An investigation into the emotional reactions to inclusion of Ghanaian mainstream teachers

EMMANUEL KOFI GYIMAH, DAVID SUGDEN and SUE PEARSON

Literature is replete with evidence of considerable pressure that many mainstream teachers may experience in their bid to respond to the diverse needs of children with special educational needs and disabilities and to achieve ever better results. In this study, the results of 100 teachers from mainstream primary schools in three of the ten regions of Ghana were examined. The analysis involved five bi-polar emotional reactions; namely: anxious/relaxed; encouraged/discouraged; confident/diffident; satisfied/dissatisfied; self-assured/ worried. The results confirmed that in teaching children with SEN in the mainstream, teachers experienced psychological stress. On the basis of the findings, suggestions for more information about SEN, supply of resources and inter-agency collaboration were made.

***Key words*: inclusion, disability, emotional reactions, mainstream, special educational needs, Ghana, teachers, regular education.**

Introduction

In spite of UNESCO's (1994) call for all countries to include children with special educational needs (SEN) and disabilities in regular education programmes and welcome any measure that makes activities fruitful, there is evidence that not all pupils with SEN and disabilities are in the mainstream. The United Kingdom Audit Report (2002), for example, points out that the trend towards inclusion has been gradual and that in England a significant proportion of children with SEN and disabilities continues to be educated in special schools funded by the Local Educational Authorities (LEAs). The Report noted further that the move of children with higher levels of needs into mainstream education has progressed very slowly and that only a gradual reduction in the special school population over the last decade has been witnessed. According to the Report, many teachers found themselves under considerable pressure in their bid to respond to the individual needs of children with SEN and disabilities against the demands of teaching the National Curriculum and achieving ever better results.

A similar tension exists in Ghana (Kuyini and Desai, 2007) in spite of inclusive education not being well developed in that country.

Ghana and the inclusion agenda

Ghana's approach towards inclusion has been one of caution, in spite of being one of the first countries to ratify the United Nations Convention on the Rights of the Child (Okyere, 2003). Literature identifies a number of interlocking factors that are responsible, including cultural and socio-political. There is, for instance, a recognition of negative societal attitudes (Okyere, 2003), the government's lack of commitment (Avoke, 2001), inadequate resources, large class sizes and teachers' inadequate knowledge of inclusive education (Kuyini, 1998). But the over-riding factor is generally considered to be the stress involved. Chen and Miller (1997) and Wisniewski and Gargiulo (1997) reported that teachers are experiencing psychological and physiological symptoms of stress in their workplace. Trendall (1989) reports that gender differences, length of teaching career and level of qualification influenced the amount of stress that teachers experienced. Trendall further reports that teachers in special schools reported being less stressed than their counterparts in the mainstream.

As implementers of policies emanating from educational systems, teachers' lack of interest in or support for any educational policy has serious repercussions, especially for those for whom it is intended. For example, Mushoriwa (2001) was of the view that educational programmes are likely to fail if teachers do not support them. Also, Ellins and Porter (2005) argued that if children with SEN and disabilities are to succeed in the mainstream education system, then their needs must be met within the classroom and teachers who are expected to meet them must be willing to provide

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for them. If teachers are not willing to meet their needs due to the stressful nature of the task, the child could be placed in the classroom but that is no guarantee of participation or achievement. If a situation such as this arises, teachers in regular classrooms may be apathetic to the academic needs of children with SEN and may think they belong elsewhere, thereby separating children into neat compartments of 'mine' and 'yours' instead of seeing that the children 'fall into the category of "ours" ' (Wood, 1998, p. 106).

Aim and method

The study examined types of emotional reactions that teachers in Ghana experienced or anticipated they would experience in teaching different ranges of children with SEN and disabilities in mainstream settings. In order to achieve the aim, one research question was posed; namely:

- What types of emotional reaction do mainstream teachers in Ghana experience in teaching children with SEN in inclusive settings?

These were examined alongside type, nature and degree of SEN; teachers' gender; qualification, that is, whether trained (qualified) or untrained (unqualified); length of teaching experience; level of experience; and knowledge of SEN.

Participants

The selection of the sample size was based on the 2003 staff data of the Ghana Education Service (GES, 2003) for three of the ten regions of Ghana. The three regions had a total staff population of 24,077. Cohen, Manion and Morrison (2004) indicated that a sample size of between 377 and 381 would be appropriate for such a population. However, considering the fact that some of the respondents could fail to return the questionnaire, which was the main research instrument, a sample size of 540 was used for convenience, and these were selected from the Northern, Ashanti and Central Regions, three of the ten regions of the country.

In selecting districts and schools to include, consideration was given to the ease of access. Since data were collected during the rainy season, it was difficult to access some districts and schools in the three regions due to roads that were not accessible by car. Hence, the purposive sampling technique was used in selecting administrative districts and schools. The purposive technique is a non-probability technique used when the researcher builds up a sample likely to satisfy certain specific needs (Cohen *et al.*, 2004). However, only teachers who were willing to respond to the questionnaire in the selected schools in the various districts participated in the study.

Considering how geographically widespread the schools were, there was an initial plan to collect data by post since it is recognised as effective in dealing with a large geographic area (Robson, 2004; Cohen *et al.*, 2004). However, when the first author was in Ghana between April and July 2005 to gather data, he found this was not possible due to the poor postal system. The instrument was therefore self-administered.

The questionnaire was an adoption of the scale used by Avramidis, Bayliss and Burden (2000). Avramidis *et al.* (2000) used a continuum to measure different levels of emotional reaction (a type of scale they refer to as semantic differential, originally developed by Osgood, Suci and Tannenbaum, 1957). In the current study, five pairs of emotional reactions were used; namely: anxious/relaxed; encouraged/discouraged; satisfied/dissatisfied; confident/diffident; and self-assured/worried. However, realising that inclusive education was not well developed in Ghana, instead of asking respondents to rate their levels of emotional reactions, as was the case in Avramidis *et al.* (2000), the dichotomous type of response was used. Respondents were asked to select, from each one of the five pairs of emotional reactions, what they experienced in teaching children with SEN and disabilities.

Even though there are no clearly defined SEN policies in Ghana, Avoke (2001) reports that the medical model is used in assessing, categorising and placing children with SEN. Children in Ghana are therefore categorised on the basis of their disability. Therefore, ten categories of SEN which it was thought most teachers in the country would be familiar with were selected. The categories were: mild to moderate intellectual difficulties; severe to profound intellectual difficulties; emotional and behavioural difficulties; physical disorders; health disorders; deafness; blindness; low vision; and speech and language difficulties.

Results

Only 20% of the respondents filled in the data gathering instrument correctly. The findings therefore should be interpreted cautiously in view of the sample size. It is not known why the return rate was so low but in attempting to identify why there was a low return rate, two main hypotheses have been proposed:

1. The respondents might not have understood the instruction due to the layout of the section. A better method would have been to present the pairs of emotional reactions vertically instead of horizontally with some boxes to be ticked; and
2. The respondents might have got confused in differentiating the meaning of the five pairs of emotional reactions. It seems that it would have been better to either explain the pairs of emotional reactions or, better still, have three instead of five pairs of emotional reactions to be selected.

In the analysis, frequencies and percentages were used to identify respondents' emotional reactions. For the purposes

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Table 1. Summary of scores of teachers' emotional reaction in teaching children with SEN (N = 100)

SEN CATEGORIES	*Relaxed*	*Anxious*	*Encouraged*	*Discouraged*	*Satisfied*	*Dissatisfied*	*Confident*	*Diffident*	*Self-assured*	*Worried*
Mild to moderate intellectual difficulties	51	49	76	24	65	35	72	28	72	28
Emotional and behavioural difficulties	40	60	68	32	64	36	67	33	59	41
Physical disorders	55	45	79	21	69	31	78	22	75	25
Health disorders	50	50	63	37	59	41	63	37	53	47
Hard-of-hearing	50	50	56	44	43	57	46	54	46	54
Low vision	46	54	69	31	62	38	68	32	65	35
Severe to profound intellectual difficulties	50	50	66	34	55	45	61	39	58	42
Speech and language difficulties	36	64	27	73	30	70	33	67	28	72
Deafness	39	61	19	81	16	84	20	80	14	86
Blindness	38	62	23	77	16	84	22	78	17	83
Total	455	545	546	454	479	521	530	470	487	513

of analysis and to boost clarity, emotional reactions were classed as favourable (i.e., positive) or unfavourable (i.e., negative).

Type of SEN and emotional reactions

In examining the results in relation to the type of SEN, there was a divide between six of the SEN categories and four others (see Table 1). While there were several positives in six, there was not a single positive in three. Out of the 30 paired emotional reactions in the six SEN categories, teachers were positive in 26 of them, but negative in four. This means that teachers were emotionally favourable to teaching the majority of children with SEN.

The summary in Table 2 gives information on the six SEN categories with many positives and a few negatives. The hard-of-hearing category seemed to belong with the three unfavourable categories; namely severe to profound intellectual difficulties, deafness and blindness. In the hard-of-hearing category, there was one neutral, three negatives and only one positive out of the five paired emotional reactions.

Further, the results (see summary in Table 3) showed that respondents reported both favourable and unfavourable emotional reactions, but there were more unfavourable than favourable ones.

Nature and degree of SEN and emotional reactions

A further examination of the results confirmed that teachers' emotional reactions were affected by the nature and degree of SEN. By deliberately excluding data on the deaf, the blind and those with severe to profound intellectual difficulties, teachers reported they were only anxious (see summary in Table 4). These categories were excluded because traditionally in Ghana, pupils with these needs attend special schools and form a distinctive population with whom the respondents may have had no contact.

Gender difference

The summary of the results in Figure 1 shows that there was no difference in emotional reaction between male and female teachers in teaching children with SEN. Both were encouraged and confident, but anxious, dissatisfied and worried in teaching children with SEN.

However, the results changed when the severe to profound intellectual difficulties, deafness and blindness SEN categories were excluded from analysis (see summary in Figure 2). The female teachers selected the positive option in all five pairs of emotional reactions, but the male teachers selected the positive option in four of them. Again, in all the positive pairs of emotional reactions, the scores of the

Table 2. Favourable or unfavourable emotional reactions of teachers in teaching children with SEN in the mainstream (N = 100)

Favourable or positives	*Unfavourable or negatives*
Mild to moderate intellectual difficulties	Hard-of-hearing
Emotional and behavioural difficulties	Severe to profound intellectual difficulties
Physical disorders	Deafness
Health disorders	Blindness
Low vision	
Speech and language disorders	

Table 3. Summary of type of teachers' emotional reactions in teaching ten categories of children with SEN (N = 100)

Favourable or positives	*Unfavourable or negatives*
Encouraged	Anxious,
Confident	Dissatisfied
	Worried

Table 4. Summary of type of teachers' emotional reactions in teaching seven categories of children with SEN on the basis of the nature and degree of SEN (N = 100)

Favourable or positives	*Unfavourable or negatives*
Encouraged	Anxious
Satisfied	
Confident	
Self-assured	

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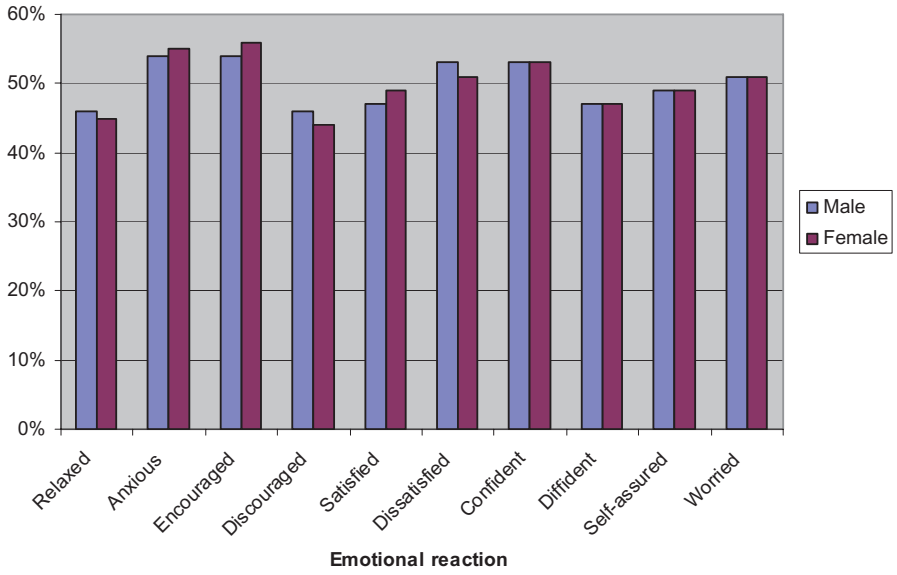

Figure 1. Teachers' gender as a factor in determining their emotional reaction in teaching ten categories of children with SEN

female teachers were higher than those of their male counterparts.

Qualification

The Ghanaian education system relies on both qualified (referred to as trained) and unqualified (untrained) teachers. The former have been trained for between three and four years at a post-secondary, diploma or degree level. As the summary of the results in Figure 3 indicate, the untrained (unqualified) were generally more positive emotionally than the trained (qualified). While the untrained reported positively on four of the pairs of emotional reactions, the trained did so for only two of them. Even in the two where the trained responded positively, the scores of the untrained were higher than those of the trained. Thus, the untrained were more encouraged, satisfied, confident and self-assured than the trained in teaching children with SEN.

There was a change in the results when the severe to profound intellectual difficulties, deafness and blindness SEN categories were excluded from analysis (see summary in Figure 4). The trained reported positively on four of the pairs of emotional reactions, instead of the previous two, making it appear that they were not emotionally well disposed to children with severe to profound intellectual difficulties, deafness and blindness. Though the untrained remained positive on four pairs, their scores were higher than those of their trained counterparts.

Length of teaching experience

There was an indication in the results that a teacher's length of teaching experience had no influence on his or her emotional reactions in teaching children with SEN (see summary in Table 5). Only teachers with between one and three years' teaching experience reported that they were relaxed, encouraged, confident and self-assured. Teachers

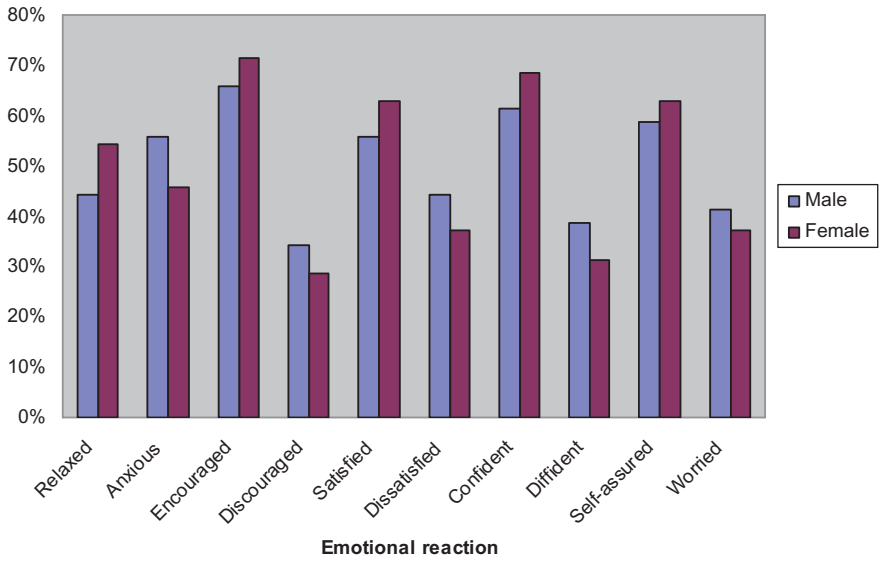

Figure 2. Teachers' gender as a factor in determining their emotional reaction in teaching seven categories of children with SEN

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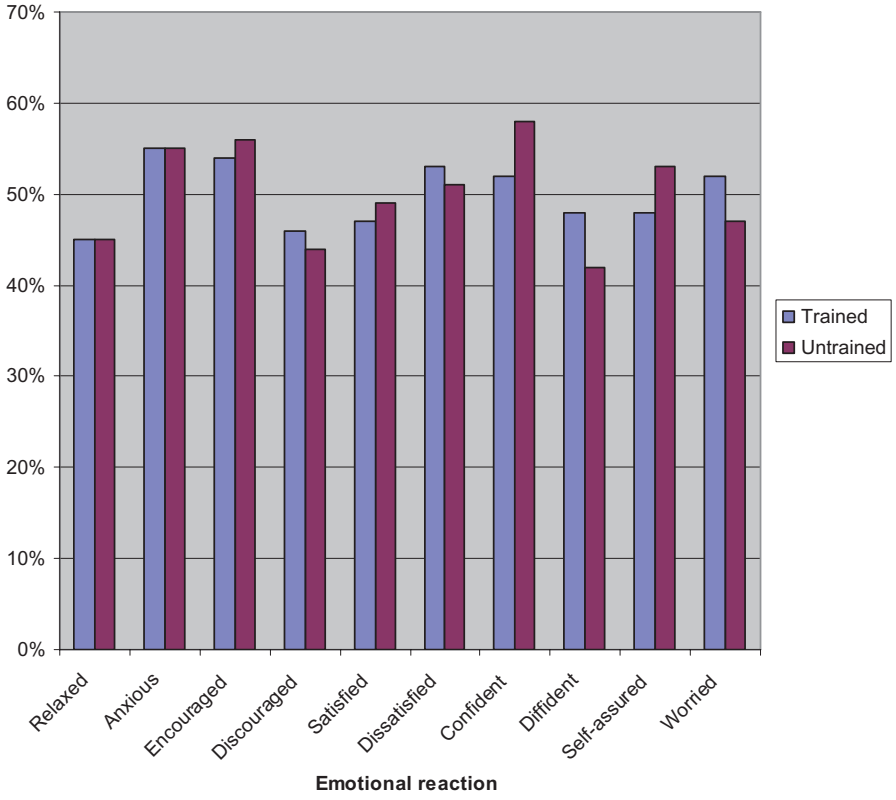

Figure 3. Teachers' qualification as a factor in determining their emotional reaction in teaching ten categories of children with SEN

who had taught for seven years or more reported that they were emotionally anxious, dissatisfied and worried in teaching children with SEN.

Level of teaching experience

The results in Table 6 show that teachers who had taught children with SEN were encouraged, satisfied, confident and self-assured, but those who had not taught them were only encouraged. There was no change in the results when data for the severe to profound intellectual difficulties, deafness and blindness SEN categories were excluded from analysis; the results were the same, with those who had taught children with SEN reporting more positively.

Knowledge of SEN

There was no difference in the emotional reactions of those who reported that they had or did not have knowledge in teaching children with SEN (see summary in Table 7). Both groups were encouraged and confident but anxious, dissatisfied, and worried in teaching children with SEN.

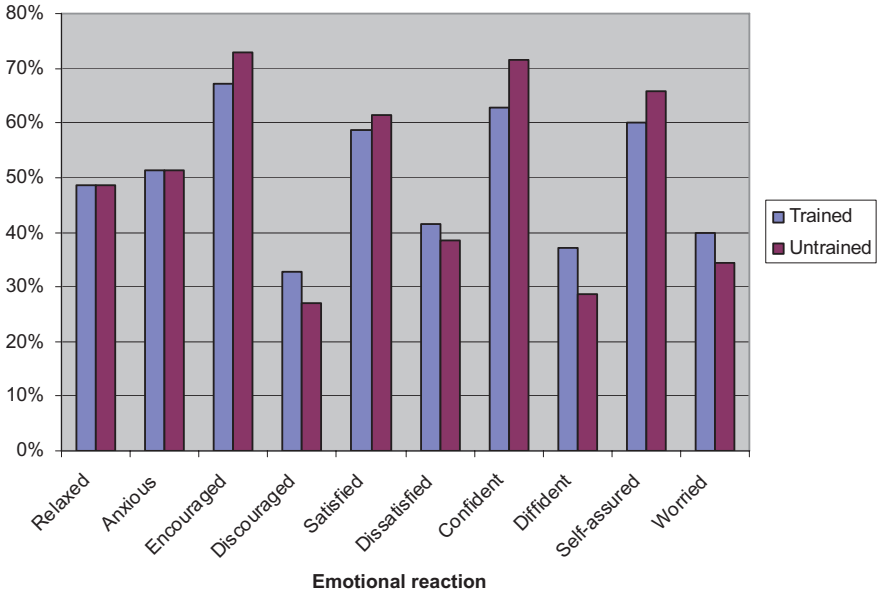

Figure 4. Teachers' qualification as a factor in determining their emotional reaction in teaching seven categories of children with SEN

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Table 5. Showing type of emotional reactions teachers experience in teaching ten categories of children with SEN on the basis of length of teaching experience (N = 100)

Length of teaching experience	*Favourable emotional reaction*	*Neutral (that is, neither favourable nor unfavourable)*	*Unfavourable emotional reaction*
Less than 1 year			Anxious Discouraged Dissatisfied Diffident Worried
1–3 years	Relaxed Encouraged Confident Self-assured		Dissatisfied
4–6 years	Encouraged Satisfied	Neither relaxed nor anxious Neither confident nor diffident Neither self-assured nor worried	
7–9 years	Encouraged Confident		Anxious Dissatisfied Worried
10 years or more	Encouraged Confident		Anxious Dissatisfied Worried

Discussion

Type of emotional reaction

There was evidence in the results that teachers experienced some emotional reactions in teaching children with SEN and disabilities, but this depended on the type, nature and degree of the SEN and disability. In this study, children with deafness, blindness and severe to profound intellectual difficulties were those whom teachers had their greatest concerns over and were emotionally unfavourable towards. Does this mean that inclusion should only target children with mild to moderate SEN, as some have argued (Madden and Slavin, 1983; Peetsma, Vergeer, Roeleveld and Karsten, 2001)? Madden and Slavin (1983) indicated that children with greater needs might not be suitable for inclusion. In support of this position, Peetsma *et al.* (2001) argued that inclusion policy ought to target children with 'mild academic handicaps' or 'moderate special needs' (p. 126).

There is danger in doing this, for it will lead to separation and/or marginalisation of some SEN categories. The inclusion agenda is not about separation of children. It is about the presence and participation of all children and how they are helped to achieve. It is concerned with 'identification and removal of barriers to achievement' (Ainscow, 2005). This may mean that teachers have to be provided with the support they need to reduce or remove their anxieties. The support can be in bureaucratic form, such as access to appropriate aids (Mitchell, 2005) and use of ample teaching and learning materials in schools and classrooms, but most importantly, having systems that address teachers' emotional needs. For instance, there may be a case for the involvement of other agencies such as social services, speech and language therapists, health and medical personnel and special educationists in planning for and meeting the needs of children with SEN and disabilities.

Table 6. Type of emotional reaction of teachers on the basis of level of experience with children with SEN (N = 100)

Taught children with SEN?	*Favourable emotional reaction*	*Unfavourable emotional reaction*
Yes	Encouraged Satisfied Confident Self-assured	Anxious
No	Encouraged	Anxious Dissatisfied Diffident Worried

Gender and qualification

Trendall (1989) found that more female teachers with lower qualifications underwent more extreme levels of stress. But in the current study, there was no difference in emotional reactions between male and female teachers. However, there was an indication that the untrained, rather than the trained, showed positive emotional reactions in teaching children with SEN and disabilities. This finding raises a crucial question concerning why the untrained rather than the trained were positive emotionally. In Ghana, teachers graduate from their institutions with little or no knowledge of SEN

Table 7. Type of teachers' emotional reactions on the basis of teachers' knowledge of how to teach children with SEN (N = 100)

Knowledge of how to teach children with SEN?	*Favourable emotional reaction*	*Unfavourable emotional reaction*
Yes	Encouraged Confident	Anxious Dissatisfied Worried
No	Encouraged Confident	Anxious Dissatisfied Worried

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(Mawutor and Hayford, 2000). The trained therefore have no advantage over the untrained.

Gross (2002) finds that a child's achievement or lack of it is dependent on the effectiveness of the school, and that if efforts are made to improve teaching techniques, achievement levels increase. The implication of this is that training is important. Without knowledge and expertise to meet the needs of children with SEN and disabilities (Gersten and Woodward, 1990), placing a child with special educational needs in the general education environment will not automatically guarantee their success (McLeskey, Henry and Axelrod, 1999; Vaidya and Zaslavsky, 2000; O'Donoghue and Chalmers, 2000; Wilson, 2003). The example of the UK government strategy paper on Removing Barriers to Achievement (DfES, 2004) is helpful in this argument. This paper highlights the importance of equipping teachers with the skills and confidence to enable them to work creatively and optimise the potentialities of children with SEN and disabilities.

Length and level of experience

In the results, a teacher's length of teaching experience had no impact on his or her emotional reaction in teaching children with SEN. However, there was an indication that teachers who had taught children with SEN were encouraged, satisfied, confident and self-assured, while those who had not taught them were only encouraged. Soodak, Podell and Lehman (1996) reported that teachers with low teaching efficacy and experience were less receptive to teaching children with SEN and disabilities in the mainstream. Even though Stephens and Brauns (1980), Forlin (1995) and Gilada, Reiter, and Leyser (2003) do not affirm the findings, it highlights the importance of supporting teachers in meeting the needs of all children including those with SEN and disabilities. The support should not only come from the government, but also other stakeholders, including parents, who hold key information about their children (DfES, 2001). But in Ghana, Okyere (2003) reports that 'parental involvement in the decision-making concerning their children is totally absent' (p. 26) and government funding is limited. Sugden and Chambers (2005) and Beveridge (2005) encourage the involvement of the family, since part of the child's development is inextricably linked to his or her total lifestyle, particularly in the context of the family.

Teachers' knowledge

There was no difference in the emotional reactions of teachers on the basis of whether they reported that they had or did not have knowledge in teaching children with SEN and disabilities. They both reported two positive (that is, 'Encouraged' and 'Confident') and three negative (that is, 'Anxious', 'Dissatisfied' and 'Worried') emotional reactions. Norwich and Lewis (2001) conclude that there is a form of generic teaching which assumes that 'what works with most pupils also works for all pupils' (p. 324). If this argument is correct, then there may be no excuses for teachers being anxious, dissatisfied and worried in teaching children with SEN and disabilities.

The advice of Stainback, Stainback, Stephanich and Alper (1996) is helpful. They caution teachers not to assume that the general class curriculum is non-functional for some students. All students can benefit from it if the right approach is adopted. While it is important to recognise individual difference in the diverse population in the class, Stainbach *et al.* (1996) maintain that teachers must have the same goals for all the children in order not to isolate and segregate any child. This means that learning objectives have to be flexible for children, to enable them to work at different activities on specific curricular learning objectives. They also suggest the involvement of peers in the selection and organisation of learning experiences. Since some individual children may require extra help to cope with their environment, provision should be made for the inclusion of functional skills. These will help them to learn practical living, vocational and social skills, and more importantly, to achieve independence.

Conclusion

The study aimed to examine the emotional reactions that teachers in Ghana experienced in teaching children with SEN and disabilities in the mainstream. Five hundred teachers returned their questionnaires for analysis. However, only 100 (20%) were considered relevant for analysis since the other 400 respondents did not correctly complete all the items in spite of clear instruction given. While this may be regarded as a methodological limitation, the study provided some information about those children who are very likely to be excluded from the mainstream. Further, it has shown the kinds of stressors teachers were likely to experience. It was clear that in teaching children with SEN and disabilities, teachers experienced stress. Irrespective of the number of years teachers have taught and their experience of SEN, teachers experienced anxiety, dissatisfaction and worry.

The study brought to the fore the importance of supporting teachers in their schools and classrooms. It is a duty which calls for the involvement of all stakeholders, including parents. It affirms the United Kingdom Government Strategy on SEN to remove all barriers to learning (DfES, 2004). Most importantly, it encourages the use of a collaborative or partnership approach between local authorities, schools, health and social services, and voluntary organisations (DfES, 2004) since 'no single professional' (Kirk *et al.*, 2000, p.371) can deal with a child's SEN and disabilities. Through this approach to SEN, teachers would be enabled to teach children with SEN and disabilities with little or no emotional stress.

The study has importance in pushing the practice of inclusive education forward in Ghana since the government, as

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well as the Ministry of Education, Science and Sports, now has information on where some of the barriers to inclusion are in accommodating children with SEN in the mainstream. If teachers can be effective in accommodating a wide range of children and be less stressed, the government should provide adequate funding and resources especially to meet the needs of children with sensory disabilities and severe to profound intellectual difficulties. Ample teaching and learning materials should be available in schools and classrooms throughout the country to create the capacity to respond to diversity. The need for inter-agency collaboration must equally be emphasised. Agencies, such as health, social service, psychology and counselling, could contribute a lot to easing the classroom teacher's burden in planning for and meeting the needs of children with SEN and disabilities. Parental involvement should not be ignored since, as key shareholders, they can make significant contributions to easing teachers' stress in the classroom.

References

AINSCOW, M. (2005) Developing inclusive education systems: what are the levers for change? *Journal of Educational Change*, 6, 2, 109–124.

AUDIT COMMISSION (2002) *Statutory Assessments and Statements of SEN: in Need of Review?* London: Audit Commission.

AVOKE, M. (2001) Some historical perspective in the development of special education in Ghana. *European Journal of Special Needs Education*, 16, 1, 29–40.

AVRAMIDIS, E., BAYLISS, P. D. and BURDEN, R. (2000) Student teachers' attitude towards the inclusion of children with special educational needs in the ordinary school. *Teaching and Teacher Education*, 16, 3, 277–293.

BEVERIDGE, S. (2005) *Children, Families and Schools: Developing Partnerships for Inclusive Education*. London: RoutledgeFalmer.

CHEN, M. R. and MILLER, G. (1997) *Teacher Stress: a Review of the International Literature*. ERIC Document, 410187.

COHEN, L., MANION, L. and MORRISON, K. (2004) *Research Methods in Education* (fifth edition) London: Routledge.

DEPARTMENT FOR EDUCATION AND SKILLS (2001) *Special Educational Needs Code of Practice*. London: DfES.

DEPARTMENT FOR EDUCATION AND SKILLS (2004) *Removing Barriers to Achievement: the Government's Strategy for SEN*. London: DfES.

ELLINS, J. and PORTER, J. (2005) Departmental differences in attitudes to special educational needs in the secondary school. *British Journal of Special Education*, 32, 4, 188–195.

FORLIN, C. (1995) Educators' beliefs about inclusive practices in Western Australia. *British Journal of Special Education*, 22, 4, 179–185.

GERSTEN, R. and WOODWARD, J. (1990) Rethinking the regular education initiative: focus on the classroom teacher. *Remedial and Special Education*, 11, 3, 7–16.

GILADA, A., REITER, S. and LEYSER, Y. (2003) Principals' views and practices regarding inclusion: the case of Israeli elementary school principals. *European Journal of Special Needs Education*, 18, 3, 355–369.

GHANA EDUCATION SERVICE (2003) *Enrolment and Staffing Data*. Accra: unpublished.

GROSS, J. (2002) *Special Educational Needs in the Primary School: A Practical Guide* (third edition). Buckingham: Open University Press.

KIRK, S. A., GALLAGHER, J. J. and ANASTASIOW, N. J. (2000) *Educating Exceptional Children* (ninth edition). Boston: Houghton Mifflin Company.

KUYINI, A. A. B. (1998) *The Ghana Community-Based Rehabilitation Programme: An Outsider Assessment of Programme Implementation and Functioning in Northern Ghana*. Unpublished MPhil thesis. Ghana: University of Cape Coast.

KUYINI, A. B. and DESAI, I. (2007) Principals' and teachers' attitudes and knowledge of inclusive education as predictors of effective teaching practices in Ghana. *Journal of Research in Special Educational Needs*, 7, 2, 104–113.

MADDEN, N. A. and SLAVIN, R. E. (1983) Mainstreaming students with mild handicaps: academic and social outcomes. *Review of Educational Research*, 53, 519–569.

MAWUTOR, A. and HAYFORD, S. (ISEC, 2000) *Promoting Inclusive Education in Basic Schools in Winneba Circuit: the Role of School Attachment Programme*. University of Manchester. 24–28 July 2000. [Online at http://www.isec2000.org.uk/abstracts/papers_m/mawutor_1.htm]. Accessed 03/05/04.

MCLESKEY, J., HENRY, H. and AXELROD, M. I. (1999) Inclusion of students with learning disabilities: an examination of data from reports to Congress. *Exceptional Children*, 66, 55–66.

MITCHELL, D. (2005) Introduction; sixteen propositions on the contexts of inclusive education. In D. Mitchell (ed.), *Contextualizing Inclusive Education Evaluating Old and New International Perspectives*, pp. 230–252. London: Routledge.

MUSHORIWA, T. (2001) A study of the attitudes of primary school teachers in Harare towards the inclusion of blind children in regular classes. *British Journal of Education*, 28, 3, 142–147.

NORWICH, B. and LEWIS, A. (2001) Mapping pedagogy for special educational needs. *British Educational Research Journal*, 27, 3, 313–329.

O'DONOGHUE, T. A. and CHALMERS, R. (2000) How teachers manage their work in inclusive classrooms. *Teaching and Teacher Education*, 16, 889–904.

OKYERE, B. A. (2003) Trends in special education. In B. A. Okyere and J. S. Adams (eds.), *Introduction to Special Education: an African Perspective*, pp. 43–74. Accra: Adwinsa Publications.

OKYERE, B. A. (2003) Issues in educating exceptional children in Africa. In B. A. Okyere and J. S. Adams (eds.), *Introduction to Special Education: an African Perspective*, pp. 29–41. Accra: Adwinsa Publications.

OSGOOD, C. E., SUCI, G. J. and TANNENBAUM, P. H. (1957) *The Measurement of Meaning*. Urbana, IL: University of Illinois Press.

PEETSMA, T., VERGEER, M., ROELEVELD, J. and KARSTEN, S. (2001) Inclusion in education: comparing pupils' development in special and regular education. *Educational Review*, 53, 2, 125–135.

ROBSON, C. (2004) *Real World Research* (second edition). Padstow: Blackwell.

SOODAK, L. C., PODELL, D. M. and LEHMAN, L. R. (1996) Teacher efficacy: toward the understanding of a multi-faceted construct. *Teaching and Teacher Education*, 12, 4, 401–411.

STAINBACK, W., STAINBACK, S., STEPHANICH, G. and ALPER, S. (1996) Learning in inclusive classrooms: what about the curriculum? In W. Stainback and S. Stainback (eds.), *Inclusion a Guide for Educators*, pp. 209–219. Baltimore: Paul H. Brookes Publishing Company.

STEPHENS, T. and BRAUN, B. L. (1980) Measures of regular classroom teachers' attitudes toward handicapped children . *Exceptional Children*, 46, 292–294.

SUGDEN, D. A. and CHAMBERS, M. E. (2005) Models of intervention: towards an eco-developmental approach. In D. A. Sugden and M. E. Chambers (eds.), *Children with Developmental Coordination Disorder*, pp. 189–211. London: Whurr Publishers.

TRENDALL, C. (1989) Stress in teaching and teacher effectiveness: a case study of teachers across mainstream and special education. *Educational Research*, 31, 1, 52–58.

UNESCO (1994) *The Salamanca Statement and Framework for Action on Special Needs Education*. Paris: Unesco.

VAIDYA, S. R. and ZASLAVSKY, H. N. (2000) Teacher education reform effort for inclusion classrooms: knowledge versus pedagogy. *Chula Vista*, 121, 145–152.

WILSON, A. R. (2003) *Special Educational Needs in the Early Years* (second edition). London: RoutledgeFalmer.

WISNIEWSKI, L. and GARGIULO, R. M. (1997) Occupational stress and burnout among special educators: a review of the international literature. *Journal of Special Education*, 31, 3, 325–346.

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WOOD, J. W. (1998) *Adapting Instruction to Accommodate Students in Inclusive Settings* (third edition). New Jersey: Merril.

Correspondence
Emmanuel Kofi Gyimah
University of Leeds
School of Education
University of Leeds
Leeds LS2 9JT
Email: gyimahemma@yahoo.com

David Sugden
School of Education
University of Leeds
Leeds LS2 9JT
Email: d.a.sugden@education.leeds.ac.uk

Sue Pearson
School of Education
University of Leeds
Leeds LS2 9JT
Email: s.e.pearson@education.leeds.ac.uk

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