfolk, A. E., & Hoy, W. K. (1990). Prospective teachers' sense of efficacy and beliefs about control. *Journal of Educational Psychology*, 82, 81-91.
- Woolfson, L. M., & Brady, K. (2009). An investigation of factors impacting on mainstream teachers' beliefs about teaching students with learning difficulties. *Educational Psychology*, 29, 221-238.