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## EDITORIAL COMMENT

JEM Volume 3 welcomes you to interesting and challenging issues that are very crucial and pertinent to the educational enterprise. A few technical hitches contributed to the delay in publishing this issue. These are developmental tasks and will be overcome. Now that it is out we are grateful to all who in diverse ways contributed to this success story.

Volume 3 opens with Owolabi (editor on furlough) and Edzii in a study on Teacher support systems in Ghana with particular reference to the Cape Coast municipality. Whilst it is gladdening to find that there is adequate supply of teaching/learning materials in Cape Coast schools, it is saddening to realize that other aspects that enhance teacher management and support are woefully inadequate and in some cases non-existent. Examples are in-service training, external supervision and financial support among others. The role of teachers as catalysts in the educational process demands that they need the necessary support systems to make them effective.

Dzinyela and Agezo consider how work-home conflict influences the effectiveness of female teachers in basic schools in Ghana, again with emphasis on Cape Coast municipality, the cradle of Ghanaian education. Undoubtedly, the combination of housekeeping and paid employment roles results in stress among female teachers, but, in so far as they contribute economically to the upkeep of the home married female teachers need to balance the two roles. There is the ultimate necessity for a cultural brain cleansing that informs married men to learn to lend a helping hand to their spouses in the performance of household chores.

Akinseinde reiterates the significance of universal basic education (UBE) and considers its effective implementation. Nine strategies that enhance effective implementation have been raised, and government is adjured to provide the requisite logistics to ensure quality basic education.

Fletcher's comprehensive work on appraisal of mathematics teachers in Ghana is a challenging module for educational managers. It appears that majority of the officers who appraise mathematics teachers in Ghanaian Secondary Schools have little or no training in secondary school mathematics teaching or appraisal. To improve the professional

competence of the Ghanaian mathematics teacher, Fletcher argues that the present system of teacher appraisal needs overhauling. The findings and recommendations could form the substratum for a sound mathematical achievement in the Ghanaian educational system.

Education in developing countries seems to be atoning for the apparent neglect of the girl child. Even today home environmental influences have been found to impact negatively on girls' academic performance in secondary schools. Agu and Hamad consider these factors as not peculiar to Zanzibar but are universal among African societies and even more pronounced in the rural areas. Girls who work more than their brothers in the home are more likely prone to less participation in schooling. Parents in Zanzibar would prefer their sons in higher education than their daughters. The home which holds a great sway on the education of the child should understand the significance of girl education.

Stress is real in work experiences, and Arikewuyo finds it more prevalent among secondary school teachers who are often neglected by society. Causes and strategies for coping with stress should interest managers of educational institutions who are often confronted with such situations. Agencies of education-government, society, etc: are called upon to respect the teaching profession which becomes the fulcrum of human resource development and national growth.

In *Secondary School in Transition in Nigeria*, Alani traces the evolution of secondary education, reviews the reforms introduced into the system to improve quality, and amplifies that the provision of physical and material resources, education financing and staff development among other factors, are inevitable in the provision of quality secondary education.

Assessment in educational institutions is a thorny issue. Today, all teachers in Ghana are involved in continuous assessment of their pupils. Amedahe explains the difficulty in combining teacher assessment with external examination scores and the comparability of these two strands in terms of quality - reliability and validity. Moderating teacher assessment scores becomes a foregone conclusion, therefore techniques for moderating teacher assessment to ensure quality have been reviewed. Educational administrators cannot afford to relent in their effort to making classroom assessment scientific.

The pendulum swings dramatically from the classroom with Agyenim Boateng's treatise on appraisal system of senior and junior staff members of higher educational institutions, particularly the University of Cape Coast. If institutions of high learning will continue to attract more qualified clientele and maintain public respect then staff performance appraisal cannot be down played. Although these staff are in administrative positions, yet they play a vital role in the academic achievement of the university. Various views about purposes and uses of, staff performance appraisal are reviewed, and the processes of applying management by objectives (MBO) strategies are also discussed.

The completion rate of Master's degree programmes in the University of Cape Coast tends to be fraught with problems. A greater percentage of students are unable to present their theses for the award of the degrees on schedule. It seems plausibly easier for master's students to complete their course work and structured examinations, but the theses. Baafi Frimpong examines the causes of the "All-but-thesis" (ABT) phenomenon which is increasingly becoming a disincentive to qualified and aspiring candidates. Should the university as well as the master's students take the recommendations seriously, there is the possibility that the ABT syndrome could be reduced to its barest minimum, if not eliminated.

Okae-Anti brings up the rear with a brief comment on the feasibility of employing MBO in the administration of tertiary institutions. She focuses on the lessons to be drawn from MBO.

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# *Articles*

**TEACHER MANAGEMENT AND  
SUPPORT SYSTEMS IN GHANA :  
THE CASE OF CAPE COAST MUNICIPALITY**

**S. O. Owolabi and A. A. Edzii**

*ABSTRACT*

*The need to give support services to teachers throughout their career is being recognised as the only way to maintaining an effective teaching profession. The study was designed to ascertain the extent to which teacher support services are provided by the Ghana Education Service and how the services influence teacher morale and job performance.*

*Using Cape Coast municipality as a case study all the 340 teachers in the nine secondary schools, their headmasters and directors of education in the municipality formed the accessible population. About 72% of the teachers responded to the questionnaire served on all of them. The headmasters and directors were separately interviewed. Frequencies of responses were aggregated and converted into percentages to know what obtains with respect to GES support services.*

The study revealed that

- i. Ghana Education Service scarcely organises in-service training for school teachers. Subject associations, however, do organise refresher courses, seminars and workshops for their members.*
- ii. Except for the inadequate laboratory equipment, supply of teaching materials in the Cape Coast municipality is sufficient.*
- iii. Internal supervision of the Senior Secondary School teachers in the municipality is negligible. External supervision is scarcely done.*
- iv. Six kinds of financial support exist in principle but most teachers are unaware of any of them. Majority of the respondents considered the highly priced National Best Teacher Award as being inadequate to effectively motivate most teachers.*

- v. *Internal incentive packages, organised by each school and its PTA, are more effective than GES incentive packages.*

*Based on these findings some policy measures are suggested to ensure that adequate teacher management and support services are provided to boost the morale of teachers.*

### **Introduction**

There is a general complaint that academic standards have fallen or are falling in the country (Mensah, 1995). The quality of teaching and learning is observed to be very low (Owolabi, 1999 p. 15). Statistics published by the Ministry of education confirm the allegations made by the concerned public (Opare, 1999, p. 2). On one hand, parents, management and other educational beneficiaries blame poor student learning outcome on teachers. On the other hand teachers blame management and parents for lack of the necessary support systems to facilitate student learning and boost the morale of teachers. But effective education of the child is a business of the whole society. Improving the quality of teaching and learning in schools requires the support of all and

sundry and the input of resources of which teachers are the most crucial. Teachers are required to implement educational policy decisions to the final stage. They need the support of all the agents of education to reach the highest possible levels of achievement.

Despite the continual inflow of new technological devices to facilitate the process of learning, the role that teachers will continue to play is a vital one for which no substitute can exist (Williams, 1979; Farrant, 1988; Chapman and Carrier, 1990; Windham, et al. 1992). The teacher is the pivot of classroom instructional activity (Fullan and Hargreaves, 1996). Antwi (1992) seems to have a similar view when he said that the solution to the problem of quality in Ghanaian secondary education lies in the training and re-training of qualified and dedicated teachers.

No doubt most of the contemporary writers on the subject agree that teachers play a vital role in the achievement of quality education and therefore need adequate training and appropriate management and logistic support to perform very well. The professional development activities that teachers engage in to enhance their knowledge, skills and attitudes to effectively lead children to learn is

what many authors refer to as In-Service Education and Training (INSET). The best way of improving the quality of education in schools is through INSET (Rebore, 1980; Hoyle, 1982; Szilagyi Jr, 1984; Farrant, 1980; Chapman and Carrier, 1990; Glickman, et al. 1995). A baseline survey carried out by the Institute for Educational Planning and Administration, University of Cape Coast, on the state of school management in Ghana revealed that there were internal workshops and seminars organised on teaching related issues in effectively managed schools (Atakpa and Ankomah, 1999).

Even though there is widespread agreement about the urgent need to improve the quality of education by recruiting and retraining more professional teachers, "instruction without appropriate textbooks, equipment and facilities cannot be effective or efficient even in the hands of highly trained teachers" (Chapman and Carrier, 1990, p.112). Teachers respond more positively when adequate supply of instructional resources are available (Hansen, 1979). Teachers become demoralised when teaching materials are non-existent or grossly inadequate and when dusty floors, cracking walls, leaking roofs, poorly maintained desks and

benches and other problems stare at them daily.

Supervision involves provision of support for teachers so that they can become the best they can be. Supervision enables teachers to improve instruction for students (Harris, 1975; Glickman, 1995). Without instructional support and professional supervision it is unlikely that teachers can provide the desired quality of teaching and learning. In effectively managed schools supervision and monitoring of teaching/learning activities is effective, but ineffective in schools where management is poor (Atakpa and Ankomah, 1999). A major characteristic of successful schools is that someone, somewhere is responsible for, and committed to the process, function and tasks of supervision.

Literature suggests that the individual's decision to remain in an organisation is influenced, to a large extent, by rewards and incentive packages. Teachers are not different from workers in other occupations where money and other forms of rewards are effectively used as incentives (Chapman and Carrier, 1990). When incentive packages are effectively provided there is high morale and job satisfaction. Indicators of high morale include low absenteeism,

fewer complaints or grievances, frequent informal contacts, uninduced punctuality and a general high sense of mission. Intrinsic rewards, including such incentives as recognition, advancement and inter-personal relationships on the job, no doubt contribute to effectiveness. What actually motivates people to perform well, Herzberg argues, are related to the nature of the job (job content). These motivating factors or satisfiers include achievement, recognition, responsibility and advancement. A worker's morale is lifted when he has a feeling of self-worth and recognition and when he feels his objectives have been achieved. A teacher for example, feels satisfied and motivated when some responsibility has been put in his hands and he feels he is making progress on the job. But the absence of these motivating factors may lead to employees' dissatisfaction. What lead to dissatisfaction, according to Herzberg and his associates are related to the environment of the job (job context). They call them hygiene factors or dissatisfiers. These include company policy and conditions of service, salaries and fringe benefits. They are extrinsic factors because they do not relate directly to the nature of a person's job. But when such hygiene factors

are not adequate workers feel uneasy and discontented (Herzberg, et al. 1959; Herzberg, 1966; Herzberg, 1968). Extrinsic and ancillary rewards do not motivate teachers significantly (Lorie, 1975; Pastor and Erlandson, 1982). But if all these maintenance needs are taken care of adequately, the employees will stay with the organisation. Beach (1980) therefore concludes that maintenance factors (hygiene factors) serve as a base upon which motivators can be added to improve workers' morale and job performance. This finding underscores the importance of paying attention to both dissatisfiers such as monetary rewards and fringe benefits, and satisfiers such as recognition, advancement and feeling of self-worth.

All the literature reviewed on the subject under study are pointing the same direction - that teachers play a vital role in the achievement of quality education and therefore must be developed through training and continual re-training, supplied with necessary logistics for effective teaching, supervised regularly to provide instructional support, and motivated with both extrinsic and intrinsic rewards to promote an optimum level of morale for improved performance.

### **Purpose of the study**

In recognition of the fact that teachers play a vital role in the achievement of quality education the Ghana Education Service (GES) has policies for the organisation of Inservice Education and Training (INSET) programmes, the supply of instructional materials, the provision of instructional supervision and the award of many fringe benefits to serve as incentives. The problem is, to what extent are these teacher management and support services provided in the GES, and to what extent do they have the desired impact on teacher morale and consequently on the quality of teaching? The study therefore seeks to find out precisely about teacher management and support systems in the GES. This is to ascertain the level of their adequacy in keeping high the level of teacher morale and ensuring teacher retention.

### **Method**

The target population for the study was all the people in charge of teacher management and support system and the recipients of such services (teachers) at the senior secondary school level in Ghana. They include the directors of education, heads of schools and all

teachers in senior secondary schools in the country. The accessible population, however, is all such officers and teachers in the Cape Coast municipality. All teachers in the nine secondary schools in the municipality were purposively selected. They were 340. All headmasters and directors of education including the regional director of education, the deputy regional director, the municipal director and the assistant director in charge of second cycle schools were similarly selected purposively. The 340 teachers were served with questionnaires but only 252 (constituting 72.6%) returned completed questionnaires. Information sought through the questionnaire included the biographic data of respondents. Other items sought information on what the respondents perceived to be the level of management and support services provided by the GES and what the respondents' satisfaction levels were. The educational administrators (Headmasters and Directors) in the municipality were also interviewed to gather data on the types of support services they were offering the teachers, how adequate the services were and what impact they were making on teacher morale and on quality of education provided. The main procedure for analysing



the data was computation of frequencies of responses and conversion of those frequencies into percentages, to know how the respondents perceived the support services offered to them by the GES in their career.

## Results and Discussion

### *In-service Education and Training.*

There was an attempt to find out how often career development programmes were organised for teachers in the municipality. Information sought was on:

- INSET courses attended during the past three years
- The effect of the INSET courses on improving teacher competence
- Degree of satisfaction of teachers with the INSET organised.

Respondents were requested to respond “yes” if they attended any in-service training course in the last three years.

As Table 1 indicates less than half of the respondents had ever attended any in-service training course in three years. Information received from the headmasters and directors of education revealed that the GES does not organise INSET on regular basis. The “yes” responses were related to the periodic refresher courses and conferences organised by subject associations. Those courses and conferences often received minimal support from the GES. Heads of schools in the municipality unanimously stated that it was only at the beginning of the school reform programme that an intensive national orientation course to prepare teachers for the change was organised. This finding gives the impression that the GES does

*Table 1.*  
*Attendance of In-service Training Courses*

Attendance of INSET	Number Responding	Percentage Responding
Yes	110	43.7
No	142	56.3
Total	252	100.0

not accord regular in-service training its due importance in the teaching service. It could also be that the GES lacks the requisite manpower and logistics to carry out this teacher management support service.

To know the contribution of INSET to increased knowledge and job performance, the heads of schools were asked to appraise the INSET so far organised. There was a general consensus that they were organised to upgrade the skills of teachers or help them review or appraise what they know. The respondents were also asked to indicate their level of satisfaction with the INSET. Only 17.5% of the respondents were satisfied. The rest registered their dissatisfaction about the frequency at which INSET was organised for secondary school teachers.

### *Supply of Teaching Materials*

Adequate supply of books and instructional materials will, no doubt, enhance the competence of teachers on the job. The adequacy of instructional materials in senior secondary schools in Cape Coast municipality was examined. Respondents were asked to indicate whether or not the supply of those teaching materials were adequate.

As summed up in table 2, slightly more than half of the respondents considered required instructional materials to be inadequate. But all the headmasters confessed in an interview with each of them that they had quite sufficient quantities of books and stationery. The problem area was in the inadequacy of laboratory materials and facilities for Home Economics. This is so because school enrolments had far exceeded the

*Table 2*  
*Adequacy of Teaching Materials*

Teaching Materials	Number Responding	Percentage Responding
Adequate	108	42.9
Inadequate	144	57.1
Total	252	100.0

numbers those laboratories were originally built for. In general the supply of non-laboratory instructional materials in Cape Coast municipality appears to be better than it is in any other district in Ghana. Except for the insufficient laboratory facilities, all other required instructional aids were in place. Incidentally, Cape Coast schools appear to be leading in academic performance. Thus the supply of instructional materials would appear to be a correlate of academic performance in Ghana.

Almost all the respondents indicated that whenever resources, such as textbooks, stationery and laboratory materials were adequate their performance on the job was far enhanced. The view of the

performance in two ways. Firstly, textbooks do much to define the domain of instruction. Secondly, when instructional materials lead to a high level of students achievement teachers receive much of the credit. The heads of schools in the municipality also agreed totally with their teachers' view.

### *Supervision*

Monitoring to improve the quality of teaching is the explicit responsibility of the supervision team of the GES and the heads of schools. Questions were asked to find out from the respondents the intensity of supervision that the schools received. The response was appalling.

*Table 3*  
*Frequency of External Supervision*

Visit	Number Responding	Percentage Responding
Never	124	49.2
Occasionally	117	46.4
Termly	5	2.0
Monthly	6	2.4
Total	252	100.0

teachers is consistent with Chapman's (1994) assertion that the adequacy and timely provision of textbooks can influence teacher

About half of the respondents said that supervision by the GES team was never done. Another 46% said that it was done only occasionally.

In other words about 95% of the respondents perceived such visits as virtually non-existent. The finding was buttressed by the interview responses from the heads of schools. External supervision was scarcely done by officials of the GES. The occasional visits some respondents were thinking of were mere routine inspections of the schools and their records. They were meant to examine teachers' work to enable officials write their recommendations for teachers' promotion. Supervision, in this sense, is seen by the GES team as a "directing and judging activity" instead of being an "instructional behaviour ...by the organisation for the purpose of interacting with the teaching behaviour system in such a way as to maintain, change and improve ... learning opportunities for students" (Wiles and Lovell, 1975, p.6). Whatever concept of supervision the GES team holds, the exercise was sporadic and irregular. This is contrary to the viewpoint of Enus (1963) that it is important to ensure adequate supervision if school objectives are to be achieved. Only 25% of the respondents indicated some degree of frequency of internal supervision.

The administrators were interviewed on the cause of infrequency of supervision. They attributed the

minimal level of supervision offered by their outfit to lack of logistics and problems of inadequate manpower. Supervision teams of GES at the local level are often made up of untrained personnel who may have less experience than the teachers in the field. The heads of schools also confirmed that inter-personal problems between teachers and supervisors often arise when teachers who have been rejected by the schools for instructional inefficiency are absorbed by the regional and municipal directorates of education and turned back on schools as supervisors of instruction.

When asked to assess the benefits they derived from the few internal supervisions offered most of the teachers said that those supervisions had great positive influences on their performance on the job.

#### *Financial Support and Incentive Package.*

GES offers six types of financial support for teachers. They are loans, salary advance, car maintainace allowance, study leave with pay, grants and hospital bill refund. It is strange that 61.0% of the respondents were not aware of the existence of any of those financial supports offered by the

service. Different numbers of the rest were aware of only one form of financial support. Less than 12% were satisfied with the financial support services. But financial rewards are dissatisfiers (hygiene factors) which are the primary causes of unhappiness on the job. When provided they may not necessarily act as motivators. They only lead employees to experience no job dissatisfaction. According to Beach (1980) provision of financial support serves as a base upon which motivators can be added to improve worker morale and job performance.

In the interview sessions all heads were unanimous in their view that the GES does not provide any financial support worth writing home about. They claimed that normal allowances were mere "peanuts". Heads receive ₦25,000 and assistant

heads receive ₦12,000 per month as responsibility allowance. Up to a maximum of ₦25,000 can be given to a teacher in a year as hospital bill refund. This is less than \$4.00! In answer to the question as to why the fund was so inadequate, the municipal director opined that it was not expected that more than one-sixth of the teachers employed in an institution would fall sick in a year.

The secondary schools provide some form of health care facilities, the most popular being the school nurse. Some schools have school clinics for teachers and a few have just first aid services.

The GES also has in place certain incentives for motivating teachers. These include the national best teacher award, special gifts, prizes

*Table 4.*  
*Opinion About Best Teacher Award*

Perceived Adequacy	Number Responding	Percentage Responding
Woefully Inadequate	145	57.5
Inadequate	64	25.4
Adequate	39	15.5
Very Adequate	4	1.6
Total	252	100.0

and subsidised accommodation. Since the national best teacher award appears to be the most priced, respondents were asked to indicate the adequacy of this incentive for teachers.

About 83% of the respondents perceived the incentive as inadequate. This perception is similar to those of the headmasters and the directors. They commented that incentives that go to many teachers tend to motivate more than those that go to a few individuals. The more the people receiving the incentive the more the motivation. About 57% of the respondents indicated that the rather symbolic and sporadic incentives offered by the GES do not motivate them to work any harder. But having recognised the inadequacy and unattractiveness of the national incentive package, many schools and PTAs in the municipality have instituted internal incentive packages in their schools. These include annual best-teacher-in-the-school award, free meals to teachers, PTA bonuses and annual get-together dinners. There are also staff welfare funds from which teachers are offered soft loans when the need arises. In the perception of the heads of schools these internal incentives seem to be more attractive and more motivating than the national incentives. They

conclude that as a result, their teachers are committed to their jobs. The observation from the school heads tends to re-echo Davidson's (1966) view that teachers feel happy and motivated to work when they are offered some of the incentives enjoyed by other workers such as bankers, doctors and even parliamentarians.

### Conclusions

Based on the findings of the study it can be concluded that GES teaching support services to secondary school teachers in the municipality are, in most cases, not adequately provided. In-service education and training are scarcely organised as enshrined in the conditions of service of teachers. But for the inadequacy of laboratory equipment for the ever increasing number of students, the supply of textbooks and other teaching materials is encouraging. External supervision is virtually non-existent. Internal supervision, though much better, is also erratic. About 62% of the respondents were not even aware of the existence of facilities for loans, salary advances, car maintenance allowances, study leave with pay, and hospital bill refund. This implies that those facilities were scarcely used. In general, financial rewards provided

by the GES are extremely poor and out of tune with current price levels. Health care facilities include school nurse service, first aid service and school clinics.

GES packages of incentives do not appear to motivate teachers. The most highly priced of them, the National Best Teacher Award, was considered by an overwhelming majority to be inadequate. But internally instituted incentive packages appear to be more rewarding.

Recommendations based on these findings would appear to include:

- The need for GES to intensify its support activities by drawing up in-service programmes for secondary school teachers and integrating such training programmes in the academic calendar of secondary schools, as well as the need for the municipality to use parts of its internally generated fund to provide support for INSET.
- The need to constitute the supervision teams of the municipal and regional directorates of education of competent, dedicated and

special officers beyond reproach from different schools and offices of the GES to ensure better performance, as well as the need to provide necessary logistics for such teams.

- The need to strengthen the supervisory roles of heads of schools by providing them with additional training in educational leadership. The Institute for Educational Planning and Administration of the University of Cape Coast offers sandwich courses leading to M.Ed. and M. Phil degrees in educational administration.
- The need to issue a teacher, on his/her appointment, a brochure of conditions of service for teaching staff of GES to enable him/her to be conversant with what the service is supposed to offer him/her.
- The need to expand the incentive of National Best Teacher Award to cover a sizeable number of teachers.

There is an urgent need to support and motivate GES teachers for improved performance by

providing opportunities for professional growth, supplying essential teaching materials, providing regular and better instructional supervision and increasing the level of financial rewards and incentive packages to reduce the present level of teacher dissatisfaction.

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WORK-HOME CONFLICT AMONG FEMALE TEACHERS  
IN BASIC EDUCATIONAL INSTITUTIONS  
IN THE CAPE COAST MUNICIPALITY OF GHANA

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*ABSTRACT*

*One of the factors that contributes most significantly to the success of an organization is the effectiveness of its staff. This is particularly true of educational institutions. No matter how efficient and well-intentioned the school administrator is, he can hardly achieve success without the support and co-operation of well-qualified, dedicated, committed and effective staff.*

*The study critically examines work-home conflict among female teachers at the Basic Education level and its impact on effectiveness in the classroom and other organizational work in the school. Data from questionnaires and interviews with 268 female teachers and 25 heads respectively suggest that there is a relationship between work-home conflict and effectiveness of female teachers. The combination of paid employment with the care of the home and children involves an excessive strain and stress which negatively affects effectiveness of female teachers.*

**Introduction**

In recent years, there has been a growing national concern about the falling academic standards of pupils in public schools at the Basic Education level. Parents, social workers, scholars, clergymen, opinion leaders and educational authorities in various communities in Ghana most often blame teachers for this national phenomenon and persistently express disgust at their attitude, especially that of female teachers, toward teaching. It is common knowledge to hear parents/guardians making such remarks as “female teachers are lazy” and “female teachers dodge classes and are often absent from school”. Al-Khalifa (In Coyle & Skinner, 1988) carried out a study into women in teaching in Britain and came to the conclusion that in the view of many people, “a large number of female teachers do not exhibit any strong sense of work commitment, dedication and involvement in

the teaching profession. They seem to approach teaching as a dull routine work which they have to do to earn a living and view parenting as incompatible with professional work” (p. 81). This approach to teaching in the basic schools has been of much concern to the Educational Authorities and School Administrators. The engagement of female teachers in family responsibilities, to a large extent, tend to reduce their effectiveness at work place.

Montagu (1968) states that the working mother subscribes completely to the view that the home is the most influential environmental factor in the moulding of human personality. She wants the love of her husband and children and the shared responsibility of making good human beings of her children, but she has the feeling that she has the talent, capacities and abilities to serve her community and the people therein. The effectiveness of the classroom teacher, more especially the female teacher, for the success of any school programme is of grave concern to the Educational Administrator. Much work is expected of female teachers likewise their male counterparts. Though female teachers in all circumstances have dual role to play, i.e. the traditional role of

housekeeping and paid employment, one expects them to be efficient and effective at work, for that matter, at school.

Combining formal employment with housekeeping appears to be a cumbersome mixture. In the face of mounting pressures at work places for employees – both male and female – to perform exceptionally well to justify their retention on the jobs, the question as to whether working mothers can cope in such a competitive situation is being raised.

Date-Bah (In Anker & Hein, 1986) conducted an investigation into sex segregation and discrimination in Accra-Tema in Ghana and reported that employers were generally not happy about the level of women’s productivity. The employers complained that the women’s productivity was so much affected when they were pregnant especially during the early and last stages.

Date-Bah further noted that when women employees went on maternity leave, their schedules were added to those of their colleagues or, in few cases, temporary employees were engaged who were less qualified or less efficient in the performance of their duties. Thus, production within the organization suffered set back.

She noted that "some of these working women go home to breastfeed their babies while at the same time they are expected to be at work place" (p. 266).

Solman and Feld (1989) carried out a study in 82 schools in New South Wales into occupational stress and stated that male teachers were absent less frequently than their female colleagues. They contended that the frequent nature of female teachers' absence might in part be a consequence of their dual roles as career teachers and parents primarily responsible for child raising and household management.

Klein (1965) who conducted a study on Britain's married women workers states that working women certainly face dilemma as long as housekeeping largely rests on their shoulders and is considered their primary concern. Thus conflict of loyalty often arises between their jobs and their domestic duties and are in most instances resolved in favour of the latter. To a large extent "women with home ties are looked at as less reliable employees than their male counterparts" (p. 18).

Prokopec (In Michael, 1971) carried out a study into problems facing Czechoslovak women and observed that though paid employment of women increases

their prestige in the family and serves as source of income, it also increases their workload, intensifies their mental stress and aggravates problems related to child rearing and household management. "A clash between the role of the mother and the role of the employee leads to conflicts which often result in neurosis of the women" (p. 68).

Housekeeping by itself is a full time occupation which demands the time, energy and ingenuity of a mother. This is particularly so when the children are still very young and are full of energy and capable of causing mischief and the mother has to "divide" her attention into as many parts as there are children. Obviously, it takes time to train, teach and care for children if the ultimate objective is to turn out well-disciplined adult citizens capable of steering the affairs of the nation in the future.

On the other hand, development on the economic front over the years has made it mandatory that public and private enterprises harness all resources to enable them maximize profit if they are to remain in business. Subsequently, employers expect employees to perform to their best ability. The married female teacher and those who have homes to keep have to meet many contrasting demands at a particular

time. They have to play their traditional role of housekeeping in addition to paid employment.

The central focus of attention in this study is women's traditional role activities and expectations as child bearers, wives, mothers, caretakers of children and the sick. Focus is also on how female teachers are able to combine housekeeping with employment as they feel they have the talent and abilities that cry out for exercises, and that they are obliged to help their community with the knowledge, skills and expertise that they have obtained. Dahlstrom (1967) observes that the more intelligent, lively and educated woman fears that her mind will get narrowed within the confines of her home and stultified by lack of practice. Though children and home may be an emotionally satisfying milieu, they are hardly mentally stimulating and most of all, housewives suffer from social isolation, confinement to the home, lack of prestige and underdeveloped impulses.

Work-home conflict which appears to be widespread cross-cultural phenomenon and very common among working women has been defined by Greenhaus and Bentell (1985) as a form of inter-role conflict in which the role pressures from work and family (home)

domain are mutually incompatible. Kahn *et al.* (1964) define role conflict as the simultaneous occurrences of two or more sets of pressures such that compliance with one would make compliance with the other more difficult. The female teacher faces the dilemma of meeting contrasting demands at a particular time. She has to play the traditional role of housekeeping in addition to paid employment, thus, she has to leave home at certain times of the day for work. The female teachers' capability of performing the task of teaching effectively is of grave concern to the educational administrator.

The purpose of the study is to examine how work-home conflict affects output of work of female teachers and how best the effects of the conflict could be minimized. Specifically, the study sought answers to the following questions:

1. How does work-home conflict manifest itself among female teachers?
2. What is the nature and extent of the conflict?
3. How does the conflict affect efficiency and effectiveness?
4. How can the conflict be managed?

## Method

### *Target Population:*

The population for the study was made up of 54 primary and 34 Junior Secondary Schools in the Cape Coast Municipality of the Central Region of Ghana in the 1993/94 academic year. This gave a population size of 444, made up of 58 Headteachers/masters and 386 classroom female teachers. Some of the Headteachers/masters administered either primary or junior secondary schools only while others administered both.

### *The Sample:*

Purposive and simple random sampling procedures were used in selecting the sample of the respondents. The respondents were female teachers and Headteachers/masters of Basic Educational Institutions. Only professionally trained female teachers who were married with children or were single parents were selected, and all of them had taught for one or more years and therefore have had some experiences as regards work-home conflict. Untrained/non-professional teachers and professional teacher who were not working mothers were excluded from the sample for the following reasons:

- (a) Teaching work for untrained teachers is temporary. Their appointment could be terminated when a trained teacher is available. The temporary nature of their teaching service does not give them much opportunity to experience work-home conflict.
- (b) Professional teachers who were "single" were also left out since it was assumed that they might not have had much exposure to the work-home conflict as working mothers. They had neither children nor husbands to cater for; thus their responsibilities in the home were not considered to have any significant effect on teaching/learning.

In all, 268 female class teachers and 25 headteachers/masters, totalling 293 respondents, constituted the sample. The headteachers/masters who were involved in the study gave account of what transpires at the school in terms of output of work by female teachers .

### *Research Instrument:*

A questionnaire was designed for the female teachers while an interview guide was prepared for

the headteachers/masters. The probe method made it possible to get maximum information from them. The questionnaire was mostly of the checklist and likert type. Some open-ended items were included. These two techniques were used in order to capture a more reliable picture of the phenomenon.

#### *Data Analysis:*

Chi-square calculations ( $X^2$ ) were used as a means of testing levels of significance ( $d = 0.001$ ) in the responses made by the teachers. These helped to determine whether differences which were observed in the opinions of female teachers were due to chance.

### **Results**

The study recorded a number of findings relating to the extent to which work-home conflict affects performance of female teachers.

#### *Feeling of Satisfaction with Work*

About 58% of female teachers expressed the view that they feel more satisfied emotionally when they are with their families at home rather than when they are at school while 42% stated otherwise. To those who feel more satisfied being with their families at home, school

work or teaching is mentally stimulating; however being with their own children at home gives them emotional satisfaction. This confirms the findings of Dahlstrom and Liljestrom (1967) when they stated that the most important role of women is the caring of the home and children as they have been found to be emotionally satisfying.

#### *Absence from School to give Proper Care to Children*

Approximately 67% of female teachers stated that they were never absent from school in order to give proper care to their children. This was because they left their children under the care of their mothers, grandmothers, househelps and professional caretakers and those who were above two years were taken to crèches, nurseries and kindergartens. A very significant observation was the fact that they never brought their babies to school for breast feeding neither did they obtain permission to go home to do so. However, they exhibited the desire to go home immediately school had closed. Thirty-three percent (33%) of female teachers who were compelled to absent themselves from school did so when they had to take their sick children to the hospital, attend funerals or pay visits to sick relations. To a large extent, instructional time was

judiciously used or at best female teachers were often present at school.

#### *Maternity Leave/Replacement*

It was noted that Ghana Education Service (GES) had not put in place any mechanism whereby female teachers who had to go on maternity leave could be replaced. This concern was expressed by all the headteachers/masters. To them it retarded work in affected classes. Detached headteachers were compelled to teach in addition to office duties while non-detached heads had to teach two classes. This situation usually had serious repercussions on the academic performance of pupils in such classes.

#### *Importance of Work and Welfare of Children*

Teaching and housekeeping are two issues facing the married female teacher and the probability of one being done at the expense of the other cannot be ruled out. About 72% of female teachers expressed the view that they did not consider teaching to be more important than the welfare of the family, i.e. they cannot sacrifice the welfare of the family at the instance of work. The children must be given proper care i.e. taken to the hospital when ill,

provided with enough security, et cetera, even if it means doing so at the expense of work. These views are consistent with the findings of Dahlström and Liljestrom (1967). They stated that the women's most important role was that of caring for the home and children and that paid work is secondary.

#### *Experiencing Stress and Strain*

The study revealed that 78% of the female teachers did experience stress when they combined teaching with family/home responsibilities. They tend to become tired after work and subsequently burden their husbands with functions in the home; their double work leads to friction in the home and their free time is reduced. This is consistent with the findings made by Prokopec (in Michael, 1971). He stated that though paid employment of women increased their prestige in the family, it also increased their workload, intensified their mental stress and aggravated the problems related to child rearing and household management which often result in neurosis of the women.

#### *Adequate Preparation for Work*

Teaching involves thorough preparation on the part of teachers. It involves lesson notes preparation,



thorough knowledge of the subject matter, preparation of teaching/learning resources, knowledge of teaching methods, strategies and techniques, et cetera. It was revealed in the study that 70.1% of the female teachers between the ages of 25 and 50 years never had sufficient time to prepare adequately before going to school. This factor had been attributed to the performance of household chores like cooking for the family, bathing the children, washing clothes which to them had serious repercussions on their work. Lesson notes were hardly prepared on time while teaching/learning materials to enhance teaching were neither made available nor prepared in good time. At times, they were never prepared. This attitude to work was different from teachers between the ages of 50 and 60 years. Teachers above 50 years of age prepared adequately for work. According to them (teachers), they had less household chores to perform as their children invariably gave them the necessary assistance thus enabling them to concentrate on their work (teaching).

### *Commitment to Work*

Every organization has a goal to attain and this depends so much on so many factors, one of them being commitment. Higher teacher

motivation to work and strong commitment to work are essential requirements for effective teaching. When these characteristics are absent, teachers are likely to consider their commitment as being a "fair day's work for a fair day's pay" (Sergiovanni, 1968). The study revealed that the level of commitment of female teachers was not very high because of the double role they play. Most of them (60%) came to school late because they had to prepare breakfast for the family and get the children ready for school or take them to crèches. They were also anxious to get home immediately after school had closed because they had to go for their children at the crèches or prepare lunch for the family. They were hardly involved in co-curricular activities like sports, games, clubs, and cultural festivities as that was considered to be the preserve of men. It was when such activities took place during instructional hours that they actively participated. It was noted that there was discrepancy between what the teachers said and what the heads also stated as regards effective teaching. While the teachers claimed they engaged in effective teaching, the heads expressed contrary views. To the heads, only 30% of the female teachers engage in effective lesson delivery. They stated that 70% of the female teachers were not able

to put in the same number of hours at their jobs as their male counterparts because of their responsibilities. This confirms the findings of Brekke (1985) which state that "working women are simply not able to put in the same number of hours at their jobs as men" (p. 32). It was also observed that female teachers, like other women, experience nausea in the mornings during the early stages of pregnancy and felt tired and weak during the advanced stages which greatly affect their performance in class, thus portraying them as being ineffective.

#### *Managing Work-Home Conflict*

Respondents expressed various ways by which work-home conflict could be managed.

1. About 60% of them were of the view that GES should provide adequate teaching/learning resources to save working mothers' time in preparing such materials and to enhance teaching and learning.
2. 20% of them stated that crèches and nursery schools should be established and attached to every school to take care of teachers' children and those from the neighbourhood as this will prevent them from thinking about security.
3. About 8.7% of them were of the view that working mothers should be encouraged to get trained househelps who would help in managing the home. These househelps should be well motivated in order to manage the home effectively.
4. Spouses should be counselled on the need to give a helping hand in the performance of household chores, for example, washing of dishes, bathing of children and ironing of clothes. Though performance of these activities by men is not part of our cultural system there is the need to change our attitudes toward things since we live in a world of change. This view was expressed by about 5% of the respondents.
5. 5% of the respondents expressed the view that sons should also be given the necessary training to enable them contribute toward the management of the home.

6. Nursing mothers should be granted two (2) hours off-duty every working day to nurse their children up to a period of 12 months and the School Management Committee (SMC) should take up the challenge to see to it that affected pupils do not suffer in terms of effective teaching and learning. This view was expressed by about 1.3% of the respondents.

### **Conclusion and Recommendations**

This research was conducted at a time when most educationists, policy makers, administrators, social workers, parents, and guardians expressed much concern about the falling standard of education in the country and the attitude of female teachers towards the teaching profession. The researchers critically examined the work-home conflict among female teachers and its repercussions on both housekeeping and the teaching profession. From the study, the Ghanaian female teacher seems to derive emotional satisfaction from home and family life than teaching. In the same vein, she considers the welfare of the family to be more important than the work she does,

hence little enthusiasm and low level of commitment is shown towards teaching.

1. Though lateness and absenteeism have not featured prominently as problems facing female teachers, thoughts of the security of family members, lack of concentration on whatever they do at work and little or no adequate preparation of teaching and learning resources are bound to have adverse effect on their efficiency and effectiveness. It is recommended that the Department of Social Welfare should help train househelps. This, to a large extent, would enable them to manage the affairs of the home very well and to give the much needed attention and care to the children. Heads should also counsel female teachers on the need to produce improvised teaching/learning materials.
2. Combining teaching with family/home responsibilities implies work overload, especially when there is no househelp. Stress and strain may set in due to the inability to cope with the workload

which invariably affects one's productivity. About 78% of the female teachers experience stress and strain as a result of the dual role that they play. It is suggested that the Press should help in educating the public on the need for women to share domestic/household chores with men. Parents should also train their sons in housekeeping or in the performance of household chores.

3. Female teachers, to a large extent, do not have sufficient time to make adequate preparations for work as they have to cook for the family, bathe the children, wash their clothes and get them ready for school. The ill preparation of the female teachers have serious repercussions on their performance likewise the pupils. It is recommended that supervision by Heads of Institutions and Circuit Supervisors be strengthened so that teachers, especially working mothers, become enthusiastic and more committed to the teaching profession.

It could therefore be concluded that work-home conflict among female teachers to some extent has repercussions on their classroom performance and also their attitude towards the teaching professions.

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TOWARDS EFFECTIVE IMPLEMENTATION  
OF THE UNIVERSAL BASIC EDUCATION :  
A CASE STUDY OF ADMINISTRATORS'  
PERCEPTION IN DELTA STATE OF NIGERIA

Samuel I. Akinseinde

*ABSTRACT*

*This study was designed to examine strategies needed for effective implementation of the Universal Basic Education in Nigeria. The population for the study was made up of all administrators of primary and secondary school systems in Delta State of Nigeria. The questionnaire was used for data collection, and data analyses were converted into percentages. The findings revealed that the Government and administrators have important contributions towards effective implementation of the UBE. Fourteen strategies were identified for adoption by the Government while nine were identified for the administrators. Recommendations were based on the findings.*

Introduction

The universalization of basic education for all is a major challenge facing Africa. The inability of African states to implement the action plan on education for all is caused by a

number of factors including political instability, low economic growth, poverty, civil wars and high illiteracy rates. UNESCO (1995) emphasized that "Education for all" is an indispensable pre-requisite for fulfilling all other pre-conditions for a culture of peace.

Nigeria has made appreciable efforts to implement the 1950 Universal Declaration of Human Rights by entrenching this concept in her constitution. Essential aspects of this declaration are that:

1. Everyone has the right to education
2. Elementary education shall be compulsory while technical and professional education shall be made generally available
3. Higher education shall be equally accessible to all on the basis of merit, and

4. Parents have a right to choose the kind of education that shall be given to their children (Akinkugbe, 1994 : 42).

The Universal Free Primary Education (UPE) of 1976 was launched with good intention and purpose. It was to be the main corner-stone in Nigeria's determination to produce a literate society. Unfortunately, the programme suffered major setbacks from the economic, political and social systems of the country.

Ejiogu (1991) observed that the UPE scheme gradually died off as a result of

1. poor financial standing (dwindling economy),
2. over-estimation of Nigeria's potentialities.
3. lack of accurate data and
4. political instability and poor management.

Causes of the failure of the UPE programme should be worked on to avert a recurrence in the Universal Basic Education (UBE) scheme which was launched in 1999. Researchers (Tamuno & Atanda, 1989; Oragwan, 1998 & Ubaka, 2000) asserted that the failure of the

UPE should be blamed on the implementation rather than the policy.

It is important to assess resources as well as elements of teacher quality, intellectual ability of children and learning environment when introducing educational reforms. What is expected in the implementation of the UBE is the evaluation of antecedents. It is the basis of such evaluation that wise decisions can be made on budget allocations and programme planning. This will lead to fine-tuning what worked and what did not work well.

The UBE covers the primary and junior secondary school children as well as adult literacy. The scheme is a priority task which guarantees the right to learn how to read and write, acquire basic technical/vocational skills and to learn of democratic ideals (Obasanjo, 1999). This means that youths and adults have opportunities, individually and collectively, to realize their potentials as human beings. This is a human-centred development which will lead to sustainable and equitable development if effectively implemented. Since UBE is an extension of UPE, care must be taken so that it does not fail.

This study was designed to propose mechanisms for effective implementation of the Universal Basic Education in Nigeria.

### Research Questions

The study sought answers to the following questions:

1. What strategies can be adopted by Government to implement the Universal Basic Education ?
2. What strategies can administrators adopt to make the UBE scheme effective?

### Method

#### Population and Sample

The population for the study was made up of all the Chief Inspectors of Education (CIE), Principals of public secondary schools, Headmasters/Headmistresses and Local Government Education Authority (LGEA) Secretaries in Delta State. There are 25 CIEs, 318 Principals, 1015 Headmasters/Headmistresses and 25 LGEA Secretaries (SPEB and Ministry of Education data, February 2000). Using stratified random sample, 460 respondents were selected for the study. This was made up of 12 CIEs, 106 Principals, 330 Headmasters/Headmistresses and 12 LGEA Secretaries.

#### Instrument

The instrument used for collecting data was a questionnaire titled "Universal Basic Education Implementation Questionnaire" (UBEIQ). It was made up of two sections. Section A provided demographic data while Section B contained 25 structured items which were developed through extensive literature review based on the research questions. Each structured item had a 4-point scale of "Highly Important, Important, Unimportant and Highly Unimportant." Respondents were asked to indicate the level of importance of each item to the implementation of the Universal Basic Education. The instrument was validated by four experts in the field of study.

Test-retest reliability was carried out with the instrument at a time lag of two weeks. Correlation analyses using Rank difference correlation ratio yielded 0.89. This was considered adequate.

#### Data Collection Technique

Four hundred and sixty copies of the instrument were distributed to the subjects by hand. Four hundred and thirty-seven were completely filled and returned for analysis after a period of three weeks. This represents 95% return rate.



### Data Analysis Technique

Percentages were used to analyse data generated by the questionnaire. Based on the four point scale employed in the instrument, Highly Important and Important were merged into

'Important' while Unimportant and Highly Unimportant were merged into 'Unimportant' for the purpose of analysis. Thereafter, items were ranked from the most important to the least important.

*Table 1*  
*Responses on Strategies to be Adopted by Government*

S/N	Items	% RESPONSE			
		Highly Important	Important	Unimportant	Highly Unimportant
1.	Make UBE compulsory for all school age	75	25	-	-
2.	Centrally locate pre-vocational workshop for schools within short distance locations	41	47	6	6
3.	Equip laboratories and workshops	95	5	-	-
4.	Provide a system of regular maintenance of equipment	65	35	-	-
5.	Provide buildings	63	37	-	-
6.	Provide laboratories	65	35	-	-
7.	Provide workshops	55	4	-	-
8.	Use all schools for UBE programme	25	50	25	-
9.	Select some existing Primary and JSS schools to be used as experimental schools	32	26	32	10

Table 1 cont'd

S/N	Items	% RESPONSE				
		Highly Important	Important	Highly Unimportant	Unimportant	
10.	Put students in primary and J.S.S. in a common location	10	15	75	-	
11.	Provide quality control services more regularly and effectively	45	55	-	-	
12.	Equip quality control services to make it functional or perform	29	61	5	5	
13.	Ensure that all teachers for UBE have professional teaching qualifications	66	29	5	-	
14.	Pay teachers' salary as and when due	81	14	5	-	
15.	Provide incentives for teachers (e.g. Housing loan, car refurbishing loan)	57	43	-	-	
16.	Encourage pension board to pay teachers' pension regularly	76	24	-	-	

### Findings

The findings of this study are presented in Tables 1, 2, 3 and 4.

Table 1 shows the percentage responses of the strategies to be adopted by Government. From the table, the respondents indicated the

level of importance of each item to the effective implementation of Universal Basic Education. Most of the items were perceived to be important except for items 9 and 10 which have low percentage values.

These are:

1. Select some existing primary and JSS schools to be used as experimental schools.
2. Put students in Primary and JSS in a common location. This implies that items 9 and 10 are unimportant for effective implementation of UBE scheme. Strategies to be adopted by Government include all the items except 9 and 10. The Rank order of the strategies to be adopted by Government are presented in Table 2.

*Table 2*

*Rank Order of Important Strategies to be Adopted by Government*

S/N	Items	Rank order
1.	Make Universal Basic Education compulsory for all school age	1
2.	Equip laboratories and workshops	1
3.	Provide a system of regular maintenance of equipment	1
4.	Provide buildings	1
5.	Provide laboratories	1
6.	Provide workshops	1
7.	Provide quality control services more regularly and effectively	1
8.	Provide incentives for teachers (e.g. Housing loan, car refurbishing loan)	1
9.	Encourage pension board to pay teachers' pension regularly	1
10.	Pay teachers' salary as and when due	10
11.	Ensure that all teachers for UBE have professional teaching qualifications	11
12.	Equip quality control services to make them functional or perform	12
13.	Centrally locate pre-vocational workshop for schools within short distance locations	13
14.	Use all schools for UBE programme	14
15.	Select some existing Primary and JSS schools to be used as experimental schools	15
16.	Put students in Primary and JSS in a common location	16

As can be seen in Table 2, items that ranked high can be categorized as provision of educational facilities (items 2,4,5,6), quality control services (item 7), teachers welfare package (items 8,9,10) and professional development of teachers (item 11).

The analysis in Table 3 shows perception of respondents on strategies to be adopted by administrators. The nine items enumerated were considered important for effective implementation of the UBE scheme.

Table 3

*Responses on Strategies to be Adopted by Administrators*

S/N	Items	% RESPONSE			
		Highly Important	Important	Highly Unimportant	Unimportant
1.	Modify curricula for JSS so as to be more functional	65	35	-	-
2.	Review JSS curricula for terminal and continuing programmes	25	65	10	-
3.	Integrate library services into the schools	75	25	-	-
4.	Educational counselling should start from the primary school	43	43	5	9
5.	Expand and reinforce guidance and counselling services for JSS students to reduce frustration at any point	47	43	-	10
6.	Re-invigorate and expand school supervision and inspectorate division	55	45	-	-
7.	Organise in-service training for teachers on management of large classes	55	45	-	-
8.	Encourage teachers for acquisition of professional skills	52	48	-	-
9.	Encourage teachers to improve through sandwich courses	45	30	15	10

*Table 4*  
*Rank Order of Important Strategies to be*  
*Adopted by Administrators*

S/N	ITEM	RANK ORDER
1.	Modify curricula for JSS so as to be more functional	1
2.	Integrate library services into the schools	1
3.	Re-invigorate and expand school supervision and inspectorate division	1
4.	Organise in-service training for teachers on management of large classes	1
5.	Encourage teachers for acquisition of professional skills	1
6.	Expand and reinforce guidance and counselling services for JSS students to reduce frustration at any point	6
7.	Review JSS curricula for terminal and continuing programmes	
8.	Educational counselling should start from primary school	8
9.	Encourage teachers to improve through sandwich courses	9

The acceptable strategies for administrators were ranked as shown in Table 4. Items that rank high are grouped under major clusters such as curricula (item 1), library services (item 2), quality control (item 3) and training of teachers (items 4 and 5). Strategies that ranked low were on counselling (items 6 and 8) and improving teachers through sandwich courses (item 9).

#### Discussion

The findings of this study revealed that 23 strategies rated as important should be adopted in implementing the UBE programmes by the Government and administrators. This stems from the fact that each of the 25 items was rated as important with responses above 50%.

On the part of the Government, items related to infrastructural

facilities and equipment obtained the highest scores. This is an indication of the level of importance which the subjects placed on these.

Akpobi (2000) has declared that 500 additional primary schools are needed to boost the UBE programme in Delta State. There is the need to build new classroom blocks because the existing primary schools in the state cannot accommodate all children of school age in the UBE programme.

Provision of quality control services had 100% score. There is the need to maintain a standard for high quality education. This can be achieved by providing equipment and materials to facilitate the work of the inspectorate division. An essential need of this division is vehicles to move around for supervisory work. This implies that the Government will increase resource allocation for the UBE programme.

The need to provide incentives for teachers cannot be over-emphasized. Amiebenomo (2000) asserts that teachers' welfare is fundamental to the success of the UBE programme. Teaching will not improve unless the reward system for teachers is improved upon. It is beneficial to

give housing loan, car refurbishing loan and other incentives to teachers.

The findings on responsibilities of the administrators towards effective UBE programme showed that all the nine items rated as important should be adopted. Furthermore, the findings showed that in-service training of teachers, integration of library services into the school system and rejuvenation of school supervision obtained 100% rating among other items. Teachers need training on management of large classes which are to be filled with pupils having mixed abilities, and techniques of motivating pupils to learn science, vocational and technical skills. Provision of library services in each school is a way of boosting learners' literacy and basic education.

Analysis of the result showed that educational counselling was given moderate rating. Even though counselling services was ranked low, it is the opinion of the researcher that counselling services should be given priority place in this programme. Guidance is as important at the elementary school level as at the secondary level. School guidance services assist the pupil in understanding himself, his present situation and planning

his future in the light of his needs, interests, abilities and limitations.

### Conclusion

The critical importance of Universal Basic Education cannot be over-emphasized. It has economic, social, holistic and political goals. The strategies identified as important in this study represent what the administrators in Delta State considered essential for successful implementation of the Universal Basic Education.

The findings of this study have important implications for the Federal and State Governments, the administrators, the teachers and students of the UBE programme. The study identified strategies to be adopted by Government. Based on these, the Government and policy makers will have better understanding of the challenges ahead. The findings could certainly serve as an initial input into the development and implementation of functional UBE programme for all Nigerian children in primary and junior secondary schools.

The findings from this study also have implications for curriculum planners and school administrators. There is the need to implement the identified strategies at the school

system for a meaningful take off of the programme.

The following recommendations are made based on the findings and conclusions of this study.

1. The Federal Government should provide infra-structural facilities (e.g. classroom buildings, workshops, laboratories), equipment, tools and a system of regular maintenance.
2. Official vehicles and relevant quality control materials should be made available to the Inspectors of Education and Local Government Education Authority Secretaries to facilitate their work.
3. The Ministry of Education and State Primary Education Board (SPEB) should provide in-service training for teachers on management of large classes.
4. The curriculum planners need to modify the curricula of Junior Secondary Schools so as to be more functional and practical for the acquisition of basic education and pre-vocational skills.

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## THE APPRAISAL OF MATHEMATICS TEACHERS IN GHANA

J. A. FLETCHER

### ABSTRACT

*Many mathematics teachers in Ghanaian secondary schools have little or no training in the teaching of mathematics, yet they teach the subject because of the shortage of mathematics teachers in Ghana. Such teachers and their trained counterparts, need professional help to enable them guide pupils learn the subject effectively and efficiently especially since the duration for pre-university education in Ghana has been cut by about five years.*

*This study aimed to:*

- 1. Examine the nature of teacher appraisal in Ghana .*
- 2. Examine the validity of existing methods of teacher appraisal in Ghana.*
- 3. Determine which variables influence Ghanaian mathematics teachers' views about teacher appraisal and its ability to help them improve their competence of teaching mathematics.*

*Of the 441 secondary mathematics teachers who participated in the study, 193 taught the*

*subject at the junior secondary level and 248 taught it at the senior secondary level. In addition, 44 Ghana Education Service Officials and six heads of secondary schools who appraise mathematics teachers were sampled. Methods used included questionnaires, interviews and observation of appraisers at work.*

*Highly significant relationships were found between mathematics teachers' perceived professional support and appraisal experience, mathematics teaching experience and professional status at the senior secondary level, and between received support and appraisal experience at the junior secondary level. The results indicated a dramatic difference between junior secondary and senior secondary mathematics teachers in their perception of the potential of the teacher appraisal system in Ghana to help them to improve their teaching of mathematics. Senior secondary mathematics teachers were generally more pessimistic about*

*the potential of the appraisal system than their junior secondary counterparts.*

*The study also showed that many education officials who appraise mathematics teachers have little or no training in secondary school mathematics teaching or its appraisal, yet the appraisal system for both formative and summative purposes require these officers to both "help" mathematics teachers improve their work and make judgements about their performance. These findings led to the conclusion that the teacher appraisal system in the Ghana Education Service is not valid. The implications of the findings are discussed.*

### **Introduction**

Teachers constitute the most important (and perhaps the most expensive) resource in education. Therefore there is no gainsaying the fact that any educational system is as good as the teachers in it. Thus, in order to improve the quality of learning that takes place in any educational system, there is the need to improve the quality of teaching in that system. One way of improving the quality of teaching is by providing teachers with the opportunity to develop professionally through the process of appraisal. This paper describes a study which aimed at assessing

the potential of the appraisal system in the Ghana Education Service (GES) with regard to enhancing the competence of mathematics teachers.

Teacher appraisal may be defined as the attempt by oneself and/or others to analyse and assess a range of professional knowledge, skills and attitudes which are relevant to the performance of a teacher's role within an institution or agency. (Anderson, et al. 1987). Teacher appraisal can be both retrospective and prospective, looking back at what has or has not been achieved, taking stock of the present and then planning some pathways which will help the individual teacher's professional development and professional 'accountability'.

Used in the above context, teacher appraisal becomes synonymous with teacher evaluation, which also involves stock-taking and recommendations for improvement. In this paper, the two words (i.e. appraisal and evaluation) are used interchangeably and they mean almost the same thing. The importance of school mathematics in the development of science and technology has been stressed by many governments in both developed and developing worlds.

It is however fair to point out that

as part of the ongoing education reform, changes have been made in the appraisal system to enhance its ability to help teachers improve their work (Gokah, 1993). According to Gokah, the changes are designed to “strengthen the management and supervision of basic education schools at the district and circuit levels” (p.3). These changes include the selection of Circuit Supervisors with higher qualifications and experience to be in charge of supervision of schools at the basic education level. At the senior secondary level too, the selection of supervisors has been streamlined to “ensure that the supervisors have adequate expertise in the teaching (and supervision of teachers) of the various subjects in the senior secondary school programme” (Gokah, 1993, p.3). This paper looks at how the appraisal system was in fact “working” after the above changes were introduced. It concentrates on the appraisal of mathematics teachers in Ghanaian secondary schools where mathematics is found most difficult both to teach and to learn (Boakye and Oxenham, 1982), and where others have done very little research. It examines the validity of the teacher appraisal system and tries to identify some of the factors that are relevant to Ghanaian secondary mathematics teachers’ perceptions of the

potential of the appraisal system to help them improve their teaching of mathematics.

### **The Problem**

Literature on teacher evaluation in Ghana (e.g. Bame, 1991; Fokah, 1992) suggest that a single system of teacher appraisal is used for the two most frequently cited primary purposes of personal appraisal, namely accountability and professional growth. The accountability (or summative) dimension reflects the need to determine whether a professional is competent in order to ensure that services delivered are safe and effective (Stiggins & Duke, 1988), whereas the professional growth (or formative) dimension reflects the need for development of the individual (Wragg, et al. 1996).

Writers like Nuttal (1986) have argued that summative and formative purposes of appraisal can co-exist within the same scheme. Fullan (1991) has also noted that “combining individual and institutional development has its tensions, but the message ... should be abundantly clear. You cannot have one without the other” (p.349). Yet McGreal (1988) argued that multiple purposes of evaluation can be successfully met with a single evaluation system only when the system is viewed as one component of a larger mission: that

of furthering the goals of the organisation. If the dynamic relationship between the individual and the organisation is healthy, then what is good for the organisation must also be good for the individual and vice-versa. Indeed, Getzel and Guba (1957) described this dynamic relationship as one that fuses the prevailing interests of the institution with those of the individual. Such an orientation enhances the ability of both the individual and the institution to achieve desired goals and consequently encourages a satisfying state of affairs within the organisation and among its respective employees (Little, 1993; March & Simons, 1993).

If teacher appraisal is to provide a meaningful solution to the problem of helping teachers to improve on their work, then it is imperative that Ghanaian teachers see the GES in the light described above. This is why the concept of perceived organisational support is central to the present study. It must be emphasised further that in any system of appraisal, even if a single purpose is identified, those involved may see the purpose differently. Senior management, for example, may see it in terms of their need to 'manage' staff whatever the purpose of appraisal is whilst junior staff in their hierarchies may see it more in terms of their own personal

development. These differences may be exacerbated when a single system is used for the dual purposes (of appraisal) as the literature suggests is the case in Ghana.

In such circumstances, and in view of the limited resources available to the GES, it is important to identify which teacher characteristics (and other variables) are significantly related to teachers' perceptions of the appraisal process. Hence the importance of considering teachers' perceived validity of the teacher appraisal system in Ghana. The question then is : how do different categories of mathematics teachers perceive the performance appraisal system in the GES?

### *Hypotheses*

A number of hypotheses were formulated using the relevant teacher characteristics to investigate the perceptions of different categories of teachers of the teacher appraisal system in Ghana. Four hypotheses, which bear somewhat directly on the teaching of mathematics, are discussed in the paper. Perceived support was used as the main dependent variable.

The independent variables are:

1. Experience with appraisal

2. Experience in mathematics teaching
3. Professional status of respondent
4. Gender

The hypotheses which were formulated with the above variables, were based on some of the issues which teacher appraisal ought to address. In other words, they were based on some of the gaps in the literature on teacher appraisal, which need filling. For example, it was considered important to investigate the relationship between mathematics teachers' perceived support and their experience with the appraisal process because any differences between the perceived support of teachers who had been appraised and that of those who had not been appraised could help describe the teacher appraisal system in Ghana.

Another issue which the literature on teacher appraisal in particular has been rather silent on include the influence of teachers' experience and expertise (in both quantitative and qualitative terms) on their perceptions of teacher appraisal system (Berliner 1986). For the purpose of this study, experienced mathematics teachers were those who had taught mathematics at the appropriate level for more than five

years. This is in line with the experienced - inexperienced dichotomy used in studies which have examined the differences between experienced (or expert) and inexperienced (or novice) teachers (Lienhardt Smith 1985; Carter, et al. 1988; Yen, 1991). Any relationship between perceived support and mathematics teaching experience can help shed some light on the appraisal system, and also help determine how experienced and inexperienced mathematics teachers might be helped to improve on their teaching of mathematics.

Finally, the issue of gender differences in mathematics education has attracted much interest both within and outside the mathematics education community (Grouws, 1992). Yet it appears that very little attention has been paid to the relationship between gender and perceptions of appraisal in teacher appraisal studies. The present study therefore attempts to fill this important gap. This is because such a relationship might help explain some of the differences that researchers have found between the sexes in various aspects of mathematics teaching and learning (Hoyles, 1988, 1989; Eshun, in press).

The hypotheses that were tested in

the present study are listed below.

1. Junior and senior secondary mathematics teachers who have been appraised will be more positive about the potential of teacher appraisal in Ghana to help them improve their teaching of mathematics than those who have not been appraised.
2. More experienced mathematics teachers in junior and senior secondary schools will be more positive about the potential of teacher appraisal in Ghana to help them improve their teaching of mathematics than less experienced ones.
3. Junior and senior secondary professional mathematics teachers will be more positive about the potential of teacher appraisal in Ghana to help them improve their teaching of mathematics than will non-professional mathematics teachers.
4. Junior and senior secondary female mathematics teachers will view the potential of teacher appraisal in Ghana to help them improve their teaching of mathematics differently from

male mathematics teachers.

The four hypotheses, formed the basis of teachers' perceived validity of the teacher appraisal system in Ghana. They were based on the "changes" that have been made in the appraisal of teachers in the GES, (Gokah,1993).

### ***Population***

The target population for the study consisted of mathematics teachers in the Ashanti, Central, Eastern and Greater Accra regions of Ghana. However, the study was limited to full-time secondary mathematics teachers in public schools, referred to in this paper as "government - schools".

The few private secondary schools in the selected regions were excluded from the study because teachers in these schools are usually hired on temporary or part-time basis, and are also not appraised by the GES for promotion and other purposes like their counterparts in government-assisted schools. Furthermore, most of these part-time teachers are also full time teachers in government secondary schools (Bame, 1991). For these reasons, including private secondary schools in the study

might have led to duplicate listings, whereby some mathematics teachers might have had the chance of being selected more than once, and consequently biasing the results of the study (Kalton, 1983). This is more so because many teachers do not disclose part-time work for various reasons and it is therefore very unlikely that all duplicates (arising from including private schools) could be detected and adjusted for unequal selection chances. For the same reasons, mathematics teachers who teach on part-time basis in government-assisted schools were excluded from the study.

### ***Sample***

The sampling frame for the study consisted of the relevant secondary schools in the selected regions. This was done in spite of the fact that secondary mathematics teachers were the units of analysis of the study. In other words, mathematics teachers were sampled by schools. This design was preferred to simple random sampling of individual secondary mathematics teachers because it was to ensure that mathematics teachers in the selected regions were adequately represented, and also to avoid the problem of the huge transportation and other costs involved

in tracing teachers selected through simple random sampling. Stuart (1984) rightly points out that using simple random sampling in such circumstances could lead to high incidence of non-response and increase biases resulting from the latter.

However, in an attempt to preserve the random principle on which statistical inferences depend, while at the same time allowing for a design that would ensure adequate representation of teachers in the sample regions, the study used a stratified cluster sampling method to select participants. Stratification was done by region and type of school (i.e. whether junior or senior secondary).

At the senior secondary school level, mathematics teachers were sampled by schools selected at random from a list of schools in each region. Fifteen schools were selected in each of the Ashanti and Eastern regions whereas 10 schools each were selected from the Central and Greater Accra regions. The number of schools selected in each region reflected the number of schools in the region. In all, 50 senior secondary schools were involved in the study, and all the mathematics teachers in these schools were sampled.

Unlike the senior secondary schools, junior secondary schools in Ghana are scattered throughout the country. Nearly every single town or village with a primary school has a junior secondary school. Because of this, the method of sampling mathematics teachers by schools (selected at random from a list of schools in each region) proved extremely difficult and almost impossible to use. Two districts were therefore selected at random from each of the 4 regions. In each district, 4 circuit supervisors were selected at random and all the mathematics teachers in the selected circuits were sampled. In all 129 junior secondary schools participated in the study.

The sample sizes for the junior and senior secondary were 193 (with 12 absentees) and 248 (with 46 absentees) respectively. Thus the study involved 441 junior secondary and senior secondary mathematics teachers. With regard to the appraiser, 44 GES officials and 6 heads of senior secondary schools who appraise mathematics teachers took part in the study. The constitution of the appraisers who were sampled is as follows: the circuit supervisors of the 8 selected circuits in each region were sampled. In addition, 2 inspectors were sampled from each of the four regions and all the inspectors

at the headquarters of the Inspectorate Division of the GES were sampled. In all, out of the 50 supervisors/appraisers sampled, 44 responded, giving an overall response rate of 88%.

### *Instruments*

Preparations towards the pilot as well as the main study involved a number of steps. Preparations began with the study of similar studies and the materials used in them. This was followed by training in the construction of questionnaire and interview items. The author attended a number of seminars and workshops on the construction of survey instruments. The training received at these seminars and workshops helped the author to select and modify the items with which the teacher and appraisal questionnaires used in the present study were constructed. For example, in order to identify the appropriate items to include in both the mathematics teacher appraisal questionnaire (referred to in this paper as the teacher questionnaire) and the appraiser questionnaire, a number of existing instruments were examined. With regard to the teacher questionnaire, these were instruments which aimed at assessing teachers' attitude towards the teaching and learning of mathematics and those



assessing their attitude towards teacher appraisal generally. As no study involving the appraisal of mathematics teacher had come to the notice of the researcher, most of the items used in the study were modifications of those used in mathematics education studies which were somewhat related to the present study (e.g. Kouba, 1992). Other items used were from instruments used in teacher appraisal studies generally. Specifically, some of the items on Ghanaian teachers' attitude towards GES officials' supervisory activities were adapted from the items used in the teacher motivation study described by Bame (1991). Those items regarding teachers' attitude towards mathematics teaching and learning were adapted from studies investigating mathematics teachers' attitude towards the teaching and learning of the subject (e.g. Raymond 1993). Some of the items used in the appraiser questionnaire were similar to those used in the teacher questionnaire. Such items were derived from the same instruments as those on which the teacher questionnaire were based. Other items were derived from Ghanaian teachers' expressed opinions about the supervisory activities of GES officials in similar studies.

Preparations towards the interviewing exercise involved much the same steps undertaken to develop the two questionnaires. They involved the development of interview 'blue print' specifying the areas to be covered and the questions to be asked. The preparation began with the study of materials describing the process of interviewing (e.g. Anastasi, 1986; Oppenheim, 1990). These materials included manuals, descriptive articles and transcripts of interviews carried out using the "critical incident" technique (Hoyles, 1986). These initial exercises provided a sense of the form the interviews in the present study should take, the appropriate questions to ask and the probes and prompts to use.

### *The Pilot Study*

The instruments were tested in a pilot study which was conducted from October to December 1998. Thus the purpose of the pilot was to gain insight into the relative strengths and weaknesses of the research instruments in order to make possible improvements prior to the main study. The sample for the pilot study consisted of 50 secondary mathematics teachers and 10 appraisers selected from two

districts in the regions selected for the real study.

### *Administration of Instruments in the Main Study*

The main study was conducted from February to May 1999. Having been granted permission by the directors of education in the districts and regions involved in the study, the researcher then personally administered the teacher questionnaire. At the junior secondary level, circuit supervisors in some of the districts were directed by the district directors to inform all mathematics teachers in their circuits about the research and to arrange a meeting of all mathematics teachers at specified venues. In all the districts sampled, the author met with the teachers at specified venues to administer the questionnaires. The meeting usually took the form of a workshop: the first part of which was used for the administration of the questionnaires and the second part for the discussion of some general issues on the problems facing mathematics teachers generally and those in the junior secondary schools in particular. This was done after questionnaires had been collected from the respondents. No discussion took place among the respondents whilst they were

completing the questionnaires. The author went round after the questionnaires had been completed to ensure that all sections were completed before collecting the completed questionnaires. The "workshop" lasted about 3 hours.

The method used to administer questionnaires at the senior secondary level was different from the one used at the junior level. At the former level, the author visited the individual selected schools to administer the questionnaires. The heads quickly arranged for the author to meet with the heads of mathematics departments who then informed their colleagues about the study. The questionnaires were usually administered to groups of mathematics teachers available in the school at the time of the visit. In some cases, especially where some of the mathematics teachers could not join the groups because they were engaged in the classroom or elsewhere, the questionnaire was administered on one-to-one basis. No questionnaires were left behind for the 46 teachers who were not available. Therefore although nearly all the teachers who were available in the schools at the time of the visits completed the questionnaires, the response rate came to about 85%. The

questionnaires for the appraisers at the junior secondary level were left with the Assistant Director (AD) at the Inspectorate Division at each district office, who in turn distributed them to the selected circuit officers. Appraisers returned the completed questionnaires to the AD for collection later. A similar procedure was used at the senior secondary level except that at this level, the questionnaires were left with the Director in charge of the Inspectorate Division at the regional office or at the headquarters. The completed questionnaires were picked up a week later.

### *Interviews*

In addition to the questionnaires, 20 senior secondary and 17 junior secondary school mathematics teachers were interviewed in detail about their responses to the questionnaire items, their experience with the appraisal process, their teaching of mathematics and how they think the former affect the latter. These interviewees were selected on the basis of their responses to the questionnaire items. Specifically, after an initial 'analysis' of the completed questionnaires, the responses were categorised using the main independent variables. Individuals from these categories were selected

at random for the interviews. Using the proportions of senior and junior secondary respondents in the sample for the study, 22 senior secondary and 18 junior secondary mathematics teachers were selected for the interviews. One junior secondary and two senior secondary mathematics teachers who had completed the questionnaires were not available for the interviews. Thus 37 (92.5%) out of the 40 teachers selected were interviewed. Also 10 appraisers selected from the districts headquarters of the GES as well as 6 secondary heads were interviewed in detail about their views regarding the appraisal process. The appraisers were also selected on the basis of their responses to the appraiser questionnaire. Factors taken into account in the selection of the appraisers included subject specialisation, experience as an appraiser and the level of education at which appraiser worked (i.e. either JSS or SSS). The heads were selected from the senior secondary schools where at least two teachers were selected for the interview. All the heads and appraisers selected for interviewing were interviewed.

Apart from the questionnaire and the interviews, some appraisers were observed while at work. The purpose of the field observation

was both to gather data to enable conclusions to be drawn about the validity of the appraisal system and to cross-validate the responses from the interviews and information from other sources. The researcher observed three inspectors whilst they were on inspection duties in two senior secondary schools in the selected regions. Nine circuit supervisors who were on supervision and promotion inspection duties in the selected districts were also observed.

### *Analysis*

First, descriptive statistics were run on all the individual items in the teachers' questionnaires to both make sense of the data and to examine any differences between the various regions. This initial examination revealed no significant differences between the regions with regard to the measure used in the study. Nor was there any reason or theory to suggest any differences between the regions in terms of the data collected. However, there were significant differences between junior and secondary 'scores' within each region which reflected the fact that the two levels constitute different stages in the Ghanaian education system.

The data were therefore analysed separately for junior and senior and

the results compared. Chi-square analysis were initially conducted to test the significance of any relationships between the variables employed in the study. This initial analysis was followed by multivariate analysis - particularly discriminate analysis - to throw more light on the relationships that had been revealed by the use of chi-square analyses. Responses from appraisers' questionnaires were subjected to exploratory and bivariate analyses in the same way as described above.

All interviews conducted in the study were tape recorded and fully transcribed. The interviews were reduced to manageable proportions by creating summary sheets for each interviewee (see Moriere, 1992). On each summary sheet, there were portions corresponding to the main variables of interest of the study. These sheets offered a quick and useful reference to respondents' perceptions of the appraisal system and helped make comparisons between teachers' and appraisers' perceptions much easier. The actual transcripts were used as references for quoting particular representative observations.

### *Results*

The findings of the study are reported separately for junior and

senior secondary levels because the initial analysis revealed significant differences between the levels of "score" obtained at these levels. This was expected because the junior and senior secondary levels constitute different stages in the GES. The junior secondary school level forms part of the basic education level which, in theory is free and compulsory for all Ghanaian children. The senior secondary level, on the other hand, is neither free nor compulsory, and admission to this level is determined by students' performance at the Basic Education Certificate Examination (BECE) as well as their parents' or guardians' ability to afford the fees charged at this level.

Besides, the appraisal of mathematics teachers at the two levels is done by different sets of officers in the GES. Whereas junior secondary mathematics teachers are generally appraised by circuit officers from the district offices of the GES, the appraisal of mathematics teachers at the senior secondary level is done mainly by officers from the regional officers as well as those from the headquarters of the Service.

The main dependent variable (i.e. perceived support) was taken from section II of the mathematics

teacher appraisal questionnaire (MATAQ) which dealt with mathematics teaching. Respondents were presented with the following item: "*Please state three ways in which you personally can improve your teaching of mathematics*". Each respondent stated three ways in which he or she could improve his or her teaching of mathematics. Three separate items were used to gather respondents' views about the potential of Teacher Appraisal in Ghana (TAG) to help them to do what they had stated they would to improve their teaching of mathematics. The three items were:

- a. Can the way teacher appraisal is done presently in this country help you to do the first (1<sup>st</sup>) thing you have stated in the item above?
- b. Can the way teacher appraisal is done presently in this country help you to do the second (2<sup>nd</sup>) thing you have stated in the item above?
- c. Can the way teacher appraisal is done presently in this country help you to do the third (3<sup>rd</sup>) thing you have stated in item above?

Respondents were required to answer "yes" or "no" to each item "Yes" was coded 1 and "No" was coded 0. Each respondent's score-

measuring his or her perceived potential of TAG to help or him or her to improve his or her teaching of mathematics (i.e. Perceived Support from GES) - was arrived at by adding the codes for their three responses. Thus, respondents' score ranged from 0 (i.e. 3 "nos") to 3 (i.e. 3 "yesses"). Table 1 shows the frequencies of the perceived support scores for both junior and senior secondary level respondents.

At the first stage in the analysis of the data, the 4-point scale in the table was dichotomised into two categories. Scores of 2 and 3 were put into one category, and those of zero and one were put into the second category. The former category was designated the positive category and the category with scores of 0 and 1 was taken as the negative category.

It may be noted from Table 1 that at the junior secondary level, 137(71.0%) out of the 193 respondents were positive about the potential of TAG to help them to improve their teaching of mathematics, and 56(29.0%) had negative perception of TAG to help them to improve their teaching of mathematics. The corresponding figures at the senior secondary level were 126(50.8%) positive, and 122(49.2%) negative.

In order to identify probable two-way relationships between the dependent and the independent variables, the various multinomial scales of measurement of some of the independent variables were also collapsed into two categories. Table 2 shows the frequency counts of perceived support 'scores' in the form of contingency tables

*Table 1*  
*Frequencies of perceived support scores for respondents at the junior and senior secondary levels.*

Number of "Yesses"	JSS Frequency	SSS Frequency
0	20(10.4%)	57(23.0%)
1	36(18.7%)	65(26.2%)
2	62(32.0%)	62(25.0%)
3	75(38.9%)	64(25.8%)
Total	193(100.0%)	248(100.0%)

involving the main independent variables in the study, and the dependent variable at the junior and secondary levels respectively.

1. The totals in Table 2 are not row totals. They refer to the total number of respondents in each of the two (positive/negative) categories.

professional status correlated significantly with perceived support.

### *Appraisal Experience*

The first hypothesis tested was the one formulated to examine the relationship between appraisal experience and perceived support.

*Table 2*

*Examining the relationship between teacher characteristics and perceived (professional) support*

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#### JUNIOR SECONDARY LEVEL

	Number of respondents in specified category		Chi-square	P
	Positive (Total n = 137) <sup>1</sup>	Negative (Total n = 56)		
1. Teachers who have been appraised	113	35	7.7994	p<.01***
2. Taught maths for over 5 years	50	18	0.1669	—
3. Professional maths teachers	15	7	0.0030	—
4. Female teachers	16	8	0.0501	—

#### SENIOR SECONDARY LEVEL

1. Teachers who have been appraised	64	91	13.9778	p<.001***
2. Taught maths for over 5 years	59	89	16.5128	p<.001***
3. Professional maths teachers	51	89	25.2854	p<.001***
4. Female teachers	13	11	0.2056	—

\* Significant at 5%

\*\*\* Significant at 1%

It may be inferred from the table that at the junior secondary level, only appraisal experience correlated significantly with perceived support. At the senior secondary level, however, three variables, namely, appraisal experience, mathematics teaching experience and

The prediction was that at both junior and senior secondary levels, mathematics teachers who had been appraised would be more positive about the potential of TAG to help them improve their teaching of mathematics than those who had not been appraised. At both levels,

appraisal experiences was significantly related to perceived support at the 1% alpha level. At the junior secondary level, 113(76.4%) out of the 148 respondents who had been appraised were positive about TAG as compared to 24(53.3%) of the 45 who had not been appraised,  $X^2(1, N=193)=7.7944, p<.01$ .

At the senior secondary level, 64(41.3%) out of the 155 respondents who had taught mathematics for more than five years were positive about the potential of TAG, while 62 (66.7%) out of the 93 non-appraised respondents were negative about TAG,  $X^2(1, N = 248) = 13.9778, p <.01$ .

### ***Mathematics Teaching Experience***

The second hypothesis tested in the present study concerned the relationship between experience in mathematics teaching and perceived support. It was predicted that teachers who had taught mathematics for longer periods would be positive about the potential of TAG to help them to improve their teaching of mathematics. At the junior secondary level 50 (73.5%) out of the 68 teachers who had taught mathematics for more than five years were positive about

the potential of TAG to help them to improve their teaching of mathematics whilst 87 (69.6%) of the 125 teachers with five years or less experience in mathematics teaching viewed TAG positively. It may be noted that, on the face of it, the difference between "experienced" mathematics teachers in terms of perceived support was not statistically significant even at the 50% alpha level,  $X^2(1) = 0.1669, P > .50$ .

The situation looked different at the senior secondary level. At that level, 59 (39.9%) out of 148 of "experienced" maths teachers as opposed to 67 (67%) out of the 100 "inexperienced" teachers - nearly double the former percentage - viewed TAG in a positive light. Thus, at this level, there was an apparently strong relationship between mathematics teaching experience and perceived support in the direction predicted,  $X^2(1) = 16.5128, P <.001$ .

### ***Professional Status***

Hypothesis 3 predicted that at both levels, professional mathematics teacher would be more positive about the potential of TAG to help them to improve their teaching of mathematics. The initial findings, as far as professional status is concerned, were that hypothesis 3 was not supported at either levels. Null results were obtained at the



junior level but at the senior level, the relationship between professional status and perceived support was, on the face of it, very strong and in the opposite direction.

At the junior level, 15(68.2%) out of the 22 'professional' respondents were positive about TAG whereas 122 (71.3%) out of the 169 non-professionals were positive,  $X^2(1, N=193)=0.003, p>.95$ . The situation at the senior level was, as mentioned above, very different. At that level, only 51(36.4%) out of the 140 professionals were positive about TAG as compared to 75 (69.4%) out of the 180 non-professionals, resulting in an apparently strong association between professional status and perceived support,  $X^2(1, N=248) = 25.3854, p<.001$ .

### *Gender*

The fourth hypothesis tested in the study was about gender differences in perceived professional support. It predicted that at both junior and senior secondary levels, female mathematics teachers would view the potential of TAG to help them improve their teaching of mathematics differently from male mathematics teachers. The results obtained were apparently unresponsive of this hypothesis for, at both levels, no significant differences were found between males and females about their views about TAG. At the junior secondary

level, 16(67%) out of the 24 female mathematics teachers and 121(71.6%) out of the 169 male mathematics teachers were positive about TAG. As mentioned above, the difference between female and male respondents with regard to their views about TAG was not significant,  $X^2(1, N=193) = 0.2056, p>.50$ .

At the senior secondary level, the corresponding figures (indicating positiveness towards TAG) were 13(54.2%) out of the 24 females and 113(50.4%) out of the 224 male respondents. Here too, the difference between males and females in terms of their views about TAG was not significant,  $X^2(1, N=248) = 0.2056, p>.50$

### *Further Analysis*

In the chi-square analyses presented above, no more than two of the independent variables were used at a time. This means that the chi-square analyses provided no means of examining the combined 'effect' of the independent variables on the dependent variable. It also means that they provide no means of disentangling the web of correlations that appeared to exist between the independent variables in order to find the effect each of them had on the dependent variables 'on its own'. It therefore seemed necessary to re-examine the variables discussed above using procedures that would take into account not only the relationships

between the various independent variables, but also those between a combination of the latter and the dependent variable. Thus, in an attempt to throw more light on the relationships between the main (dependent and independent) variables discussed above, and to find out how the independent variables affect the dependent variable directly or indirectly, linear discriminant function analyses were done.

Each of the variables was examined to see how best it can, on its own, discriminate between the above groups of teachers on the basis of their scores on the dependent variable. Put differently, the discriminant power of each variable was calculated for each of the three sets of data (i.e. junior secondary, senior secondary, and the combined sets). The discriminant power of each variable was arrived at by finding the percentage of "grouped"

cases correctly classified by the variable on its own, using the "stepwise" procedure on the SPSS discriminant analysis programme. Table 3 gives the discriminant power of each of the variables of interest.

The table shows that, at the junior secondary level, appraisal experience could, on its own, correctly classify 71 percent of the respondents into two groups - positive and negative - in terms of their actual 'scores' on the dependent variable. None of the remaining three variables namely, mathematics teaching experience, gender and professional status could, on its own, classify any of the respondents. In other words, they were too weakly related to the dependent variable to classify any of the respondents - an observation which appears to confirm the results reported in the last section.

*Table 3*

*Discriminant power of the main independent variables*

Variable	Junior Secondary % classified correctly	Senior Secondary % classified correctly	Combined Data % classified correctly
Appraisal experience	70.98	61.69	-
Maths teaching experience	-	62.90	59.64
Professional status	-	66.13	66.44
Gender	-	-	-

At the senior secondary level, and in much the same way, each of the three variables that correlated significantly with the dependent variable at that level (when chi-square values were used) could, on its own, assign respondents to the two groups with some degree of success. For the combined data, the variables, mathematics teaching experience and professional status were the only ones that qualified for analysis, with professional status emerging as the best single variable for correctly classifying 66 percent of all the 441 respondents. In fact, the linear discriminant function analysis confirmed the results obtained from the chi-square analysis.

### *Discussion*

It is interesting to note that at both levels and in both analyses, gender was not significantly related to the dependent variable and both mathematics teaching and professional status at the junior secondary level need to be explained. Also to be explained is the fact that contrary to the prediction that at both junior and senior secondary levels, mathematics teachers who had been appraised would be more positive about the potential of TAG to help them improve their teaching mathematics than those who had not been appraised, the relationship between the two variables were in

different directions at the two levels. Whereas the relationship between appraisal experience and perceived support was in the predicted direction at the junior secondary level, the direction of the relationship between the variables was reversed at the senior secondary level.

Explaining first the apparent difference between the groups in the direction of the relationship between the dependent variable and appraisal experience, one major reason why the results at the senior secondary level showed a deviation from the prediction is the type of appraisal experience the respondents get at the two levels. As mentioned above, 44 Ghana Education Service Officials (GESOs) who appraised mathematics teachers at either the JSS level or SSS level took part in the study. Of these 29 were circuit supervisors who appraise mainly junior secondary mathematics teachers as well as teachers of other subjects. The remaining 15 appraisers were responsible for appraising teachers at the secondary level. Although at the latter level, emphasis is placed on subject specialisation and that where possible, GESOs are supposed to appraise teachers who teach the appraisers' specialist subjects, most of the officials who had appraised mathematics teachers were not mathematics specialists.

In fact, only eight (18.8%) of the appraisers who had appraised mathematics teachers were mathematics specialists. Of the eight, three appraised mathematics teachers at the junior secondary level and five appraised mathematics teachers at the senior secondary level. What is more, not all the non-mathematics specialists had been trained in the appraisal of mathematics teaching. As many as 15 (41.6%) of the 36 non-specialists had not been trained. Eight of these were operating at the junior secondary level whereas seven of the untrained non-specialists operated at the secondary level.

Thus of the 15 appraisers who appraised mathematics teachers at the senior secondary level, seven (47.0%) were either non-specialists or not trained. The corresponding percentage at the junior secondary level was about 17%. Thus whereas 27% of the appraisers at the junior secondary level lacked the expertise in mathematics teaching or its appraisal, as high as 47% lacked such expertise at the senior secondary level. As Ball (1988) points out, "knowledge of mathematics is obviously fundamental to being able to help someone else learn it" (p.12). Many of the appraisers at the senior secondary level were not in the position to help mathematics

teachers improve their performance. In other words, the feedback most of the mathematics teachers, especially those at the senior secondary level, got from the appraisers could affect their perceptions of the appraisal system negatively. The suggestion is that mathematics teachers who doubt the expertise of their appraisers would not be satisfied with the appraisal feedback from such appraisers (Larson & Callan, 1990; Raymond, 1993).

It can be inferred from Table 2 that, apart from appraisal experience, the relationship between perceived support and each of the variables, mathematics teaching experience and professional status was the reverse of the one predicted at the senior secondary level. At the junior secondary level, no significant relationship was found between the dependent variable and either of the variables under discussion.

The leader-member exchange model describes the process by which members in an organisation evolve their roles through interactions with their supervisors. As a result of this process, quality of exchange ranging from low to high develops between the teacher and the supervisor. Early research examining the model indicated that a superior develops different quality exchange relationships with

subordinates and these relationships are relatively stable over time (Dansereau et al. 1975; Graen and Cashman, 1975). Later studies (eg. Kingstrom and Mainstone, 1985) were focused on the relationship between exchange quality and supervisor and subordinate attitudes and behaviours. Results suggested that, in comparison with a low quality exchange relationship, a high quality exchange relationship is related to more supervisor support and guidance, higher subordinate satisfaction and performance, greater subordinate influence in decisions and lower subordinate turn over.

The relationship between Ghanaian teachers, particularly the experienced ones, and their supervisors has been far from anything that can promote a high quality exchange behaviour between the two groups. The rather depressing relationship that has existed between teachers and their supervisors is well documented (e.g. Bame, 1991). It would appear that in spite of the changes that the reform is purported to have brought in the supervision of teaching, the relationship between teachers and their supervisors does not seem to have changed for the better.

Thus following Graen and Cashman's (1975) observation about the relative stability of superior-subordinate relationships

over time, it is reasonable to expect more experienced teachers especially at the senior secondary level to make "on-line" judgements in the negative direction about the supervisory activities of GES officials. This could be more so in the case of mathematics teachers, considering that most of the supervisors might not have the requisite knowledge in mathematics or its teaching to enable them offer any help to these teachers.

It may be recalled that the hypothesis concerning professional status stated that at both junior and senior secondary levels, professional mathematics teachers will be more positive about the potential of TAG to help them improve their teaching of mathematics. At both levels, there was a deviation from the prediction. Whereas no significant relationship was found between professional status and perceived support at the junior secondary level, the predicted direction of the relationship between professional status and perceived support was reversed at the senior secondary level. Both results need to be explained.

Firstly, the difference between junior secondary and senior secondary mathematics teachers with regard to the relationship being examined may be due to the difference between the proportion of professionals at the two levels.

Indeed the tiny proportion (11.4%) of professional respondents at the junior level makes any conclusion about relationship between professional status and perceived support at the junior secondary level appear unsafe. The tentative conclusion therefore is that there were insufficient data at the junior level to enable safe conclusions to be drawn, notwithstanding any claim that the data were representative of the proportion of professional mathematics teachers at the two levels.

Secondly, considering that most of the appraisers at both junior and senior secondary levels were found to lack expertise in mathematics, it is no exaggeration to suggest that the difference between the two groups of teachers may be due to the possible differences in the levels of competence and self-concept in mathematics between the two groups. Indeed, Grouws (1992) has cited a number of studies (e.g. Byrne, 1984; Marsh, 1986) on the individual's self-concept in mathematics which findings suggest that the relationship between self-concept and achievement is consistently positive. If these findings are anything to go by, then teachers who have low achievement levels in mathematics and as a result poor self-concept in the subject, would be more likely to accept feedback from an external source than those with high self-

concept in the subject. It is suggested that the professional teachers at the junior secondary level differ from their counterparts in the senior secondary schools in terms of self-concept in mathematics. This view was supported by the interviews conducted during the study.

The fourth hypothesis tested was about gender difference in perceived professional support. It predicted that at both junior and senior secondary levels, female mathematics teachers would view the potential of TAG to help them improve their teaching of mathematics differently from male mathematics teachers. The results obtained were apparently unsupportive of this hypothesis, for at both levels, no significant differences were found between males and females about their views.

In as much as one would wish to explain the above "deviation" from the hypothesis, one would also have to point out the difficulties involved in explaining the null results involving gender in the present study, considering the small number of female mathematics teachers who took part in the study. At either levels, 24 females took part in the study. This figure represents 12.4% and 9.7% at the junior and senior secondary levels respectively. Consequently, no further discussion

of the data on gender can be justified. Nevertheless, the data may be the starting point of further research, looking, for example, at gender differences in performance appraisal ratings.

### Other Findings

In addition to the findings resulting from the testing of the hypotheses, the study made other findings through the interview and observation data. For example, the study found that in line with the Ministry of Education's stand on appraisal, the system was, at the time of the study, being used for both staff development and the assessment of performance for promotion and other related purposes. In fact, the appraisal system used for both accountability and professional development purposes and the same set of officers were used for both purposes! The lack of expertise among these officers clearly invalidated the appraisal system (Yen, 1991; Brown and Borko, 1992).

Besides, the dual use of an appraisal system often creates confusion as teachers are most of the time not aware of what purpose they are being appraised for. This confusion appears to confirm the fears of writers like Powney (1991) who hold the view that no appraisal

system can serve both purposes. Bame (1991), for example, comments on the dilemma the dual role poses in the Ghanaian educational setting:

“We noted that (the) majority of both the teachers and headteachers acknowledge the usefulness of some aspects of the supervision carried out by officials, in that it helped teachers to improve their teaching. But at the same time, they indicated that ... the officials always tried to find fault with ... teacher's work” (Bame, 1991, pp. 114-115). The study also confirmed Gokah's (1993) observation that only the managerial appraisal method was being used in the appraisal of mathematics teachers in Ghana. Classroom observation was found to be the main instrument for the collection of data for teachers' work for both formative and summative appraisals, particularly at the junior secondary level. It was found that classroom observation when it was used to collect data about teachers' work, for either purpose was used once or twice, not more. It is worth pointing out that the scanty samples of teachers' work used in summative evaluations weakened the validity of classroom observations in the present study.

The only other instrument used to appraise mathematics teachers for summative purposes was the

promotion interview. Here too, the study concluded that the nature of questions mathematics teacher were asked at such interviews invalidated the interviews. This is because the interviewers did not ask enough questions about teachers' classroom practice. Far too many of the questions were on issues that bore no relevance to mathematics teaching. Asked why general knowledge questions dominated the interviews, an officer who served on one of the interview panels rightly argued that although academic qualifications are important in the teaching profession, they are not enough to make one a good teacher and that the GES was committed to rewarding good teachers. Other factors, he argued, had to be taken into account. Nevertheless, not asking a mathematics teacher or indeed any teacher enough questions about their classroom practice leaves one in doubt as to what the purpose of the promotion interview is.

### **Conclusion**

The findings of the present study lead to the conclusion that the teacher appraisal system in the GES is far from valid. It must be emphasised, however, that knowing (rightly) that the system of teacher appraisal in Ghana is not valid, and improving one's teaching are two different things. Professional mathematics teachers may be

aware of the lack of mathematical expertise among their appraisers but this knowledge cannot, on its own, help them to improve their work. In fact, such knowledge can even lead to complacency. It appears the main way of helping teachers to improve their working through the teacher appraisal system in Ghana is, in view of the findings of the present study, to make changes to the present system of appraisal of teachers in Ghanaian schools generally and that of the appraisal of mathematics teachers in Ghanaian secondary schools in particular. Indeed, both Nyoagbe (1993) and Bame (1991) recommended that there should be restructuring of the supervisory relationship between officials and teachers. They both urged officials to show educational leadership by suggesting new ideas to teachers and by practical demonstrations which will help the teachers discover alternative means of improving their work. This view was shared by nearly all the mathematics teachers who took part in the study, especially those at the senior secondary level. They all expressed the need for professional support through formative appraisal processes conducted by competent officials who would be capable of raising their confidence in the teaching of the subject.

Thus, in addition to Nyoagbe's (1993) recommendation that "the



GES should appoint a good corps of supervisors to infuse professional consciousness in teachers and guide them to improve (their) performance” (p. 15), teachers must perceive the supervisory activities of present and future officials in a positive light.

These officials should be conversant with the teaching of mathematics at the pre-tertiary level of the education system. Admittedly, it would be extremely expensive to appoint supervisors subject by subject, yet if the emphasis the government is putting on mathematics, science and technology is to translate into real gains in these fields, then there is the need to train professionals who would help teachers in these areas. Such professionals when appointed should go through a period of intensive training during which time they would be exposed to different uses of appraisal and how they can be applied to suit local conditions. In addition to the pre-service training, they must be given the opportunity to attend international courses and conferences on appraisal. Another important observation is that, the findings of the present study call for the reintroduction of mathematics and science organisers at the district offices. These organisers were redeployed as part of the reform programme. Many of them are now in charge of Basic

Education Certificate Examinations, serving as links between the district offices and the West African Examinations Council. This redeployment has clearly led to waste of vital “resources”. These specialist officers ought to be responsible for the professional development of junior and senior secondary mathematics and science teachers whereas the present supervisors would concentrate on the general running of the schools by heads and deal with matters relating to allocation and uses of educational facilities. This means that the organisers must be very well qualified and experienced teachers some of whom may even be drawn from the universities. Should the circuit supervisors need information about mathematics teachers’ professional needs, they should collect such information from the mathematics organisers, who will only give such information with the teachers’ consent.

With regard to appraisal for promotion and other summative purposes, the GES should train officers who would be able to ‘assess’ teachers’ performance accurately if such assessment would be needed for such summative purposes. Most importantly, the promotion interview should reflect the type of work teachers do in their classrooms as such a move could encourage teachers to learn more

about what is expected of them as mathematics teachers. It appears that one of the reasons why appraisers at promotion interviews do not attempt to ask mathematics teachers any question about the subject is their lack of confidence in the subject. This means that if the promotion interview is to reflect mathematics teachers' classroom work, then those who interview them must be mathematics specialists who would understand the various problems facing mathematics teachers in the secondary schools.

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**THE INFLUENCE OF HOME  
ENVIRONMENT ON THE ACADEMIC  
PERFORMANCE OF SECONDARY SCHOOL  
GIRLS IN ZANZIBAR**

**A. O. Agu and A. K. Hamad**

*ABSTRACT*

*This study is concerned with the home factors that affect girls' continued participation in the second level educational system in Zanzibar. It focuses on how variations in household work habits, intellectual stimulation at home and parental expectations and attitudes towards their children impacted on girls' and boys' academic performance. The study was conducted in only one of the two main Islands of Zanzibar – Unguja. Four instruments – questionnaire, interview, observation and document analysis – were used. A total of 145 persons were selected through random and purposive sampling. These included 80 JSS students, 16 teachers, 4 head teachers, 5 Ministry of Education Officials, and 40 parents. The results indicated that the aspects of home environment examined are contributory factors that affect the academic performance of secondary school girls in Zanzibar.*

*There is evidence of inequitable allocation of resources and values at the household level, which favour the boys in terms of homework habits, intellectual stimulation, and parental expectations and attitudes.*

**Introduction**

Zanzibar is part of the United Republic of Tanzania. It consists of two main islands: Unguja and Pemba, and other smaller islands, all located about 40 kilometres in the Indian Ocean off the coast of Dar es Sallam and Mombassa. Administratively, Zanzibar has five regions, each with two districts. According to the 1988 Population Census, Zanzibar had a population of about 640,685. The average population growth was 3% per

annum in the 1980s. In 1996 the population was estimated to be 750,000. The population consists of people from different ethnic background, the majority of whom are Africans. About 59% of this population live in Unguja and 40% in Pemba; the remaining one percent lives in the smaller islands. The female population is estimated to be 51%, while the one for the male is 49%.

The official language is Kiswahili, which is spoken by the whole population. English is taught as a second language at the primary school level and is the medium of instruction at the secondary school level. The main religion of the people is Islam and there is an Arabic cultural influence in the country. Arabic, therefore, is taught in all government schools.

Since independence in 1964, education in Zanzibar has been free and became compulsory from the age of seven to sixteen in 1992. The education system comprises ten years of basic education (seven years of primary and three years of junior secondary, two years of senior secondary and a further two years of higher secondary leading to university education. In 1998,

there were 139 primary schools with an enrolment of 135, 225 pupils and 113 secondary schools with an enrolment of 32,309 (MOEZ, 1998).

#### Background to the study

This study is concerned with the home factors that affect girls' continued participation in the second level educational system of Zanzibar. The introduction of free education policy in 1964 (immediately after the Revolution) increased access to education tremendously. The number of primary schools increased from 62 in 1963 to 139 in 1989. Within the same period, the number of pupils in primary and secondary schools increased from 19, 106 and 734 to 135, 225 and 32, 309 respectively (MOEZ, 1998). The policy created an enabling environment for girls to access schooling, such that the enrolment of girls and boys at the basic school level has been almost the same for the past decade (see Table 1). But the gender gap in the system sets in at the selection to the senior secondary that is the second two-year cycle that completed ordinary level (O Level) secondary education.

*Table 1:  
Trends in Form One Enrolment of Females  
and Males in Zanzibar (1982 – 1998)*

Year	Females	%	Males	%	Total
1982	3107	48.9	3207	51.1	6314
1984	1435	49.8	1771	50.2	3206
1986	2810	50.0	2805	50.0	5615
1988	2681	50.1	2669	49.9	5350
1990	3237	51.7	3023	48.3	6260
1992	3417	51.6	3195	48.4	6612
1994	5050	50.3	4990	49.7	10040
1996	4563	48.9	4762	51.1	9325
1998	5801	48.8	6069	51.2	11891

Source:

Budget Speech 1988 and 1992, Ministry of Education, Zanzibar.  
Figures for 1994 – 1998 were computed from MOEZ Annual  
Statistical Abstracts.

At the level of form three, a common examination is administered to select students who will access the senior secondary level. In the examination girls have tended to perform lower than boys. Consequently, girls are not equitably represented in the senior secondary school system (see table 2), and consequently in higher

education (see table 3) and the labour markets. The low performance of girls at this critical examination is one of the most formidable constraints to the reduction of the gender gap in secondary and higher education in Zanzibar. It is the major cause of the relatively low transition rate of girls from junior secondary to senior secondary.



*Table 2*  
*Selection of Students from JSS to SSS*

Year	Total Candidates				Students Passed					
	Girls	%	Boys	%	Total	Girls	%	Boys	%	Total
1988	2063	48.0	2237	52.0	4300	222	38.5	350	61.5	572
1989	2061	50.3	2036	49.7	4097	197	38.5	315	61.5	512
1990	1912	50.4	2880	49.6	3792	127	39.5	212	60.5	349
1991	1998	50.7	1941	49.3	3939	138	34.8	259	65.2	397
1992	2607	52.4	2371	47.6	4778	138	38.0	228	62.0	363
1998	3685	50.2	3659	49.8	7344	1043	45.4	1255	54.6	2298

Source:

*Budget Speech Ministry of Education, Zanzibar, June 1993 (for data 1988 – 1992); 1998, data, computed from MOEZ, Annual Statistical Abstract 1998, Page 52.*

JSS – Junior Secondary School

SSS – Senior Secondary School

*Table 3: Number of Students who graduated from Technical Colleges in Zanzibar 1980, 1985 and 1993*

Year	Kaarume Technical College		Mikunguni Technical College	
	Male	Female	Male	Female
1980	36	0	36	0
1985	53	16	18	17
1993	24	5	21	8
Total	113	21	75	25

Source: Ministry of State – Women and Children Affairs, 1994

The basic argument is that girls' increased access to senior secondary education is very important in making improvement in the reduction of gender gap in education in Zanzibar. Increasing girls' access to education, however, requires girls' improved performance in the common examination in JSS. The critical question for this study is: what factors account for the relative lower performance of girls at this examination?

Studies have shown that girls' performance at lower levels of education in Tanzania is about the same as that of boys. (Tadreg, 1990; Mbilinyi and Mbughuni, 1991). The issue is why the difference at the secondary level? Most researchers have tried to use socio-economic factors to explain the variation in school performance between two different groups (Coleman, 1966; Jenck, et al. 1972; Sewell and Hauser, 1976; Bloom, 1980). But the socio-economic variable is a very complex one, including income, level of parental education, parental occupation, neighbourhood and home environment and others. It is a load status characteristic that is not easily made operational from a policy perspective. To unpack this complex variable, the authors used

an aspect of it, the home environment, where we felt that the critical dynamics originate and converge.

The major assumption is that besides the school environment and resources, the home environment plays a significant role in academic performance. The home has been viewed as a place where the child is prepared to take up the challenges of schooling. (Simmons and Alexander, 1978; Mbilinyi, 1972). Many studies on education performance indicate that learning which occurs in the home is much more important than that which occurs in school (Epstein, 1988; Lightfoot, 1978; Walberg, 1984). Home environment comprises a set of variables that constitute the emotional climate of the family provided by the interaction process between the adult members and children. This process mediated by levels of education, income, type of job, and the size of the family constitutes a large chunk of the form and substance of the family life dynamics.

The effect of home environment on students' academic performance can be explained in two ways. First, at the early stage of development a child is born to a family and grows up within the scope and characteristics of his or her

environment. The child at this stage acquires the initial social behaviour and manners. It is argued that the child's intellectual potentialities for success in school education depend on the initial efforts of the parents in cultivating this potentiality and thereby establishing a good functional relationship with teachers (Durojaiye, 1976). Secondly, after school hours, children spend the rest of the time at their homes. Some parents may show interest in helping their children in their studies while at home, while others may not. Research has consistently documented the importance for student achievement of family involvement (Epstein, 1983, 1988; Laichter, 1974; Welberg, 1984). During the later elementary years, parental contributions to school achievement may be most efficiently mediated through parents' support at home of school initiated activities (Snow, et al. 1991). From a grounded perspective, parental assistance and or non-assistance may affect boys and girls differently.

It has been argued that the aspects of the home environment that influence academic performance of the child include:

- i. work habits of the family, i.e. the degree of structure and routine in home management;
- ii. academic guidance and support (i.e. parental encouragement on school work);
- iii. intellectual stimulation (i.e. activities by family members to provide intellectual interest);
- iv. language model and quality of language used by the parents, and;
- v. Parental academic aspirations and expectations (Bloom, 1980).

The focus of this study is to find out how three of these aspects explain relative lower academic performance of secondary school girls in Zanzibar compared to the boys.

Consequently, the study was guided by the following three questions:

1. How homework habits influenced girls' and boys' academic performance.

2. How intellectual stimulation at home differently influenced girls' and boys' academic performance
3. How parental expectations and attitudes towards their children and across gender differently affected girls' and boys' academic performance.

### *Method*

#### Sample

The study was conducted in only one of the two main islands, Unguja. This reduces the generalization of the findings. But the issues and lessons may not likely differ because of historical and cultural similarities between the Islands. Four schools were studied. While Ben bella and Vikokotoni schools are urban, Mahonda and Mkwajuni are rural. A total of 145 persons were selected through random and purposive sampling. These included 80 JSS students, 16 teachers, four headteachers, 40 parents and five Ministry of Education officials.

#### Instruments

Four instruments – questionnaire, interview, observation and

document analysis – were used to collect the data. Questionnaire was used to collect information on the general performance of students, parental follow-up of children's progress, home environment and children preparation for Entrance Examination. The structured interview was used to obtain information on academic performance of students and to probe teachers and headteachers. Observation technique was used to observe children's routine before and after school hours. The document analysis was used to get background information. Documents analysed included students' progress reports, and Class Attendance Registers.

#### Findings and Analysis of Data

The presentation of findings and analysis was guided by the three research questions stated above.

#### *How did homework habits influence girls' and boys' academic performance?*

The researchers tried to find out the variation in work habits in terms of gender from various home environments. Tables 4 and 5 show the main activities performed by students before and after school hours respectively.

*Work habits before school hours.*

The concern here was how household work habits before school hours affect girls' versus boys' performance. These are captured in table 4.

Only 10% of the boys from the urban areas were involved in household chores. This level of participation by the boys, though low, did happen because the boys did not have sisters at home. There was no information on boys' participation in household chores in the rural areas. One could argue that it would be less than the urban.

Table 4

*Main Activities Performed by students before School Hours*

Activities	Urban				Rural			
	Girls		Boys		Girls		Boys	
	Frequency N=20	%	Frequency N=20	%	Frequency N=20	%	Frequency N=20	%
Household Chores	14	70	2	10	18	90	-	-
Fetching Fire Wood and Water	6	30	-	-	10	50	-	-
Household income generating activities	-	-	3	15	-	-	7	35
Preparation for School Work	6	30	2	10	-	-	4	20

Source: Computed from Students' Questionnaire

Table 4 shows the activities/tasks performed by girls and boys before school hours. Household chores which include cleaning the house and surroundings, preparation of breakfast and washing of all the utensils used for supper constitute the first and main activities performed by girls. The rate of their involvement varies from 70% in the urban areas to 90% in the rural

The second activity was fetching firewood and water for the household's daily use. This was found to be more of an activity for girls in the rural areas (50%) than the urban ones (30%). The variation was as a result of the availability of pipe-borne water close to the households in the urban areas. Boys, in both urban and rural areas, were completely not involved

in this activity. The third activity performed before school was helping the family in income generating activities. These activities include cattle and goat rearing, poultry keeping, and vegetable gardening. This activity was found to be fully the affair of the boys. The rates of involvement were 20% for urban boys and 40% for rural boys.

to school. This was reported for the girls who were in most of the cases fully occupied in the mornings with household chores. In the urban areas 30% of the girls and 10% of the boys were found involved in this activity. In the rural areas 20% of the boys and none of the girls were involved.

*Table 5  
Main Activities Performed by Students After School Hours*

Activities	Urban				Rural			
	Girls		Boys		Girls		Boys	
	Frequency N=20	%	Frequency N=20	%	Frequency N=20	%	Frequency N=20	%
Household								
Chores	8	40	2	10	14	70	-	-
Feeding Animals	-	-	4	20	-	-	18	90
Fetching Water	4	20	-	-	9	45	-	-
Farm Work								
(Shamba)	-	-	3	15	2	10	8	40
Private Study	5	25	6	30	7	35	6	30
Tuition	12	60	10	50	-	-	-	-

Source: Computed from Students' Questionnaire

The fourth activity was preparation of school work. This included completion of school-home work assignments and preparatory readings for schooling. Students who were unable to complete their homework the previous day either in school or at home had to do them early in the morning before going

Looking at the data, it could be argued that one of the explanations for fewer boys' involvement is that most had time to do their homework the same day. They did not have to rush them in the morning as the girls. In the rural areas, the explanation seems different. More of the rural than the urban boys'

involvement could be related to the disproportionate heavy involvement in household chores and the fetching of firewood and water.

#### *Work habits after school hours*

The issue here was how household work affected girls and boys after school hours. Table 5 shows the activities performed by students after school hours. The work habits after school hours follow the same pattern as the work habits before school hours. After school hours girls remain more engaged than the boys with household chores, like preparing meals, caring for younger brothers and sisters and going to the market. The only activity performed solely by the boys is feeding animals, predominantly by the rural boys (90%). Furthermore, boys are more involved in farm work than girls. But these activities are not as time consuming as household chores and fetching of water. This is because household chores and fetching of water are much more recurrent than farm work and feeding of animals.

After school girls are more involved in family chores. One girl from one of the schools studied – Vikokotoni Secondary School had this to say:

“When I come back from school, I take tea. I go to the market to buy

food and cook for the family. After cooking I rush to school for the afternoon classes. I eat my food when I come back from school in the evening. This is tough for me because I do not get time to rest in between” (student interview).

Another girl, this time from another school – Benbella Secondary School had this to say:

“When I come back from school, my mother would have already prepared food and gone to the farm. I have to stay at home to take care of my two younger brothers who are six months old and three years old. I do not have time to attend the afternoon classes and the tuition study” (student interview).

While the girl from Vikokotoni secondary school is a daughter of a petty trader, the one from Benbella Secondary School is the daughter of a peasant farmer. In both cases, the girls had to attend to household chores first. This impacted negatively on their schooling and academic performance. The life of these girls is the life of most girls of the same background in Zanzibar. The same situation prevails in other African societies. Research on girls’ education in Malawi reported that in making a time allocation of the way 26 female and 16 male

students spend their after school time, the boys had twice as much time as girls for studying. Girls spend 68% of their time on domestic chores, whereas boys spend only 37.8% of their time on similar tasks. (Davidson and Kanyuka, 1972: 454).

*How intellectual stimulation at home influenced girls' and boys' academic performance*

The study investigated the educational facilities which were available at home and their accessibility to girls and boys. The facilities examined were those with the potential for stimulating intellectual interest. These included: radio programmes, textbooks and newspapers, and television programmes.

Table 6 summarizes the students' responses on the radio programmes available in order of preference.

The information on the table indicate that the first three programmes were the most popular ones. These are relatively more educational than the rest. "Follow Me" was a Ministry of Education initiative under the English Language Teaching Support Project (ELTSP), to improve the use of English Language among students and the society in general in the Isles. "From the Institute of Kiswahili" programme dealt mainly with different aspects of the Kiswahili Language and Literature. The "News Bulletin" dealt with current affairs, highlighting daily events

*Table 6  
Radio Programmes in Order of Preferences  
as Stated by Students*

Programme	Urban				Rural			
	Girls Frequency N=20	%	Boys Frequency N=20	%	Girls Frequency N=20	%	Boys Frequency N=20	%
Follow Me	18	90	14	70	13	65	18	90
From the Institute of Kiswahili	14	70	11	55	16	80	14	70
News Bulletins	4	20	-	-	9	45	-	-
Farm Work (Shamba)	-	-	3	15	2	10	8	40
Private Study	5	25	6	30	7	35	6	30
Tuition	12	60	10	50	-	-	-	-

Source: Computed from Students' Questionnaire



within and outside Zanzibar and Tanzania.

Two things seem clear from the above. One is that the radio was an important source of intellectual stimulation and readily available to most of the students in Zanzibar. Two, is that the students preferred educational programmes that are directly relevant to their studies. This makes the radio a potentially very important tool for improving education for all in Zanzibar. But the study found that the girls' accessibility to radio programmes was constrained because of the household responsibilities which demanded their attention at the time

when the programmes were being aired.

Newspapers are very important to secondary school students because they provide general and current information and help them to improve their reading skills. A look at Table 7 shows that a significant proportion of the students was found to have access to a range of the newspapers published in Tanzania. But the problem is the time to read the newspapers, especially for the girls. As was the case for the radio, girls were found to be constrained by time because of their heavy involvement in household chores.

Table 7  
Newspapers Available to Students

	Urban				Rural			
	Girls		Boys		Girls		Boys	
	N = 20	%	N = 20	%	N = 20	%	N = 20	%
Uhuru	10	50	16	80	16	80	14	70
Mzalendo	12	60	10	50	10	50	12	60
Mfanyakazi	8	40	8	40	4	20	8	40
Daily News	8	40	8	40	8	40	8	40
Jipatie Maarifa	10	50	12	60	12	60	14	70
Nuru	8	40	10	50	8	40	8	40
Mwanachi	4	20	6	30	6	30	6	30

Source: Computed from Students' Questionnaire

The issue of textbooks at home was also explored. The information on Table 8 shows a clear urban bias in the access to extra books. The girls and boys from the rural areas had no access to the books in the libraries. The girls and boys from the urban areas had access to the libraries; but more boys (60%) than the girls (25%) enjoyed the library facilities. Most girls went straight back home to accomplish the household chores. On the whole, students got extra textbooks by borrowing from the main library (50%), from the Curriculum Unit Library (30%), Home Library (25%), and those bought by parents (45%).

ensured that television sets were affordable to many people by making them custom duty free. It also distributed television sets to each Party Branch; this was the time of the one party system. In places where there was no electricity, batteries were used to operate the sets. The study found that seven television programmes were available to be watched by students at home. These included, Children's Programme, Adult Programme, News bulletin, Follow Me, Variety Programme, Film and Weekly Scope. The level of the programmes varied from those for children in pre-schools, primary

Table 8  
Extra Textbooks Available for the Students

	Urban				Rural			
	Girls		Boys		Girls		Boys	
	N=20	%	N=20	%	N=20	%	N=20	%
Main Library	3	15	8	40	-	-	-	-
Curriculum Unit	2	10	4	20	-	-	-	-
Home Library	4	20	2	10	2	10	1	5
Bought by Parents	2	10	2	10	2	10	3	15

#### Television Programmes

The government of Zanzibar introduced television in 1972 mainly for education purposes and not for leisure. To achieve that objective, the government

schools and students in secondary schools. The secondary school students were found to be more interested in the programmes related to their academic work. These included the "Follow Me" programme which was the

television version of the radio programme; the “Weekly Scope”, a one-hour programme which summarized the world weekly events; and some children’s programmes which had topics on science and technology, sports, drama, cartoons and films.

The findings revealed that some of the facilities that could contribute to intellectual stimulation of students at home such as the radio, textbooks and television are available. But girls’ access to these were limited by their heavy involvement in household chores.

*Table 9*

*Parents’ Expectation on the Level of Their Children’s Education*

	Urban				Rural			
	Girls N = 20	Boys %	N = 20	%	Girls N = 20	Boys %	N = 20	
%								
Primary	-	-	-	-	-	-	-	-
Secondary	-	-	-	-	6	30	4	20
Diploma/ A Level	6	30	2	10	8	40	6	30
Degree	14	70	18	90	6	30	10	50
<b>Total</b>	<b>20</b>	<b>100</b>	<b>20</b>	<b>100</b>	<b>20</b>	<b>100</b>	<b>20</b>	<b>100</b>

Source: Computed From Parents’ Interview Responses

Television programmes in Zanzibar are usually shown between 7.00 p.m. through 11.00 p.m. The timing is not suitable for girls. Those who did not have television sets in their homes would not be allowed to go somewhere else to watch because of the extra family protection of girls in an Islamic society, such as Zanzibar. Those in the urban areas who had the sets at home were constrained, because of their heavy involvement in household chores. The boys had both free time and freedom to watch.

The fact that the boys did not have their own fair share of the household chores afforded them more time to read their books, newspapers, watch television programmes and listen to radio programmes to the disadvantage of the girls who were saddled with household responsibilities.

*How Parental Expectations and Attitudes have affected Girls’ and Boys’ Academic Performance*

The home is usually the place where

children secure the motivation to learn and to aspire to an education and lifestyle that will serve them well in the future. Here the researchers looked at the level of education to which parents intended to educate their daughters as compared to their sons. That is whether there were variations in parental expectations and attitudes towards girls' and boys' educational levels and the basis for the difference.

The study found varied parental expectations on the educational attainment of girls and boys. Table 9 shows that none of the parents expected their children to end with primary school education. This indicates that parents were aware of the value of education. But the problem sets in when parents expect higher-level education attainment for the boys. About 90% of the parents in the urban areas indicated that they would like to educate their sons to degree level, as against 70% for the girls. With respect to the rural areas, it was 50% for boys against 30% for girls. What seemed clear and interesting was that parental expectations on their children's educational level did not differ between the urban and rural areas; the difference is in degree not orientation. The variation

is between girls and boys.

The varied expectations between girls and boys impacted on parental attitudes in a kind of Pygmalion effect in the household. A long series of studies have shown that teachers' expectations of a pupil's academic performance have a strong influence on the actual performance of that pupil. (Rosenthal and Jacobson, 1968; Wilson, 1963; Rist, 2000). This is a kind of educational self-fulfilling prophecy in which teachers, as human beings, tend to act to validate their expectations. The same logic applies to parents with respect to girls' and boys' academic performance. In order to validate their expectations, parents engage in certain behaviours that tended to be discriminatory. For example they were more willing to pay for the boys than for the girls to participate in extra classes organized in the evenings. This seemed, primarily, to be an issue of perceived returns to education. The usual argument of girls' protection from pregnancy seemed secondary. If girls' returns to education were perceived to be higher than boys', girls would have been supported to access extra classes with protective measures against pregnancy in place.

## Conclusion

### *Why the Household is not facilitative to Girls' Education*

We have seen that widening access to education has been a major policy goal in Zanzibar for the past three and half decades. This reflects a recognition that education is essential to economic and social development. But gender disparities in education, especially at the secondary level, still persist. In a sentence, the main reason is that the household in Zanzibar is not girl-child friendly. That is to say it is not facilitative towards girls' development. The study has shown some clear evidence that inequitable allocation of resources and values at the household level which favour the boys in terms of homework habits, intellectual stimulation, and parental expectations and attitudes, to a great extent, have contributed to boys' better academic performance than the girls'. The analysis of the dynamics at the household level is important because it is the place where key educational decisions are made. For a family, the costs and benefits of educating girls may be quite different from those associated with educating boys. The key issue is that in many societies like Zanzibar, the benefits

of educating women are mainly public, whereas many of the costs are private. This leads to under-investment in women's schooling and thus to the persistent gender gap.

The benefits of educating women have been succinctly summarized by Elizabeth King (1993). A better-educated mother has fewer and better-educated children. She is more productive at home and in the workplace. She raises a healthier family, since she can better apply improved hygienic and nutritional practices. Education can even substitute for community health programmes by informing women about health care and personal hygiene. Raising the level of women's education contributes in important ways to development. The question is, with societal knowledge of the tremendous benefits of educating women, why has the society not invested much to reduce the persisting gender gap?

What has come out clear from this analysis is that gender differentials in education in Zanzibar has persisted irrespective of the enabling policies by the Zanzibar government, because of the internal household choice and decision making. Specifically speaking, the persons in the household who bear the private costs of investing in

schooling for girls do not perceive the full benefits of their investment coming directly to them. This is because much of the payoff in educating women is public/social. Education, to a very great extent, is primarily a family affair influenced by perceptions about current costs and future benefits.

Depending on the society, parents tend to have different perceptions regarding the sons' and daughters' education. In certain societies, like we have seen in Zanzibar, they tend to favour sons. Such behaviour on the part of parents may not be discriminatory in itself but may be a rational response to constraints imposed by poverty and the expectation of returns determined by labour market conditions and tradition. When the expected returns to sending daughters to school do not exceed the costs of doing so, female education as an investment becomes unattractive to parents. Daughters will then be educated only to the extent that parents are willing to accept low economic returns.

Furthermore, parents may not be able to afford the opportunity costs of educating their children. These costs vary by sex and from one society to another. In some societies, such as Botswana and

Lesotho, boys perform a larger share of the labour, herding livestock. In most places, girls work more in the home. They cook, clean the house, fetch water, and help their mothers to care for the younger children as found in Zanzibar. Logically, girls who work more than their brothers will be less likely to participate fully in schooling, causing them to perform less well. This was the case in Zanzibar by the time of the study.

In conclusion what we have learnt is that the crux of the matter in gender disparity in education lies in the differences in what a household is prepared to invest in a son's and a daughter's education. The lesson is not new. This has been documented by many scholars (Schultz, 1993; Psacharopoulos, 1973; Mincer, 1974 and others). What are still missing are solutions. Which policy interventions can change household decision making preference pose a challenge for researchers and policy makers.

It is proposed that public subsidy of girls' education be increased. This is logical because the non-market productive returns to women's education are associated with important social externalities; that many societies will not have problems subsidizing.

The outcome of this increased public investment in girls' education will be increased participation of women in the labour market and consequently the perception of parents to girls' education as a result of enhanced private returns to women education. The above suggestion may not come very easily. There may be a need to research and document the returns to women's education, both in market wage increase and in non-market productivity gains at the community levels for advocacy purposes and negotiate for increased public subsidy on girls' education at the policy levels.

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## STRESS MANAGEMENT STRATEGIES OF SECONDARY SCHOOL TEACHERS IN NIGERIA

M. O. Arikewuyo

### ABSTRACT

*The study provides empirical evidence for the management of stress by teachers of secondary schools in Nigeria. A total of 3,466 teachers, drawn from secondary schools in Ogun State of Nigeria, returned their instrument for the study. Data were analysed using percentages and chi-square. The findings indicate that teachers frequently use the active behavioural and inactive (escape) strategies in managing stress. While the active cognitive strategies are never used, the teachers express mixed feelings about the adoption of the inactive behavioural strategies. Also, sex, qualifications and location have a relationship with the type of stress coping strategies adopted by the teachers.*

### Introduction

The issue of occupational stress has been of concern to many

people, especially pundits and experts in management. The issue becomes pertinent because workers in all sectors experience one form of stress or another in their work places. Stress, if not properly managed, could therefore affect the level of productivity of the workers.

Stress, as defined by Quick, Sckade and Eakin (1986), is the generalised, patterned, unconscious mobilization of internal energy resources that occur when a person is confronted with a stressor. The stressor is that condition that causes stress. The symptoms of stress could be internal or external. According to Riches (1994), the internal symptoms may include: feeling sick, being moody or having headache. The external symptoms may be throwing things, shaking with rage, weeping, etc. It is however possible for many people to experience different levels of stress, even while working under the same condition.

The signals of stress could also be behavioural and physiological. The behavioural signals include feeling of weakness and faintness, snapping at colleagues, not listening to others; doing things hurriedly; losing personal possessions; feelings of being dominated by time; feeling oppressed by imagined peer; administrative demands, etc. (Hansen, 1986). The physiological signals of stress include; high blood pressure, shaky nerves, intolerance to heat, backaches, anxiety and failure in sexual performance, etc. (Adegoroye, 1985). All these changes, according to Okorie (1997) could result into abnormal functioning in the work place. She further stated that chronic lateness to work, sloppiness, absenteeism, staff turnover, feeling of not being appreciated and decrease in work quality are also common symptoms of stress, which could affect staff morale and quality of work.

Studies have shown that teachers experience various degrees of stress. The teaching profession is not only stressful (ILO, 1981), but also increasing occurrence of unpleasant emotions, such as tension, frustration and anger as a result of teaching work has been reported (Kyriacous, 1980). From Britain, it was reported that pupils' poor attitudes, low motivation and

general uncooperativeness are factors of stress among teachers (Laslett and Smith, 1984). In Nigeria, Duyilemi (1992) discovered that lack of resources for teaching, delay in promotion, students coming to classes without necessary materials, having to teach large classes and poor attitudes of students to work were perceived to be major sources of occupational stress among teachers of primary schools. Ijaiya (2000) also reported that factors considered by teachers as stressors are poor conditions of service with the consequence of being unable to fulfil personal responsibilities; lack of recognition by the society; lack of promotion, work overload in the school, poor facilities for teaching and poor pupil academic achievement.

The indications that emerge, therefore, are that the teaching job is very stressful. The list of job-related stressors, identified by Gupta (1981) are very relevant to the Nigerian teachers. These are : role overload, role insufficiency, role ambiguity and feeling responsible for others. Role overload is a situation in which a worker is overburdened and made to achieve results within a limited time. Inadequate teachers have continued to be the bane of the Nigerian Educational system. The consequence of this situation

in the view of Arikewuyo (1999) is that a great burden would be placed on the available teachers.

Role insufficiency occurs when one works with inadequate materials and tools. This also applies to all levels of the Nigerian educational system. Nwagwu (1997) reported that the crisis of shortage of infrastructural facilities, such as library facilities and books, classrooms, furniture, laboratories and workshops, cut across all levels of the system. Role ambiguity occurs when the teacher is not quite clear about the role/task assigned or delegated to him or about how his work will be evaluated. Ijaiya (2000), however, contends that although Nigerian teachers know that they are employed to teach, the lopsided manner by which promotion is carried out makes many of them unclear about the criteria with which their work is being judged.

Feeling responsible for others implies that one feels accountable for the progress of others. Apart from being "in loco parentis" to their students, teachers also carry the responsibilities of ensuring the social, emotional and intellectual development of their students, as most parents have now abdicated the role of taking care of their children to teachers, while they run

after all sorts of business (Ijaiya, 2000).

Another study by the International Labour Organisation (ILO) captured the stressful nature of teaching profession in many third world countries, (which include Nigeria), in this way:

Overcrowded classes leading to overwork and stress which can cause lasting damage to health; the unsafe and insanitary conditions of some school buildings and the dearth of teaching materials ... (quoted by Taal, 1995).

In coping with stress, four major strategies have been suggested. The inactive behavioural strategies involve confronting or attempting to change the source of stress. The active cognitive strategies involve problem appraisal, talking about the source of stress and seeking more information. The inactive behavioural strategies involve behaviours of escape and avoidance of the source of stress. The inactive cognitive strategies involve conforming with superiors' expectations, perceiving helplessness and expressing resentment.

However, many researchers of teachers' stress in Nigeria have only focused on the sources and

causes of stress and thereby suggested theoretical strategies for ameliorating the menace. Most authors have not tried to find out how teachers cope with stress at work. This study therefore provides empirical evidence on the coping strategies adopted by teachers in managing occupational stress.

### **Statement of the Problem**

The study investigated the coping strategies adopted by secondary school teachers in managing stress. Specifically, the study attempted to find answers to this question: "what are the strategies adopted by teachers in managing stress at work?"

In addition, the following hypotheses were tested:

1. There will be no significant relationship between teachers' sex and stress management strategies.
2. There will be no significant relationship between teachers' qualification and stress management strategies.
3. There will be no significant relationship between teachers' location and stress manage-

ment strategies.

### **Methodology**

The population of the study consisted of all experienced teachers of secondary schools in Ogun State of Nigeria. These are teachers who have taught for ten years and above. The population was stratified into the four political divisions of the state. From this population, a total of 4000 teachers were sampled. However, 3466 teachers, representing 87% of the sample returned their completed questionnaires for the study. Out of this sample, 1485 were graduate teachers, while 1981 were non-graduates. Also, 2041 were male teachers, while 1,425 were females. The sample was also made up of 2031 teachers from the rural areas and 1434 from the urban areas.

The instrument used for the study was a questionnaire developed by Newton and Keenan (1985) and used by Gazieli (1993). The items of the questionnaire were generated from the four coping strategies identified by the authors. These were: active behavioural strategies; active cognitive strategies; inactive behavioural strategies and inactive cognitive strategies. The validity and reliability of the questionnaire to the Nigerian environment was determined by the researcher. The

instrument was administered on a group of teachers in another state in Nigeria. At the end of the exercise, seventeen of the twenty four items, were considered relevant, having alpha co-efficient values, ranging between 0.64 and 0.81, with an overall Cronbach co-efficient alpha value of 0.71 and significant beyond  $P < 0.001$ . The items were as follows:

- (a) inactive behavioural strategies; items 1 - 5

- (b) active behavioural strategies, items 6 - 10
- (c) inactive (escape) strategies, items 11 - 13
- (d) active cognitive strategies, items 14-17.

**Analysis of Data**

Question: What are the strategies adopted by secondary school teachers in managing stress at work? The results of the analysis are presented in Table 1

*Table 1  
Strategies Adopted by Secondary School Teachers in Managing Stress at Work*

S/N Strategies	Frequently	Once in a while	Never
1. I try to do physical exercises	41(0.01%)	192(0.05%)	3233(93%)
2. I try to keep away from this type of situation	3216 (93%)	190(0.05%)	60(0.01%)
3. I go to see a good film	-	54(0.01%)	3412(98%)
4. I do my best to get out of the situation gracefully	3333(96%)	101(0.02%)	32(0.00%)
5. I separate myself as much as possible from the people who created the situation because there is nothing I can do to change it	3329(96%)	101(0.02%)	36(0.01%)
6. I try to be very organised so I keep on top of things	3466(100%)	-	-

Table 1 Cont'd

S/N Strategies	Frequently	Once in a while	Never
7. I talk with people (other than my supervisor) who are involved	3466(100%)	-	-
8. I give extra attention to planning and scheduling	3466(100%)	-	-
9. I try to think of myself as some one who always comes through	3322(96%)	116(0.03%)	28(0.00%)
10. I devote more time and energy to doing my job	3462(100%)	04(0%)	-
11. I remind myself that work is not everything	3266(94%)	181(0.05%)	19(0.00%)
12. I try not to be concerned about it.	3333(96%)	112(0.03%)	21(0.00%)
13. I anticipate the negative consequence so that I am prepared for the worst	3324(96%)	116(0.03%)	26(0.00%)
14. I try to see the situation as an opportunity to learn and develop new skills	66(0.01%)	178(0.05%)	3222(93%)
15. I think about the challenge I can find in this situation	02(0.00%)	218(0.06%)	3246(94%)
16. I try to get additional people involved in the situation	65(0.01%)	89(0.03%)	3312(96%)
17. I decide what I think should be done and explain this to people who are affected	15(0.00%)	52(0.01%)	3399(98%)

Table 1 shows that the teachers frequently used the active behavioural strategies and the inactive (escape) strategies in managing stress. They never used the active cognitive strategies. The teachers also expressed mixed feelings about the inactive behavioural strategies.

*Hypothesis 1:*

There will be no significant relationship between teachers' sex and stress management strategies. The analysis is presented in Table 2

Table 2

*Relationship Between Teachers' Sex and Stress Management Strategies*

Respondents	Frequently	Once in a while	Never	Total	X <sup>2</sup> calculated	X <sup>2</sup> critical
Male teacher	916(629)	532(703)	593(709)	2041	467	5.99
Female teacher	152(439)	662(491)	611(495)	1425		
Total	1068	1194	1204	3466		

Table 3.

*Relationship Between Teachers' Qualification and Stress Management Strategies*

Respondents	Frequently	Once in a while	Never	Total	X <sup>2</sup> calculated	X <sup>2</sup> critical
Graduate teacher	561(484)	92(225)	832(777)	1485		
Non-Graduate teacher	568(645)	432(299)	981(1036)	1981	166.01	5.99
Total	1129	524	1813	3466		

Table 2 shows that the X<sup>2</sup> calculated is higher than the X<sup>2</sup> critical (467 > 5.99 and significant at P < 0.05). Therefore, there is a relationship between teacher's sex and stress management strategies.

*Hypothesis 2*

There will be no significant relationship between teachers' qualifications and stress management strategies. The results are presented in Table 3.



Table 3 also shows that hypothesis 2 is rejected.  $X^2$  calculated (166.01) is greater than  $X^2$  critical (5.99) at  $P < 0.05$ . Therefore, there is a significant relationship between teachers' qualifications and stress management strategies.

greater than 5.99 and significant beyond  $P < 0.05$ .

**Discussion**

The findings of this study showed that teachers frequently used active behavioural strategies to manage

*Table 4  
Relationship between Teachers' Location and Stress Management Strategies.*

Respondents	Frequently	Once in a while	Never	Total	$X^2$ calculated	$X^2$ critical
Rural teacher	297(885)	333(293)	1402(855)	2032		
Urban teachers	1212(624)	166(206)	56(603)	1434	1804.20	5.99
Total	1509	499	1458	3466		

*Hypothesis 3:*

There will be no significant relationship between teachers' location and stress management strategies.

The results of the analysis are presented in Table 4.

From Table 4, it is clear that hypothesis 3 is rejected. Therefore, there is a relationship between teachers' location and stress management strategies.  $X^2$  calculated, which is 1804.20 is

stress. The teachers preferred to appraise the problem, talk about the source of stress as well as seek information. This finding is in line with the study of Gazieli (1993), which discovered the Jewish teachers frequently using active behavioural strategies in coping with occupational stress. The adoption of the active behavioural strategies implies that the teacher organises himself very well in such a way that his duties will not be hampered by domestic chores. It

also means that even when he is stressed, the teacher feels that he could overcome the problem and consequently devotes time and energy to his professional duties.

The inactive (escape) strategies are also part of the strategies frequently used by teachers to manage stress. These strategies suggest that the teacher tries to escape and avoid the sources of stress. Here, whenever the teacher is stressed, he consoles himself with the fact that work is not everything and therefore feels less bothered. This is in line with the suggestion of Okorie (1997) that a positive attitude towards life in general is an essential prerequisite for any kind of stress management programme.

The active cognitive strategies are not popular among the teachers of secondary schools in Nigeria. Over 90% of them indicated that they never used the strategies (Table 1). The teachers probably felt that there was nothing challenging in stressful situations. It is because of this type of feeling that Iwuji (1990) enjoined that stress should be viewed as part of life which could be a means of achieving maturity in life. Thus, every stressful situation should be seen as a challenge to maturity, which must be handled constructively.

The teachers expressed some mixed feelings about the adoption of the inactive behavioural strategies. This is unlike Gaziel (1993), who discovered that Arab teachers usually employed inactive behavioural strategies in coping with stressful situations. The present finding further confirms the observation of Newton and Keenan (1985) that people do not approach each coping context anew, but rather bring to bear a preferred set of coping strategies that remain fixed across time and circumstances. Earlier, Folkman and Lazarus (1980) agreed that coping should be thought of as a dynamic process which could shift in nature from stage to stage of a stressful transaction.

Still on the adoption of the inactive behavioural strategies, the findings indicate that 93% of the teachers never engaged in physical exercises nor watched films in order to manage stress. This perhaps bothers on the fact that most workers in Nigeria do not engage in recreational activities due to ignorance of the value of recreation, lack of recreational facilities and skills, as well as economic difficulties (Mgbor, 1995). Recreational activities, according to Bucher (1985) will promote total health - physical, emotional, mental

and social, as well as provide avenues for abundant personal and family living. In addition, Adesanya and Ogunleye (1996) have argued that sports and relaxation are capable of preventing stress. In spite of these findings, the teachers frequently keep away from any situation that could cause any stressful situation, try to get out of the situation gracefully and endeavour to separate themselves from people who cause stressful situation (Table 1 ).

Furthermore, findings of this study indicate that teachers' sex, qualifications and location have significant relationship with the type of strategies adopted in managing stress. This agrees with Duyilemi's (1992) study, which discovered that sex and school location were significant correlates of occupational stress. But Duyilemi's, unlike the present study, found that job tenure or experience was not significantly correlated with the degree of occupational stress. However, while Duyilemi's study examined the sources and correlates of occupational stress among primary school teachers in Nigeria, the present study investigated the various strategies which secondary school teachers adopted in managing stress.

## Conclusion

The teacher is indispensable to the success of any educational system. But the neglect of teachers in the Nigerian society could be a source of worry and stress to the teacher. In the words of Peter Williams, Director of Education Department, Commonwealth Secretariat,

If teachers are so important and so numerous, why on earth are they so neglected? Why is it that they feel so isolated and uncared for, that they suffer indignities that other professions could not be asked to tolerate? (quoted by Taal, 1995).

To that extent, the government and society must show enough respect and recognition, not only to teachers, but to the teaching profession as a whole. Efforts should, therefore, be made to ameliorate the correlates of teachers' stress.

This study has shown that teachers in Nigeria employ different strategies in managing stress. The active cognitive strategies are not popular with the teachers. To that extent, teachers need to be orientated on the nature of life generally that stress is part of

human endeavour. Stress should be seen as a test of maturity which should be taken as a challenge. The way and manner teachers manage stressful situations will go a long way in determining their effectiveness on the job.

Teacher training institutions should develop relevant courses and programmes that will deal with topics of professional stress. Thus, right from training, teachers would imbibe the stressful realities of the teaching profession.

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## SECONDARY EDUCATION IN TRANSITION IN NIGERIA: THE QUESTION OF QUALITY

R. A. Alani

### ABSTRACT

*The paper traced the history of the development of secondary education in Nigeria since its inception in 1859. The paper noted the emphasis on traditional art and science subjects in the past and the innovations that have been brought into the secondary school curricula by the National Policy on Education published in 1977, but revised in 1981 and 1998. The problems of implementing the curricula were briefly mentioned. The paper finally highlighted steps that could be taken to improve the quality of secondary education, such as provision of physical and material resources, adequate financing of education, teacher training and development, improvement of the conditions of service for teachers and supervision of instruction, among others.*

### Introduction

Concerns have been expressed about the failure of a large number of students in the Senior School Certificate Examination (SSCE) each year. In order to meet their future aspirations and to reduce the failure rate, some unscrupulous students engage in examination

malpractices.

It has been noted that if students are adequately prepared for examinations, the incidence of cheating will be quite reduced. However, a number of happenings in secondary schools provide evidence that all is not well with the system.

In the following sections, the paper therefore examines the development in secondary education since its inception and briefly reviews the innovations that have been brought into its curricula by the National Policy of Education. Some of the problems of implementing the curricula are also briefly highlighted. The paper also considers the steps that can be taken to improve the quality of the secondary school system.

### History of Secondary Education

The Church Missionary Society (C.M.S) Grammar School, Lagos, established in 1859, was the first secondary school in Nigeria. Other

missionary groups came on board to establish their own secondary schools after the pioneering efforts of the Church Missionary Society. In 1909, the government founded Kings College, Lagos. This marked the beginning of government's ownership of secondary schools in Nigeria.

The curriculum was British in nature and most subjects emphasised the need to develop the intelligence of the students instead of orientating them toward their future career aspirations. The history and geography of Britain dominated teaching in these subject areas.

When the Universal Primary Education (UPE) Scheme was introduced in the Western Region in 1955, it became imperative for the regional government to widen access to secondary education. It was for this reason that the Western Regional Government copied the British secondary modern school system, which was of three years' duration. Subjects like agriculture, woodwork, metal work, domestic science, needlework and housekeeping were included in the curriculum (Taiwo, 1980).

The modern schools were criticised by the Banjo Commission, which was set up to review the educational

system in the Western Region, on the grounds that they provided an education which was inferior to that in secondary grammar schools although the teachers had the same qualification with primary school teachers (Ejiogu, 1986).

It is because of the inadequacies of the secondary grammar and secondary modern schools that the establishment of comprehensive secondary schools was advocated. The first Comprehensive High school was established at Ayetoro in the Western Region in 1963. The school offered the traditional Arts and Science subjects, Economics, Accounting, Typing and Shorthand, Business Methods, Cookery, Needlework, Applied Electronics, Metal Work, Technical Drawing and Fine Art (Ejiogu, 1986). The intention was to provide secondary education with bias for technical subjects. However, inadequate qualified teachers, funds and equipment affected the running of the school.

The National Policy on Education (NPE) published in 1977, but revised in 1981 and 1998, provides uniform structure for secondary education throughout the country. Secondary education is now given in two stages: junior and senior secondary, each lasting a period of three years. In addition to

Mathematics, English, Nigerian Languages, Integrated Science, Social Studies, Art and Music, Religious and Moral Instruction and Physical Education, the junior secondary school curriculum also contains pre-vocational subjects such as Woodwork, Metalwork, Electronics, Mechanics, Local Crafts, Home Economics, Business Studies and non-vocational electives (Arabic Studies and French). After this stage, graduates who do not proceed to the senior secondary stage or other post-primary institutions such as technical colleges can go into apprenticeship training or enrol in out-of-school vocational training centres.

The senior secondary school curriculum consists of core subjects like English Language; a Nigerian Language; Mathematics; one of Physics, Chemistry and Biology; one of Literature-in-English, History and Geography; and Agriculture or a vocational subject. Students can select from vocational subjects like Metalwork, Electronics, Technical Drawing, Woodwork and Auto-mechanics. The idea is to make graduates of senior secondary schools immediately employable.

However, inadequate funding, lack of qualified teachers, equipment, teaching materials and workshops

(for vocational and technical subjects) have hampered the implementation of the secondary school curriculum. It is these and other problems that have caused the high failure rate in the Senior Secondary Certificate Examinations. A relevant question at this stage is: how can we improve the quality of the secondary school system?

The next section, therefore, focuses on steps that can be taken to improve the quality of secondary education in Nigeria.

#### Improving the Quality of Secondary Education in Nigeria

This section discusses issues which could help in improving the quality of secondary education. These include provision of material and physical resources, financing of secondary education, teacher training and staff development, conditions of service for teachers, supervision of instruction, school administration, parents/teachers associations, students' evaluation, guidance and counselling and discipline.

#### Provision of Physical and Material Resources

Most public schools urgently need materials, equipment, physical facilities, and tools for an effective



teaching-learning process and to improve the productivity of teachers.

It should be noted that the aims of secondary education include preparation for useful living within the society and preparation for higher education (Federal Republic of Nigeria, 1998). It is believed that if students take subjects like Electronics, Metalwork, Woodwork, Auto-Mechanics, Home Economics and the like and combine this education with some form of apprenticeship training, they could be self-employed. Where a student opts for higher education, and specializes in any professional course urgently needed by the country, then our attempts at realising national development will be fully fulfilled. Unfortunately, most public schools are ill equipped to execute their mandate. A number of studies (Ojoawo, 1990; Ibukun, 1992; Mbipom 1992; Bamkefa, 1994) have shown that these basic requirements for the instructional process are not adequate in most public schools at the state level.

Although these research findings were obtained a few years ago, the situation has not changed significantly in most public secondary schools up till today. Perhaps, those pupils in Model

Colleges and Federal Government College are luckier than their counterparts in State schools in this regard. This is because the former have better facilities and other educational resources than the latter. Educational achievements of pupils in these two environments are often different. This calls to question our desire to promote a just and egalitarian society.

It is therefore suggested that the public school system be rehabilitated. The rehabilitation should involve construction of decent and conducive classrooms, laboratories, libraries and workshops. Educational materials needed in schools should also be provided. The idea of refurbishing an insignificant number of schools by the defunct Petroleum Trust Fund will not improve the situation.

#### Financing of Secondary Education

The grossly inadequate funding of education has exacerbated the poor condition of the public secondary school system. It has been remarked that developing countries like Nigeria still spend lower percentages of their Gross National Product (GNP) on education than most developed countries (World Bank, 1988). Even though the World Bank study was conducted

in 1988, the situation today remains the same as that obtained in 1988. Unfortunately, the inadequate funds devoted to education are sometimes mismanaged or spent on wasteful projects. Schools are not given sufficient funds to cover recurrent expenditures. It is a common knowledge that most school principals are not involved in budgeting. It therefore becomes difficult to determine the actual needs of the schools. Everything depends on the judgement of the officials of the Ministry of Education.

It is not surprising that the basic needs of schools are never met, since those who are supposed to give useful information in the budgetary process are alienated. Proper budgeting which involves estimation of the recurrent and capital expenditures on education and identification of the sources of revenue to finance education has become necessary if schools will not continue to suffer from inadequate funding. Principals must of necessity be involved in budgeting in schools. Government and parents also need to increase their financial support for the school system. Proceeds from the Education Tax and part of the earnings from the Value Added Tax could be utilized to salvage secondary education.

### Teacher Training and Staff Development

It is true that Nigeria has made considerable progress in enhancing the quality of teachers in the primary and secondary schools. At least most schools have a good number of qualified teachers on roll. However, the preparation of these qualified teachers by institutions of higher learning should be improved upon. In recent years, and as a result of incessant closure of colleges and universities, some teacher-trainees have not had sufficient professional training. A good number of sandwich and other part-time teacher training programmes are badly packaged and delivered to clients. Public agencies like the National Universities Commission (NUC) and National Commission for Colleges of Education (NCCE) need to focus more attention on how these part-time programmes are run. Their concern should not be on full-time programmes alone since those enrolled for part-time programmes are also produced for the nation's education system. A closely related problem is lack of meaningful support for on-the-job staff development programmes. Most teachers engage in in-service training programmes without much support from their employers. What of those teachers who embark

on programmes not related to the teaching profession? Such people merely see the teaching profession as a stopgap.

Therefore, improvements need to be made in the professional preparation of teachers by ensuring that colleges of education and universities run their full academic calendars, include more course units of teaching subjects and attract quality candidates to teacher training programmes. The NUC and NCCE should collaborate with universities and colleges of education respectively to overhaul part-time teacher education programmes. Teachers should be encouraged to attend conferences, workshops and seminars. The Ministry of Education should draw up guidelines of staff development programmes. Because some teachers embark on programmes not related to teaching, the guidelines should focus on choices available to teachers, for example eligibility criteria (number of years a teacher must put in to qualify for study leave), duration of study leave, leave entitlements, promotion prospects after undergoing higher professional training, to mention a few.

### Conditions of Service for Teachers

It is apparent that the conditions of service for teachers still need improvement. Because of unattractive salaries paid to teachers at all levels, dedication, commitment and loyalty have been eroded. Teachers are not given their due respect because of poverty written on their faces. Little wonder that some teachers have now diversified their sources of income. Some of them are successful traders today. They even advertise their goods and services during school hours! Definitely, this does not augur well for the education system. Conditions of service need to be improved to ensure teachers' commitment to the profession. Opportunities must be given to deserving teachers to advance on-the-job by considering hard working teachers for promotion as and when due. Those who have acquired higher professional qualifications since joining the profession should be credited for this when considering teachers for promotion. Years of teaching experience should not be the only yardstick for promoting secondary school teachers. Teachers are only saying that they should be treated

as human beings. They want to live a decent life during and after meritorious service.

### Supervision of Instruction

The Principal and his assistants like vice-principals and heads of departments need to give sufficient time to the supervision of the instructional process. Because of their rich experience, they can assist their subordinates to improve on their performance. In some instances, one finds unpardonable mistakes in the lesson notes of teachers. This shows the kind of supervision that is conducted by those who have authority to do so. Teachers need to be informed about the benefits of instructional supervision because some teachers resent being supervised by internal or external supervisors. Such teachers should be told that nobody has monopoly of wisdom. They can therefore gain from the suggestions of their super-ordinates and peers. It is a common knowledge that supervisors from the Ministry of Education do not have adequate time to supervise teachers in the classroom. Hence, the need for within-school supervision conducted by the principal and other instructional leaders. Supervisors within the school can provide the professional assistance that teachers need in the choice

of instructional materials, methods of instruction and textbooks; organisation of content into meaningful units; writing of lesson notes, among others. The Ministry of Education should provide vehicles and other materials so that the staff of the Inspectorate Division can perform their roles effectively.

### School Administration

The administration of secondary schools of today can no longer be reduced to rule-of-thumb. There is therefore the need for the Federal and State Ministries of Education to give premium to the training of school principals. Secondary Schools are becoming increasingly complex. Hence, the school system needs managers who understand the procedures for motivating, leading and developing subordinates. Principals need some rudiments of administration to ensure that staff do their work and to promote effectiveness of the school system. A principal requires the knowledge of personnel needs in the work place, the assumptions that have been made about the nature of humanity, principles of administration, process of communication, school business management and public relations practices, to mention a few.

Unfortunately, some school administrators are autocratic, wasteful spenders and visionless. Perhaps, the Ministry of Education and its relevant agencies need to conduct selection interviews for secondary school administrators, as it is done in tertiary educational institutions. Selection of school principals needs not be based solely on years of teaching experience. To be effective and efficient, principals would need the cooperative efforts of students, staff, parents and other stakeholders. The school system needs only those who understand the business of managing people and resources to achieve the goals of education.

#### Parent-Teacher Associations (PTAs)

Parent-Teacher Associations (PTAs) should be encouraged to contribute to the development of secondary education. It is gratifying to note that the PTA has been assigned specific roles in the management of education in some states like Lagos. The 1982 Guidelines published by the Lagos State Government recognized, for instance, the need for the PTA to be involved in the provision of financial support to schools, fostering harmonious relationship

between the home and the school, maintenance of discipline at home and at school, by ensuring, for example, that parents provide the educational materials needed by children (lack of educational materials can cause indiscipline among students).

Many schools, however, do not have vibrant PTAs, because of the attitude of the school administrators, and parents, and the harsh economic conditions that have made things difficult for some parents. School administrators, in conjunction with the PTA executives, need to coordinate the activities of the association so that it (association) can assist with the provision of school facilities and materials to enhance learning situations. Parents should be encouraged to visit schools to promote interaction between the home and the school. During such visits the problems that confront a school can be explained to parents. Such forum can also be used to ensure that parents and teachers are not working across purposes. PTA meetings can also be used to inform and guide parents on how to meet their children's educational needs. Several advantages can be reaped if school authorities develop good rapport with parents through the PTA.

### Students' Evaluation, Guidance and Counselling

Secondary Schools should encourage the use of continuous assessment procedures to evaluate pupils' achievement. Although the National Policy on Education emphasises that the Junior School Certificate will be based on continuous assessment and examination conducted by State and Federal Examinations Boards, this is hardly the case in a number of States. Statewide examinations are still conducted at that level to measure pupils' achievement. Because of the high student population, many teachers fail to give adequate number of tests, projects and exercises to evaluate pupils' learning. The effects of this include poor study habits on the part of students, poor performance in final examinations and inability to cover all aspects of the syllabus when assessing students' achievement.

For continuous evaluation of students' achievement to be carried out in secondary schools, teachers need to be given orientation courses in the conduct of continuous assessments. The results of these assessments should be used to guide students in the choice of subjects. Most of the factors inhibiting students' performance can be redressed if the school authorities

are vigilant. Unfortunately, some principals place more premium on teaching subjects on the curriculum than on counselling. Such principals force Guidance Counsellors to teach some subjects instead of performing their primary duty. This situation should be reversed by ensuring that Guidance Counsellors teach some subjects at a reduced rate and also devote some time to counselling. Necessary materials and facilities should be provided so that Counsellors can perform their roles satisfactorily.

### Discipline

School objectives and goals cannot be achieved in an atmosphere where there is breakdown of law and order. Government, parents, school administrators, teachers and students need to cooperate to ensure discipline in the school system. Such vices like cultism, drug abuse, examination malpractices, etc. should be eradicated from the school system to achieve set goals. To eradicate cultism, students can be helped to get over any emotional problems they may have that can encourage them to join campus cults. Also, associations such as boys' scout, girls' brigade, etc. that have positive influence on students can be encouraged in schools, and moral and religious education can be promoted in schools. To prevent drug abuse among students, the

harmful effects of unprescribed drugs can be explained to them through health education. First Aid Boxes can also be kept in schools to ensure that pupils have access to drugs needed in emergency situations instead of patronizing Medicine Stores to buy unprescribed drugs.

Particularly worrisome in secondary schools today is the issue of examination malpractices. A situation where school personnel and parents encourage examination malpractices is appalling. The society itself needs a re-orientation because the occurrence of examination malpractices (cheating) within the school system reflects the happenings within the larger society. Today, emphasis is placed on acquisition of material wealth. The young ones have learnt how to bribe their way through to obtain live question papers from officials of examination bodies who place emphasis on money above good name. School authorities should investigate cases of fraudulent practices in examination matters and punish culprits without delay. Officials of examination bodies found guilty of aiding cheating among students should be dismissed and made to face the full wrath of the law.

There is no doubt about the fact

that the Nigerian society needs rejuvenation to address the issues of indiscipline, corruption in high and low places, and perverse values. Parents and teachers must show good examples to ensure discipline among students.

### Conclusion

This paper does not claim that the issues discussed above are the only ones affecting the quality of secondary education in Nigeria. It has merely sensitised the stakeholders on the need to re-examine the school environment and proffer solutions to problems impeding the achievement of educational objectives. There is the need for concerted efforts among the interest groups in education, government, parents, school personnel, students and the society at large, so that set objectives can be attained. We should not watch helplessly as the educational system is plunged into a state of decadence.

The education of our youth is too important to be toyed with.

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**ISSUES IN COMBINING CONTINUOUS  
ASSESSMENT SCORES WITH EXTERNAL  
EXAMINATION SCORES FOR CERTIFICATION AT  
THE BASIC AND SECONDARY SCHOOL LEVELS**

**F. K. Amedahe**

***Abstract***

*Combining continuous assessment scores with external examination scores for the certification and selection of junior and senior secondary school graduates has gained currency in some countries, including Ghana and Nigeria. While the rationale behind combining continuous assessment scores with external examination scores appears to be sound, there are some fundamental issues which must be understood and addressed by policy makers and practitioners in order to make informed decisions concerning the practice. This paper addresses some relevant issues relating to the policy and practice of combining the two sets of scores for certification. The issues include differences in the quality of teacher assessments and external examinations, methods of moderating teacher assessment scores before combining them with external examination scores and challenges of moderating teacher assessment scores. Some suggestions are made concerning how some of the issues may be resolved.*

**Introduction**

The last two decades can be described as a period of rejuvenation and transformation of the field of educational measurement with emphasis on assessment. This period has been characterized by the development of new measurement theories such as the item response theory, the reconceptualization of the concept of validity in testing, and the search for alternative ways of assessing student achievement to obtain more valid results. During the period, some countries including Ghana and Nigeria, for example, in their search for better ways of assessing and certifying students, introduced the concept and practice of combining teacher-based continuous assessment scores and external examination scores at the basic and secondary school levels into their education systems. For instance, in Ghana the

implementation of the New Structure and Content of Education in the late 1980s and early 1990s included implementing the practice of combining teacher-based continuous assessment scores with external examination scores for certifying junior and senior secondary school graduates. The assessment policy framework within the reform package stipulated that the final grading of junior and senior secondary school students should be made up of 40% continuous assessment marks and 60% external examination scores (Ministry of Education, Subcommittee Report, 1988; Opong, 1992). This weighting of the assessments was recently changed to 30% and 70%, respectively. Similarly, in the first Senior School Certificate Examination held in Nigeria in May/June 1988, teacher-based continuous assessment scores were combined with external examination scores to certify graduates (Awuwoloye, 1988). In the West African sub-region, particularly in the Anglophone countries, external examinations for certifying graduates at the basic and secondary levels of education are solely conducted by the West African Examinations Council (WAEC) on behalf of the education ministries of the respective countries.

The rationale behind using teacher-based continuous assessment as a component score for certifying graduates is that it is difficult, if not impossible, to fully capture all that a student has achieved in several years of study in a programme in a one-shot test lasting between one and three hours. It is thought that by assessing students continuously throughout a programme (by teachers), a better picture of the student's achievement would emerge. However, teacher assessment alone cannot provide the necessary and sufficient information on students' attainment in terms of the same standard across schools in a country because of the non-standardisation of teacher assessments; hence the need for an external standardised examination for students.

The use of different assessment methods, as the combination implies, agrees with *Principles for Fair Student Assessment Practices* (Joint Advisory Committee, 1993) in Canada and *Standards for Teachers' Competence in Educational Assessment of Students* (AFT, NCME, and NEA, 1990) in the United States. These professional documents on assessment indicate that different assessment modes and methods should be employed in assessing

students to ensure the collection of comprehensive and consistent information on them. This significant element is, nevertheless, missing in the use of a one-shot external examination alone in grading graduates. Some people also view the practice of continuous assessment as a way of providing timely feedback to the teacher and student for instructional and learning purposes.

Even though the rationale behind the practice of combining continuous assessment scores with external examination scores for certifying students is sound, there are some fundamental issues and concerns which must be clearly understood by policy makers and practitioners in order to make informed decisions regarding the use of the procedure. The informed decisions can aid in the form of modifying the practice to improve it, if it is so desired or discontinuing the practice. This paper addresses some issues considered relevant to the practice of combining teacher-based assessment scores with external examination scores from the theoretical and practical points of view.

### **Issues**

The practice of combining teacher assessment scores with external

examination scores is based on the premise that both teacher assessments and external examinations measure students' achievement in different subject areas in the same way. In other words, the practice assumes that teacher assessment scores and external examination scores are equally valid and reliable. This premise is not, in most cases, necessarily true. This has led to the practice of moderating teacher assessment scores before combining them with external examination scores for certifying graduates. The practice of combining teacher assessment scores with external examination scores begs some questions. These include: How comparable are teacher assessments with external examinations in terms of their quality? How comparable are teacher assessment results from one school to another? What methods can be used to moderate teacher assessment scores before combining them with external examination scores? How fair is moderating teacher assessment scores to all students? What weighting should be given to the components in the final grading of students? How can the validity of the scores resulting from the combination of the components be ascertained? What validity evidence of such composite scores

is available? Answers to the above questions and others are relevant in the implementation of the practice of combining teacher assessment scores with external examination scores for certifying graduates as a way of improving the practice. The rest of the paper is divided into four main sections. The first two sections address two main issues identified using theoretical and practical basis. The third section discusses the issues while the fourth section concludes the paper.

### **Quality of Teacher Assessments and External Examinations**

The first major issue in combining teacher assessment and external examination scores is concerned with the quality of both assessments. The assessments and the examinations taken by the student are the building blocks of the final combined (composite) score obtained by a student. It follows, therefore, that the quality of the final results in terms of their validity and reliability will be determined by the quality of the prior assessments and the examination. Thus, the quality of teacher assessments as well as the external examination is crucial in determining the quality of the final composite score, assuming the procedure used for combining the

scores is also valid.

The literature on the quality of teacher assessments is rather sparse. In the United States, for example, Stiggins and Conklin (1992) report that "research on testing in the schools has provided very little information concerning the quality of teacher developed assessments" (p.17). Studies by Fleming and Chambers (1983), Carter (1984), Gullickson and Ellwein (1985) indicate problems with the quality of teacher assessments. The studies show the need for teachers to write better items and longer tests, as well as value the use of statistical analysis of items as a helpful strategy in the classroom. These findings could be generalized to teacher assessment in developing countries, including Ghana and Nigeria. Despite the paucity of evidence of quality of teacher assessment, they are believed to be valid because they can be based on a long-term knowledge of each student within different contexts which external examinations lack (Harlen, 1994). Compared to external examinations, teacher assessments, perhaps, are more finely tuned to the content of their own teaching. Teacher assessments also tend to emphasize low order thinking skills such as recall and comprehension rather than high order skills.

With regard to reliability, teacher assessments are not considered to be highly reliable. Frisbie (1988) reported that the reliability of teacher-made tests is around 0.5 while that of external examinations is about 0.9. The validity claimed for teacher assessments, if any, is therefore obtained at the expense of low reliability because of an inherent tension between validity and reliability – as validity of test scores increases, the reliability of the scores decreases. This raises the question of whether teacher assessment can have a high validity in the presence of low reliability. A recent study using the classical test theory model by Feldt (1997) demonstrated that validity could rise when reliability declines, provided that irrelevant items are removed from the composite and relevant items remain or are added.

The issue of reliability of teacher assessments is crucial if they are to be used in certification of students. Certification of students demands high level of reliability in terms of consistency of performance and scoring, for comparability purpose.

In terms of quality, therefore, available evidence indicates that significant differences exist between teacher assessment and externally developed and administered examinations.

Generally speaking, teacher assessments are known to be relatively low in quality, particularly in terms of their reliability, when compared to external examinations. This has led to high public scepticism about the use of teacher-based scores for high-stakes decisions including certification and selection. The relatively poor quality of teacher assessments stems from the fact that (1) for teachers, an assessment's quality is not primarily a technical matter but the assessment's impact on the teaching-learning process, (2) there is lack of external review of the nature and quality of teachers' assessments and this makes way for varying teacher standards applied to students, (3) more often than not, teachers do not receive adequate professional training in assessment techniques, and (4) teacher assessments rarely follow recommended practices of item development and refinement before administration (Amedahe, 1989, Stiggins, 1994, Stiggins & Conklin, 1992).

The crux of the quality issue is that teacher assessments tend to have some inherent weaknesses, particularly their non-comparability, hence the relatively low reliability of teacher-made assessment scores. As a result, combining teacher assessment

scores with external examination scores for certifying students is problematic. This does not mean that external examinations are perfect. No examination or assessment can yield perfect scores. Rather, external examinations are in most cases developed by educational assessment/measurement and curriculum experts. As such, they are more carefully constructed and refined before administration. In addition they are, in most cases, administered under standardised conditions.

External examinations, on the other hand, are one-shot in characteristic that affects their validity. For instance, a candidate's performance in external examinations is subject to some extraneous factors including the psychological condition at the time of taking the examination as well as the physical condition in which the examination is administered. The one-shot nature of external examinations also limits the mode and the number of items that the student can be tested on. Sometimes, it happens that some candidates prepare well for some examinations but luck may not be on their side when what they emphasized in their learning is not well represented in the examination – a sampling issue. Under such a circumstance, the student's score

may not be a true representation of her/his ability – a validity issue.

In any case, the quality of teacher assessments necessitates the moderation of the scores with the view to improving their comparability and/or reliability before they are combined with external examination scores. Moderating teacher assessment scores with its related issues are discussed next.

### **Moderation of Teacher Assessment Scores**

Essentially, moderation refers to making scores from different schools and/or teachers comparable. Even though there are some variations in the use of the concept, Harris (1986) points out that comparability is the key element in moderation. The variation includes the use of the concept in some countries to mean the process of computing total examination scores for students taking different examinations. In this paper, moderation refers only to making scores from different schools and/or teachers comparable. It is noteworthy that in the United Kingdom (U.K.) and in some other countries, the terms quality assurance and quality control are now used in place of moderation depending on whether

the focus is on improving the process of assessment (quality assurance) or on only ensuring that the assessment outcome is judged in a comparable way—quality control (Gipps, 1994; Harlen, 1994).

It is important at the outset to note that the issue of moderating teacher assessment scores for certification and selection purposes by external examination agencies does not mean equating them with the examination scores. This is so because the conditions necessary for equating, namely equity, population invariance, symmetry of the two tests, and the two tests measuring the same ability (Lord, 1980; Kolen & Brennan, 1995; Petersen, Kolen & Hoover, (1989) are not met. Neither is the process a prediction or the usual regression issue. Limitations and inappropriateness of using regression procedure in making scores comparable includes bias and lack of symmetry of the scores as pointed out by Angoff (1979). However, a final composite score can be used to predict a student's future performance on a criterion.

A critical review of the literature on making different teachers' assessment (internal assessment) scores comparable indicates that several methods are used (Angoff,

1979; Bardell, Forrest and Shoosmith, 1978; Burton and Linn, 1993; Cohen and Deale, 1977; 1986; Harlen, 1994; Linn, 1993; Smith, 1978). In this paper, for simplicity, the methods are categorized into three: (1) moderation by inspection, (2) statistical moderation, and (3) moderation by monitoring. These are, generally, the most common methods of moderation. It is worthy to note that even though the methods are discussed under the above named categories, the lines between some of them are blurred.

### **Moderation by Inspection**

Moderation by inspection involves bringing in persons, called moderators, to review, to re-grade, or to independently grade either a randomly selected sample or all students' responses to items on teacher assessment, particularly constructed responses (Burton and Linn, 1993; Cohen and Deale, 1977; Harlen, 1994). The goal is to determine whether a teacher's scores are out of line according to established standards or criteria. This process can result in ratification or repudiation of the teacher-awarded score. The moderators can be a panel of teachers, external experts, external examination board members, or board representatives.

The inspection can be by post. Moderators can visit a school, or converge at a centre. The procedure is known variously as group, consensus, external, or cross moderation, depending on the mode employed. It is essentially a quality control approach. However, if both the process and the products of assessment are discussed by groups of moderators and teachers with the view to arriving at shared understanding of the criteria or standards in operation, the procedure can be both quality control and quality assurance. When used in a quality assurance form, the process can enhance the professional development of teachers in student assessment.

There are, however, some difficulties in using the inspection approach to moderate scores. The problems revolve around (1) agreement on standards and stating them explicitly; (2) differences in modes of assessment, marking schemes, and relative weightings given to the components; and (3) vulnerability to a number of reliability and validity problems. There is also the practical problem of assembling everyone for a moderation session if the group moderation procedure is adopted. In addition, Burton and Linn (1993) explain that in the use of group moderation, the comparability of

scores assigned depends on the development of a consensus among the professionals. In the case of individual moderation, the specificity of the criteria used by moderators may vary from moderator to moderator. Burton and Linn (1993) found that in some cases "the decision as to whether the teachers' grades were out of line was left largely to the moderator without very specific criteria delineated" (p.9). Furthermore, the procedure also calls for a definition of tolerance limits so that if scores fall outside of these tolerance limits they are adjusted. An important characteristic of the use of tolerance limits is that they tend to differentially penalize students from different schools whose grades fall just and further outside the limits. Thus, tolerance limits are also known to suffer from validity problems. It should also be mentioned that, group moderation can be time consuming and costly. The procedure requires substantial investment of time and resources. Most developing countries such as Ghana, Nigeria, and Sierra Leone, to mention a few, lack some of the required resources - financial and human - at present. This is the reason why the WAEC was dissuaded from its use in the wake of the implementation of the practice in the West African sub-region (Ademola, 1992) but rather



opted for statistical moderation. The procedure, however, is becoming more and more popular in some countries.

### Statistical Moderation

Statistical moderation, usually, is a procedure that uses information from an external examination to adjust teacher-based assessment scores (Burton and Linn, 1993; Cohen and Deale, 1977; Harlen, 1994; Linn, 1993; Smith, 1978). This is usually a linear transformation of the teacher-based assessment scores within a school or a centre to follow the distribution of the external examination scores. The rationale behind statistical moderation as Burton and Linn (1993) put it is that

The teacher-assessed components of the examination are likely to be more valid in terms of ranking the students, while the external exam is more suitable for establishing the relative standard of work across schools (p.18).

The two most common procedures used in statistical moderation are (1) scaling and (2) mapping. In scaling, "the marks from the internal assessment for each assessment are ... adjusted to give the same mean

and standard deviation as the distribution of marks for the moderating instrument of the candidates in that group" (Smith, 1978, p. 23). In mapping,

The results on the moderating instrument of all candidates from each centre or assessment group are ranked. The candidates are also ranked in the order determined by the internal assessment. The top candidate on the internal assessment is then given a mark equivalent to the top mark obtained in the group on the moderating instrument, the next highest moderating test mark is given to the candidate ranked second by the centre, and so on, down the rank order for the internal assessment (Smith, 1978, p.24).

It is interesting to note that in both approaches, the teacher's rank ordering of the students is unchanged. This implies an acceptance of the rank ordering of the teachers within schools. However, different teachers' marks may change the relative standing of students in the total distribution of scores pooled across schools.

Statistical moderation is based on criteria that supposedly apply to teacher-based assessments (internal assessments) and external examinations. First, is the criterion that the internal assessments must be conducted over a period of time and that essentially the same knowledge, skills and abilities are assessed by both the internal and external assessments (Cohen and Deale, 1977; Burton and Linn, 1993; Smith, 1978). This criterion calls for the condition that the internal and external scores should be correlated. The Department of Education and Science, Welsh Office's document on appropriateness of moderation methodology for General Certificate of Secondary Education (1985) states:

If statistical moderation against an externally assessed component is to be used, it is essential that there is a satisfactory level of correlation between the internally assessed component being moderated and the externally assessed component used to moderate it (p.23).

However, the issue of a satisfactory level of correlation between teacher assessment and external examination scores is a tricky and contentious one. Too little overlap (correlation) will render the moderating examination unsuitable and too much overlap (multicollinearity) will cast doubt on the advisability of having both components as part of the same examination process. It is recommended that correlation coefficients below 0.50-0.60 are possibly too low (Smith, 1978; Cohen and Deale, 1977).

Second, the average grade of candidates from a particular school should be at the same levels, within statistical limits for both the internal and external assessments, and if they are not, adjustments must be made to the internal assessments to bring the average score within tolerance limits. This criterion assumes that there should be no significant differences in attainment of students on both internal and external components in any particular school (Burton and Linn, 1993).

A third criterion is that the external assessment should be reliable and be capable of being marked with a high degree of consistency.

Practically, the criteria are difficult to meet fully. Smith (1978), therefore, argued that because no examination can ever fully satisfy the above criteria, it is “probably unwise to place all one’s faith in the moderation instrument and to adjust candidates’ internally assessed marks in strict accordance with performance on it as it would be to accept the internally assessed marks without applying any kind of moderating technique” (p. 26). As a solution, he advocates a midway position in which action is taken only if scores on the internal and external examination are sufficiently different. That is, only if the internal assessment scores fall outside established tolerance limits. As indicated earlier in this paper, the use of tolerance limits has its problems. For instance, how far should a student’s score be from the tolerance limit before it is subjected to moderation? Should different moderation procedures be applied to scores based on how far apart the score is from the tolerance limit?

The establishment of the tolerance limits is also affected by a number of factors: (1) the extent to which the external examination satisfies the above criteria, (2) the standard deviation of marks in the two assessments, and (3) the number of

candidates taking each assessment (Burton and Linn, 1993; Smith, 1978).

From the foregoing, it is abundantly clear that the use of statistical moderation is fraught with unresolved issues. The issues include: What degree of relationship between the external examination scores and teacher assessment scores will result in good moderation of teacher assessment scores? What tolerance limit is appropriate for moderating teacher assessment scores? Do we moderate all scores from all schools or only some of them? Within schools, should only some subject area scores be moderated? The issues are further complicated by its use in a situation whereby the teacher assessments are supposedly criterion-referenced while the external assessment is norm-referenced.

The WAEC uses both scaling and the mapping methods in moderating the teacher-based assessment scores at the basic and secondary school levels (Ademola, 1992; Mansaray, 1988). The mapping procedure is used when the number of candidates in a school is small (Wuddah, 1996). In Ghana, however, only the scaling procedure is used to moderate the teacher-based continuous

assessment scores (personal communication with D. Odukoya, March 23, 1998).

Even though statistical moderation is used in some countries including New Zealand, Australia, Ghana, and Nigeria, its use has been discontinued in United Kingdom because of the difficulties associated with meeting the underlying assumption and criteria (Gipps, 1994; Harlen, 1994; Satterly, 1994).

### **Moderation by Monitoring**

Another way of moderating teacher assessment scores is monitoring. This is a quality assurance procedure, which involves ensuring that assessments in the schools meet the expected national standards. In the literature, this type of moderation has been discussed under different headings such as national monitoring, visitation moderation, item banks, and monitoring procedure (Broadfoot, 1994; Harlen, 1994; New Zealand Qualifications Authority, 1992; Nuttall and Thomas, 1993). There are many shades in practice. Monitoring can take one or more of the following forms: (1) using items from question banks centrally generated for use by teachers (used to calibrate teachers' assessments),

(2) using common assessment tasks, (3) auditing teacher assessments from time to time, (4) cross-moderating assessment tasks before administration, (5) having only accredited assessors use assessment instruments, and (6) using exemplar items.

### **Discussion**

The main issues concerning combining teacher-based assessment scores with external examinations presented so far, namely, the quality of teacher assessments and external examinations and moderating teacher assessment scores are interrelated. Dealing with any one issue without considering the others may lead to some problems later. Thus a systemic approach needs to be adopted in the implementation of the practice. The relatively low reliability of teacher assessments depicted above behaves stakeholders in policy formulation regarding the combination to take a hard look at improving the competency of teachers in assessing students. In practical terms, it is possible to train teachers at the basic and secondary school levels to acquire fundamental skills in assessing students through pre-service and in-service courses. It may be unreasonable to require all teachers to acquire the very high

level skills in assessment required for educational assessment experts even though this may be desirable. It is true that the respective Ministries of Education are taking steps in improving teacher competency in assessing their students. What is needed now is to enhance, strengthen and sustain such efforts to ensure the competency of all teachers.

From the foregoing discussion of moderation of teacher assessment scores, it is obvious that quite a number of unresolved issues are associated with statistical moderation. One major issue is the relationship between the components. A study conducted by Adeyegbe (1993) on the relationship between continuous assessment and external examination scores in Nigeria, which can be meaningfully used as a proxy for Ghana, yielded correlation coefficients ranging from 0.24 to 0.86 for different schools and subjects. In English Language, for instance, the correlations ranged between 0.35 and 0.77 with the majority of the schools sampled (60%) having correlation coefficients below 0.50. The majority showed no statistically significant relationship between the pairs of scores. In mathematics, the correlation coefficients ranged between 0.44

and 0.86. All the coefficients showed a statistically significant relationship between the scores. Adeyegbe concluded that "generally speaking, there was not much relationship between CASS (continuous assessments) and TASS (external assessment) score" (p.179). Similar observations regarding the relationship between teacher assessment and external examination scores were made in Ghana (personal communication with K.E. Arthur of the Test Development and Research Unit of WAEC on January 2, 1997). In a study conducted by Amedahe (1998) involving 2,378 students from 11 randomly selected public senior secondary schools, the correlation coefficients between the teacher assessment scores and external examination scores in mathematics ranged between 0.42 and 0.86. In cases of high correlation coefficients (e.g. correlation coefficients above 0.55) between teacher assessment scores and external examination scores, the existence of multicollinearity may render the practice superfluous.

This and other problems led to its discontinued use in the United Kingdom and some other countries. It should be noted that moderating teacher assessment scores is not a panacea to any weaknesses that may

be inherent in the assessments. None of the procedures used to moderate teacher assessment scores is foolproof. Each may have its advantages and disadvantages as indicated in this paper.

The issues presented indicate, however, that there is the need to rather emphasize quality assurance procedures, such as monitoring and inspection of teacher assessments, rather than attempt to control the quality using statistical moderation, even though the procedures may be more difficult to practise. For example, when monitoring results in well-crafted and graded teacher assessments high-level quality scores may be obtained. Since the main weakness of teacher assessments is their lack of comparability from school to school and from teacher to teacher, the implementation of the assessment framework requires teachers to similarly assess and grade their students at specific grade levels. To be able to achieve the relatively high degree of comparability in assessment needed, it is important that the respective Ministries of Education provide the schools with detailed information on how the practice should be implemented. The present guidelines are not detailed enough. Item banks should be developed and used to ensure

comparability of scores.

The author found out in a study in 1998 that at some senior secondary schools in Ghana, teachers at different schools computed students' term and year assessment scores differently. While some teachers computed an end of year score for a student in a subject based on number of tests, quizzes, class assignments, and homework, others computed the score based on end of term examinations alone. Even within schools there was inconsistency in the way the end of year scores were arrived at. It is also a fact that due to pressure of work, some teachers do not give students the recommended number of assessments. Instead, such teachers use their own judgment to assign scores to students. Such scores may or may not reflect the student's achievement in the subject area. Adequate supervision and monitoring should be put in place to ensure that teacher assessments meet the expectations. Since there is always room to improve in any human endeavour, the WAEC must also continue to search for ways to improve the quality of its examinations.

### **Conclusion**

In conclusion, the practice of combining continuous assessment

scores with external examination scores for certifying students at the basic and secondary schools appear to be appealing. However, like any human endeavour, the practice is fraught with some issues such as quality of the assessments and moderation. These must be reviewed to ensure the validity and reliability of the scores. There is a need to take a hard look at the current mode of moderation of teacher assessment scores using a statistical procedure since the procedure has been discontinued in some countries and has been replaced by monitoring and inspection because of difficulties associated with its use.

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## TOWARDS THE DEVELOPMENT OF PERFORMANCE APPRAISAL SYSTEM FOR UCC SENIOR AND JUNIOR STAFF

E. O. AGYENIM-BOATENG

### ABSTRACT

*The principal aim of this study was to evaluate the current UCC performance appraisal for the Junior and Senior Staff and to make recommendations for improvement or development of a new system for consideration by management.*

*The study revealed that an effective performance appraisal system must, among other things, aim at:*

- Performance Improvement
- Compensation Adjustments
- Placement Decisions
- Training and Development of Staff
- Identification of Deficiencies in Staffing Process
- Preparations to meet external challenges

*It also revealed that management and staff use the feedback from the appraisal exercise in making important management and personal decisions including career planning and Human Resource Planning.*

*The study further revealed that the UCC Junior and Senior Staff appraisal system document suffers*

*from a number of problems and that there is the need to design a new appraisal system for the assessment of UCC Junior and Senior Staff work performance.*

*From the findings of the study, it is proposed for consideration by management, Peter Druker's Management by Objectives (MBO) technique. Though this technique does not represent the ideal form of performance appraisal technique (Luthan 1977), it is one of the techniques that come closest to the ideal. It represents a significant point of departure from the rating scale and offers a great deal of potential for the future.*

### Introduction

The national policy of regarding higher education as a public good funded by government with agreed levels of "free" provision is gradually changing to a situation where higher education is being treated as a traded service to be funded according to results and, where possible, paid for by its

beneficiaries. This means that those who have traditionally been regarded as the consumers of university education are now regarded as customers, that is, individuals exercising choices over personal investment decisions among a large number of alternatives. Under this condition, one cannot but side with Boxall (1991) in saying that universities can no longer prosper simply by admitting students; they must attract them.

To do this, universities among other things, must relate their services to the benefits sought by students, parents, employers, governments as well as research buyers, and must have an effective, dynamic and goal oriented work-force. It is therefore not surprising that recently, universities have used and continue to use staff performance appraisal as one of the means of maintaining an effective, dynamic and goal oriented staff in order to remain market/customer oriented.

Letham and Hill (1992) believe that the universities have come a long way in a few years as far as staff appraisal is concerned. They continue that in the mid 1980's appraisal was being practised in one or two universities, piloted in half a dozen, thought about in many, but avoided in most.

They concluded that by 1987, the Committee of Vice Chancellors and Principals (CVCP) and the Association of University Teachers (AUT) had issued joint guidelines on the matter, and by 1991 all universities had introduced some forms of appraisal schemes. The importance that all universities attach to performance appraisal has come to stay and there is the need to organise it effectively in order to derive its full benefits.

As a distinct and formal management procedure used in the evaluation of work performance, appraisal really dates from the time of the Second World War, more than 60 years ago. Yet in the broad sense, the practice of appraisal is a very ancient art. In the scale of things historical, it might well lay claim to being the world's second oldest profession.

Duleucz (1989) claims that there is a basic human tendency to make judgements about those one is working with, as well as about oneself. The human inclination to judge can create serious motivational, ethical and legal problems in the workplace. Without a structured appraisal system, there is little chance of ensuring that the judgements made will be lawful, fair, defensible and accurate. It is in an

attempt to make lawful, fair, defensible and accurate judgements about work performance that organisations, co-operations, industries and the universities use performance appraisal systems to evaluate the work performance of employees.

Performance appraisal systems began as simple methods of income justification. Thus, appraisal was used to decide whether or not the salary or wage of an individual employee was justified. The process was firmly linked to material outcomes. If an employee's performance was found to be less than ideal, a cut in pay would follow. On the other hand, if an employee's performance was better than what the supervisor expected, a pay rise was in order.

Managers and supervisors gave little consideration to the developmental possibilities of appraisal. It was felt that a cut in pay, or a rise, should provide the only required impetus for an employee to either improve or continue to perform well. Sometimes this worked to attract the needed results, but more often than not, it failed.

For example, early motivational researchers were aware that different people with roughly equal

work abilities could be paid the same amount of money and yet have quite different levels of motivation and performance. Some empirical studies have shown that pay rates were not the only elements that had impact on employee performance. It has been found that other issues such as morale and self-esteem, could also have major influence on workers' work performance.

As a result, the traditional emphasis on reward outcomes was progressively rejected. The potential usefulness of appraisal as a tool for motivation and development was gradually recognised in the United States in the 1950s. The general model of performance appraisal as we know it today began from the 1950s.

#### Meaning of Performance Appraisal

It must be said that performance appraisal does not subject itself to one definition. Different scholars have defined the term differently. Letham and Hill (1992) see performance appraisal as the activities which involve the collection and use of information from or about people within an organisation for the purpose of assessing or adding to their performance at work. To them,

performance appraisal is to correct the inadequacies in staff performance.

Mahmoud (1996) also defines performance appraisal as the systematic evaluation of the employee with respect to his performance on the job and his potential for advancement. He sees performance appraisal as one of the most important functions of the Human Resource Department.

Archer North and Associates (1999) see performance appraisal as a structured formal interaction between a subordinate and supervisor, that usually takes the form of a periodic interview (annual or semi-annual) in which the work performance of the subordinate is examined and discussed, with a view to identifying weaknesses and strengths as well as opportunities for improvement and skills development. From these and other definitions, it could be suggested that performance appraisal serves as a foundation for future decisions. Its focus is on the review of the past, utilising judging methods, ratings and/or descriptions established by the organisations. It is also clear that performance appraisal is both evaluative and developmental. That is, it evaluates the employee's past performance, identifies his/her

weaknesses and develops strategies for strengthening the strengths and reducing the weaknesses.

#### Purposes of Performance Appraisal

Many researchers, management commentators and psychometricians have expressed doubts about the validity and reliability of performance appraisal. Some researchers, such as Derven (1990) have even suggested that the performance appraisal process is so inherently flawed that it may be impossible to perfect it.

At the other extreme, there are many strong advocates of performance appraisal. Lawrie (1990) for instance, views performance appraisal as potentially the most crucial aspect of organisational life.

Between these two extremes lie various schools of thought. While all endorse the use of performance appraisal, there are many different opinions on how and when to apply it. Some scholars (e.g. Gilley & Egglund, 1993) believe that performance appraisal has many employee development uses, but scorn any attempt to link the process to reward outcomes, such as pay rises and promotions. This group believes that the linkage to

reward outcomes reduces or eliminates the developmental value of performance appraisal. This group sees the reward-linked process as judgmental, punitive and harrowing rather than an opportunity for constructive review and encouragement. They posed the question, for example, how many people would gladly admit their work problems if, at the same time, they knew that their next pay rise or a much-wanted promotion was riding on an appraisal results? They argue that it is very likely, in that situation, many people would deny or downplay their weaknesses. They are of the view that the desire to distort or deny the truth is not confined to the person being appraised. Many appraisers feel uncomfortable with the combined role of judges and executioners. They often know their appraisers well, and are typically in a direct superior-subordinate relationship. They work together on daily basis and sometimes mix socially well. They therefore find it difficult, at times, to give a report that has a direct effect of negating a promotion or salary increase.

On the other hand, there is a strong rival argument which claims that performance appraisal must unequivocally be linked to reward outcomes. The advocates of this approach say that organisations must have a process by which

rewards may be openly and fairly distributed to those most deserving on the basis of merit, efforts and results. They continue that there is a critical need for remunerative justice in organisations. Performance appraisal is the only process available to help achieve fair, decent and consistent reward outcomes. In a recent research, Bannister and Balkin (1990) reported that appraisees seem to have greater acceptance of the appraisal process, and feel more satisfied with it, when the process is directly linked to rewards.

The University of Cape Coast has, since the 1970s, been using the ranking/rating method of appraisal system for the assessment of the performance of its Junior and Senior Staff. Though modified three times, a critical analysis of this appraisal system indicates that the drawers - Personnel Section - are believers of the school of thought which thinks that there should be a link between appraisal and reward outcomes. The UCC appraisal system requests the appraiser to inform the personnel section whether the appraisee, based on his/her performance, is qualified for salary increase or not.

According to the Deputy Registrar (P & W), the results of the

performance appraisal assist the Appointments and Promotions Board (Junior and Senior Staff) in arriving at promotion decisions. He said, to arrive at promotion decision on an employee, the Board considers the appraisal reports on the employee for a period of three years. If the reports are positive and tally with the Head of Department's recommendation on the employee's application form, the Board promotes the employee. On the other hand, if the reports are negative and the Head of Department's recommendation is positive, the Board analyses the situation critically and takes the appropriate decision.

It must be noted that assessment of human potential is difficult, no matter how well designed and appropriate the performance planning and appraisal system is. The appraisal system used must therefore be : (a) correlated with the organisational mission, philosophies and value system, (b) cover assessment of performance as well as potential for development, (c) take care of organisational as well as individual needs, and (d) help in creating a clear environment by linking rewards with achievements, generating information for the growth of both the employee and the organisation, and suggesting

appropriate person-task matching and career plans. The system must provide feedback to the appraisee as this will help him/her to know his/her strengths and weaknesses. (Theresa & Kellen, 1996; Garton 1980).

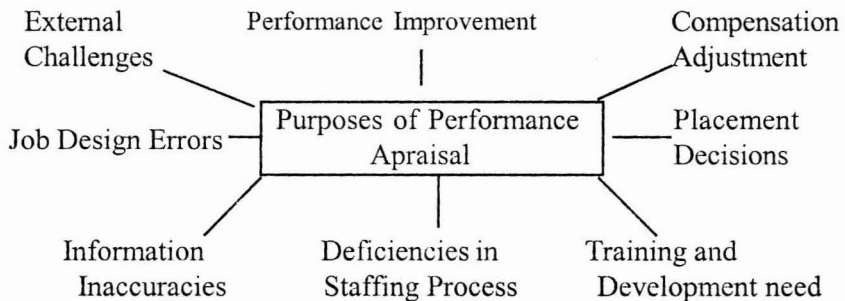
Thus, performance appraisal should not be used solely as a means of wage increase, transfers, promotions and lay offs as is the case of UCC's Senior and Junior staff appraisal system. It must be a means of communication, motivation and development of all employees in an organisation. Additionally, due to the extremely important value of employees - both pragmatically in cost terms and in the contributions they make to the success of the organisation - the appraisal system has become a major method of controlling the human asset. Such human controls are necessary if organisations, including universities, are going to survive and grow in the coming years.

The Food and Agriculture Organisation (1997) is of the view that the goals of performance appraisal must be consistent and mutually decided on by the employees and management. The appraisal system has to be reliable and consistent, and should include both objective and subjective ratings. This is because employees would like to know from a



performance appraisal system concrete and tangible particulars about their work, and assessment of their performance. This includes how they could obtain a large share of rewards, and how they could achieve their goals through their positions. From the point of view of the employees, therefore, the performance appraisal system should aim at their personal

the other human resource management functions, and one can therefore side with Mahmoud (1991) in saying that the performance appraisal system is an important management tool which could be helpful in motivating and effectively utilising human resources.



*Fig 1 Purposes of Performance Appraisal*

development, their work satisfaction, and their involvement in the organisation. This is essential because employees can develop only when the organisational interests are fulfilled. Mutual goals simultaneously provide for growth and development of the employees and the organisation as they increase harmony and enhance effectiveness of human resources in an organisation.

From Figure 1, it is obvious that performance appraisal affects all

#### Uses of Performance Appraisal

Rao (1985) is of the view that a properly designed performance appraisal system is an essential aspect of Human Resource Management and has many and varied uses. Some of the uses are discussed below.

#### Employee Performance

An effective performance appraisal system ensures effective staff performance on the job. Appraisal

helps individual workers to understand more about their roles and become clearer about their functions. The setting of goals by the employees and the supervisors as well as the interaction during interview sessions make the employees to know what are expected of them and enable them to perform effectively and efficiently. According to Castetter (1981), performance appraisal in this way, is instrumental in helping employees to better understand their strengths and weaknesses with respect to their roles and functions in the organisation.

#### *Developmental needs of staff*

Performance appraisal helps the organisation in identifying the developmental needs of employees, given their roles and functions. During the interview session both the appraisers and the appraisees are not only interested in whether or not the objectives were achieved, but also why they were not achieved. By this way, the weaknesses of the employees are identified and correct remedies, usually in the form of training, are prescribed. A well designed performance appraisal system should supply systematic grounds for determining what kinds of courses and experiences that might

help the individual employee overcome their weaknesses.

The aggregate of performance appraisal can also help the Human Resource Department to identify or determine the developmental needs of the organisation as a whole. The results of appraisal can be used as the basis for the organisation's educational policies and programme development. For example, if ineffectiveness in a particular technical or administrative area shows up in several evaluations, it may indicate a need for training in the area of deficiency. In this way, the training will be directed towards the accomplishment of some organisational objectives such as more efficient production methods, improved service quality or reduced operating cost.

#### *Increased Communication*

In modern organisations, performance appraisal acts as a mechanism for increasing communication between the supervisor and the employees. The interview session and the feedback from the appraisal give the employees the opportunity to get to know the expectations of their supervisors and each supervisor also gets to know the difficulties of the subordinates and tries to solve

them together with the employees. This makes the supervisors and the employees to accomplish their tasks.

*Management Decisions*

An effective performance appraisal system provides an objective basis for taking certain human resource management decisions. These management decisions include job analysis, job design, recruitment, selection, orientation, training promotion and compensation. For example, the results of performance appraisal are used as the basis for merit increases in salary. They also provide the Human Resource Department with information on how each employee is performing on the job and this helps the department to decide on who should be compensated, by how much and by what means. The compensation could be either increase in salary or incentives.

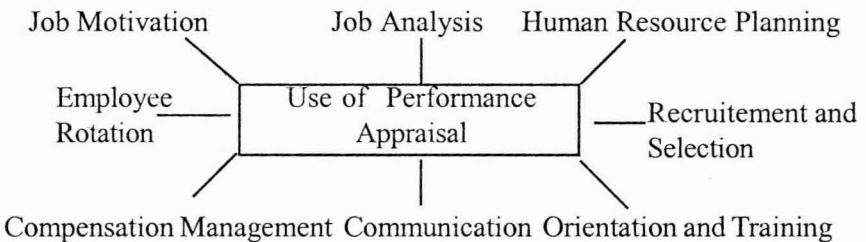
*Human Resource Planning*

The Human Resource Department uses the results of the performance appraisal for human

resource planning. The results of the appraisal may indicate personnel gaps in the organisation. For example, if the appraisal results show that many of the personnel/professionals in the organisation are lacking in some particular speciality, it may indicate the need for someone who is proficient in the area of deficiency. The potentials of the present employees are then analysed to find out the number of employees needed to eradicate the deficiency.

In addition to the above, performance appraisal also provides each employee with an opportunity for self-reflection and individual goal-setting, so that individually planned and monitored development takes place. Finally, performance appraisal prepares employees for higher responsibilities by continually reinforcing the development of behaviour and qualities required for higher-level positions in the organisations.

Figure 2 summarises the uses of performance appraisal.



*Fig 2 Uses of Performance Appraisal*

### Observation

As stated earlier, the University of Cape Coast has been using the rating scale form of performance appraisal in evaluating the performance of her Junior and / Senior Staff. This appraisal system lists personality traits or qualities desired for a particular job. For example, UCC's appraisal system lists qualities such as job knowledge, organisational ability, attitude, dependability, creativity/initiative, leadership ability, skill, adaptability and punctuality. The rater is expected to observe the actual performance of the employee and tick off on the form the range which best describes the employee's work performance.

A critical look at the UCC appraisal system indicates that the appraisal system to a very large extent, does not meet or fulfil the purposes and uses of appraisal system discussed in this paper. One is tempted to say that the main purpose of the appraisal system at UCC is to determine whether or not an employee should earn an increment (Part V.) It does not aim at assessing the past performance, identifying training needs of employees, identifying career development opportunities, establishing a more effective

communication system nor performance goals for employees etc.

The UCC Junior and Senior appraisal system suffers from organisational influence or setting. Appraisers of the system see the appraisal exercise as the basis for wage increment. Supervisors therefore tend to give employees good appraisal results in order not to appear as "bad guys" in the eyes of their subordinates. This explains why after rating some employees as good or very good, some heads of departments turn round to demand that the same employees must be transferred from the departments.

The system also suffers from the problem of subjectivity and inter personal relations. The fact that the employee is not assessed against any set goals makes it difficult to prevent emotional issues intruding into the appraisal reports. The type of relationship which exists between the supervisor and the employee may influence the supervisor's appraisal. A supervisor who likes a particular employee might give that employee a positive report even if the employee does not deserve that.

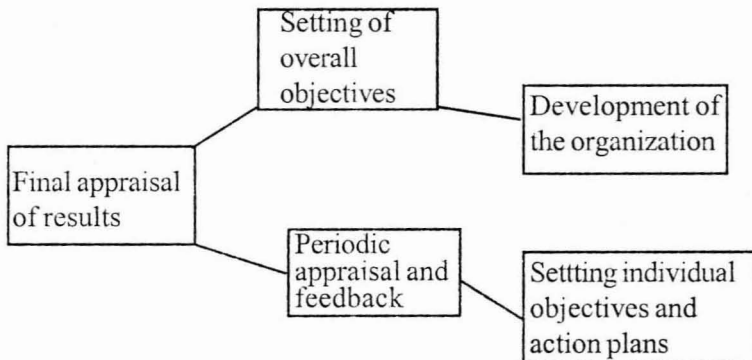
**Proposal**

It is in the light of the weaknesses and problems associated with the current performance appraisal system being used in assessing the performance of UCC Junior and Senior Staff that the author proposes for use Peter Drucker's Management By Objectives (MBO) technique. As stated by Luthan (1977) even though MBO does not represent the ideal form of performance technique, it is one of the techniques that comes closest to the ideal. The MBO represents a significant point of departure from rating scale and offers a great deal of potential for the future. MBO methods of employee's performance examine the extent to which pre-determined work objectives have been met. Usually the objectives are

established jointly by the supervisor and subordinate. Once the objectives are agreed upon, the employee is usually expected to self-audit, that is to identify the skills needed to achieve the objectives. He/she is expected to monitor his/her own development and progress. In this way, MBO methods of performance appraisal give the worker a satisfying sense of autonomy and achievement.

*Process of MBO*

The MBO which is currently being used, in one form or the other, by large business organisations and some non-profit organisations involves the process of setting objectives and appraising results. The MBO process which is a circular one is shown in Figure 3.



*Fig. 3 Process of MBO*

Source: Ross A. Webber. Management, Richard D. Irwin. INC  
Homewood, III pp 351 - 355.

### *Setting of Overall Objectives*

To implement MBO on a university-wide basis, the top management (Training & Development and Personnel Section) must formulate the overall objectives for the appraisal system. They must identify key result areas that have the greatest impact on the overall performance of the organisation. After the key areas have been identified, measures of performance must also be determined to serve as the basis for measuring the objectives. The objectives must be result-oriented and stated in measurable terms with target dates, if possible, and accompanying action plans that propose how the objectives will be accomplished.

### *Developing the Organisation*

After the determination of the overall objectives, it is vital for the organisation (The university) to be prepared so that MBO can be successfully implemented. The preparation will include training of both the appraisers and assessment of performance.

### *Setting Individual Objectives*

Once the overall objectives have been set and the organisation

(university) has been developed to the point of accommodating an MBO System, individual employees in the system must be helped to set their individual goals. These individual objectives are normally set by each supervisor-subordinate pair, starting from the top and going down as far as the system is to be implemented.

### *Appraisal of Results*

The setting of the objectives plays a vital role in the appraisal part of MBO. The individuals are appraised as to how they perform in accordance with the objectives set. The appraisal session must attempt to be diagnostic rather than being purely evaluative. This means that the reason “why” the objectives were either attained or not attained is assessed, rather than having the sessions purely punitive if objectives are not attained or rewarding if they are attained.

There should be periodic reviews which must be conducted in order to evaluate progress towards the attainment of objectives, and they should offer the necessary opportunity to make necessary changes in the objectives. This should be the case because every organisation is operating in such a

dynamic environment that objectives set at the beginning of the period may be rendered obsolete in a few months because of changing conditions. The constant review of the individual objectives and, to a lesser degree, the overall objectives makes MBO a living system that is adaptable to change. At the annual sessions, overall diagnosis and evaluation are made according to the results attained, and the process starts all over again.

### Problems

Some administrators and researchers kick against the introduction of MBO in service institutions such as the university. They claim that MBO has a number of problems and is suitable for organisations which produce concrete products, eg. Breweries.

One should not be tempted to think that MBO is without problems. There are some generally recognised problems that can occur in an MBO programme.

Webber (1975) in his research report summarises these problems as :

1. Distrust of the system
2. Resentment of a forced programme
3. Resistance to paper work and talk

4. An overly narrow focus
5. Inconsistency between bottom-up and top-down plans and
6. Inability to measure objectives.

Humble (1970), one of the main exponents of MBO, thinks that MBO is ideal for public sector organisations in which it is hard to quantify and/or price output. He thinks that most of these problems can be overcome by careful implementation and proper administration of the programme.

After reviewing in detail the existing studies on MBO programmes, Carroll and Tosi (1975) concluded that "the researches on organisational MBO programmes indicated that the adoption of this approach can improve managerial performance, managerial attitudes and organisational planning". Researches on related aspects of goal setting, feedback on performance, and participation, which are essential features of MBO, may be generalised to MBO. For example, experimental studies by Locke and his colleagues (1970) found that goal setting per se may have a very positive influence on performance. There is also considerable evidence that objective feed-back about performance can

improve performance. Such feedbacks can be a very powerful positive reinforcement for organisational participants. The MBO's periodic appraisals provide feedback close to the actual behaviour - at least quarterly - and give the administrator the opportunity to positively reinforce subordinates' progress towards goals and goal accomplishment. Since MBO also has participation of subordinates in the goal-setting process the literature going as far back as the human relations movement can be used to support the effectiveness of MBO.

### Conclusion

It can be concluded that MBO, either as a specific technique for appraisals or as a complete system of management, seems to hold enough promise to continue its widespread application. It is readily adaptable and can be used in conjunction with other Modern Human Resource Management techniques such as job enrichment and Organisational Behaviour Modification. MBO's greatest advantage is that it combines good and sound management techniques for decision making, communication, and control with basic behavioural requirement. Goal setting, feedback about performance, participative decision

making, open two-way communication, and self-control are some of the very positive characteristics of MBO. This unique combination makes MBO worthy of careful consideration. Although there can be problems, MBO, if carefully implemented and developed, seems to hold a great deal of promise for management.

It is my hope that if the University accepts and adopts this proposal, she will succeed in motivating her staff to improve productivity. The system will provide enough information for management decisions in areas such as job design, training needs, placement of staff, as well as compensation.

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**FACTORS AFFECTING GRADUATE COMPLETION  
OF THE MASTER'S THESIS AT THE  
UNIVERSITY OF CAPE COAST**

**Stephen Baafi-Frimpong**

*ABSTRACT*

*This study which was a descriptive survey, was basically to find out the factors that affected the completion of the master's thesis at the University of Cape Coast (UCC), Ghana. The primary purpose of the research was to identify factors that might be hindering master's degree students from completing their theses, thereby either delaying or forgoing the successful completion of the degree.*

*The participants in this study were "Successful Thesis Graduates" (STGs), "All-But Thesis" students (ABTs) who were enrolled between the years 1989 and 1993 and lecturers who served as thesis supervisors within the same period.*

*The five most significant factors identified as obstacles to completion of the thesis in order of importance were : (1) lack of books and other relevant materials; (2) lack of financial resources; (3) students' lukewarm attitude or lack of seriousness; (4) supervisors' delay in vetting work submitted by students; (5) students' work demands or combining thesis work with other jobs.*

**Introduction**

It has become almost an academic axiom that any university desiring to grow and to mature should have a graduate programme. It is for this reason that the University of Cape Coast (UCC) in Ghana after its establishment in 1962 and as a fully-fledged University in 1971, took the steps towards academic excellence and prestige by expanding her programmes to include master's and doctoral degrees.

The master's degree programme offered at the University of Cape Coast involves courses in various branches of learning leading to the award of Master of Education (M.Ed.), Master of Arts (M.A.) and Master of Science (M.Sc) as well as Master of Philosophy (M.Phil) in Education, Arts, Social Science, Agricultural Science and Science.

The M.A/M.Sc/M.Ed full-time programmes span over 12 calendar months, three of which would be

used for a project work and would include research methods. The M.Phil full-time programme on the other hand spans over 24 months and requires two semesters of course work followed by two semesters of research culminating in submission of a thesis (Brochure on Postgraduate Studies, 1993/95).

One realises that an important aspect of the master's degree programme is the stress on research and thesis writing. According to Grigg (1965), "graduate education as initially conceived in the U.S. had as its goal the training of advanced students as research scholars in an academic environment which stressed the search for and transmission of knowledge within a community of scholars" (p.20).

The importance of research cannot be underestimated. Through research, the University is able to fulfill its basic functions of the creation of knowledge, teaching and community service. It is also important to note that, it is through research that some major scientific discoveries and inventions are made thereby helping humans to overcome some of the many problems confronting them in the environment.

The master's degree is also very important because the traditional programme for the PH.D degree, as it has evolved in most graduate schools, requires that the students first receive their master's degree, before they proceed towards the doctoral degree. As noted by Philips and Pugh (1995), the M.Phil dissertation is often used as a training course in advanced research work, and can be a preliminary stage for the Ph.D.

In Ghana, it could be said that the government has supported graduate education and research mainly through grants and scholarships. This stems from the firm belief that the results of research may be of critical importance to national development.

At the University of Cape Coast, the last five years have seen rapid expansion in graduate education. The expansion is not only in terms of the number of students enrolled in the master's degree programme but also in the number of disciplines in which degrees are granted. The general pressure which is influencing the present and shaping the future of graduate education is the expanding opportunity for employment in research both in

industry and government as well as the training of teachers to fill vacancies in the university itself. Also with Ghana's new educational reform and the subsequent upgrading of the nation's polytechnics to tertiary status, there has been further pressure for more graduates with the master's degree to take up teaching and administrative positions in the polytechnics.

The ever increasing social demand for graduate education calls for a critical look at the graduate education programme at the university which undoubtedly is beset with a number of problems. Until some of these problems are seriously addressed, the future of graduate education at the university could be described as gloomy.

Some of these problems are related to organisation, the structure of graduate programmes, faculty (lecturers) and students. First, some people feel that though the course work is usually somehow well structured, the thesis phase is often ill-defined following no definite timetable.

Another problem relates to the question of faculty identification with the graduate programme.

Lecturers are not recruited solely for graduate programmes as done by some graduate schools elsewhere outside Ghana (Ziolkowski, 1990). Consequently it is speculated that their interest and concern or commitment with the graduate school has been at a minimum.

The role of the supervisor directing the student's thesis is also another source of problem. From some people's observation, the role of the supervisor is not at all clear. This lack of definition in part is responsible for the student either being too much dependent upon the individual lecturer or being left on his own to wallow in the quagmire of confusion.

It is also believed that most students are not committed to the thesis process thereby unduly delaying completion of their theses. The cumulative effects of these problems include the undue prolonging of the master's degree programme.

#### *The All-But Thesis (ABT) Phenomenon*

In addition to attrition occurring during course work and examination phases of the master's studies is the phenomenon of attrition that falls into "All-But Thesis" (ABT). ABT

refers to the master's degree student who has completed all requirements for the master's degree except the thesis. According to Tluczek (1995), a growing percentage of students appear to be, especially, vulnerable to dropping out or fading out of the master's programmes after completing their course work and comprehensive written examinations, but prior to completing their dissertation. Ziolkowski(1990) also estimates that as many as 70% of students in the United States of America who pass their general examinations fail, for one reason or another, to complete the degree.

In the University of Cape Coast, it is asserted that the incidence of graduate attrition and the ABT problem tend to be a stumbling block for many prospective graduate students. In the researcher's casual conversation with friends enrolled in the graduate programme, majority of them maintained they were reluctant enrolling in graduate programmes, for the simple reason that they could not afford to spend so long a time pursuing the master's degree. In fact, it is asserted that some students in the past spent between four and seven years just pursuing the master's degree.

As portrayed by the Vice-Chancellor's report to the 27th Congregation (1997) " the

University was able to publish the results of a total of 24 students from 1993/95 academic years by March 1997". This indicates that only 11.4% of the 210 students admitted within that period had successfully graduated within that period.

Although people recognize the ABT phenomenon as a serious problem, it seems it is often overlooked. According to Tluczek (1995), ABT students should be of particular interest because they have proved that they are academically capable, and they have advanced to the point of having only one obstacle to conquer before the attainment of their degree. Research to learn why this occurs and how to prevent the percentage of ABTs from increasing is very important since the major portion of institutional and student investment is made prior to the time ABT status is reached.

Though some researches have been undertaken, particularly, in the U.S., (Berelson, 1960; Coon & Foster, 1993; Tluczek, 1995) it appeared no such studies had been conducted in Ghana and in the University of Cape Coast in particular. It was therefore the desire of the researcher to research into the problems which tended to hinder the successful completing of the master's thesis at the University of Cape Coast. Specifically, the study sought to address the following research questions:

1. What factors appear to impede the completion of the master's thesis?
2. What are STGs, ABTs and supervisor's attitudes, towards the thesis itself?
3. What are *Stags* and *Bats* attitude towards thesis supervisors?
4. What are thesis supervisors' attitude towards their students?

alumni, purposive sampling was used to select all the 35 STGs who were identified to be employed in the University of Cape, in teaching, administrative and other positions. With regard to the ABTs and supervisors the stratified random sampling technique (precisely the table of random numbers) was used to select participants to represent the various faculties of the University.

### Method

The descriptive sample survey was used as the research design for the study which was basically exploratory in nature. The population for the study was the 290 students enrolled between the years 1989 and 1993 for the master's degree programme at the University of Cape Coast and the 105 lecturers who served as thesis supervisors within the stipulated period. Students involved in the study were categorised into two: "Successful Thesis Graduates" (STGs) and "All But Thesis" Students (ABTs).

In all, the study involved a sample of 140 persons comprising 35 STGs, 55 ABTs and 50 supervisors. Since it was very difficult or virtually impossible to trace all the STGs because of lack of accurate and up-to-date data on the University

### Instrument and Procedure

Two sets of opinionnaires developed by Hugley (1988) were adopted and modified to collect data for the study. The first opinionnaire, referred to as Master's Thesis Attitude Scale (MTAS) by the researcher, was administered to STGs and ABTs, and the second opinionnaire, also referred to as Supervisors Master's Thesis Attitude Scale (SMTAS), was administered to thesis supervisors. The opinionnaires which included Likert scale and open-ended questions, sought demographic information about respondents as well as factors hindering completion of the thesis, attitude towards the thesis, students and supervisors. The instrument was pilot-tested in the University of Science and Technology, Kumasi, and split-half reliability coefficients showing consistencies of the items

were computed to be 0.88 and 0.81 for the MTAS and SMTAS respectively. In the main study as in the pilot study, the opinionnaires were hand-delivered by the researcher to the respondents and retrieved personally after two weeks. Descriptive statistics such as percentages and means were used as the main procedure for the analysis of data.

## Result

### *Factors Impeding Completion of the Master's Thesis*

The study revealed that the most significant obstacles to completion of the thesis identified by the respondents (ABTs, STGs, and Supervisors) in order of importance were: lack of books and other relevant materials; lack of financial resources, students' lukewarm attitude or lack of seriousness; supervisors' delay in vetting work submitted by the students; students' work demands or combining thesis work with other jobs; supervisors' lack of commitment or poor attitude; lack of motivation; students' inadequate research skills; poor student-supervisor working relationship and ineffective structure in the thesis phase. The details are provided in Table 1.

These obstacles identified in this study were not much different from what were discovered in other recent studies (Tluczek, 1995; Jacks, et al., 1983). Perhaps the only difference was in respect of the order of importance of these obstacles. Unlike the findings of the other studies, lack of books and other relevant materials, and lack of financial resources were identified as the first two most significant obstacles of this study. These obstacles are likely to be problems associated with universities of the so-called third world and developing countries where many basic things are lacking because of the high level of poverty. For instance, unlike students of U.C.C., students of the developed nations have access to a wide range of information and literature because of the efficient and reliable library services as well as the massive use of computers, the internet and other modern communication systems.

One other major factor identified as an obstacle to completion of the thesis was students' lukewarm attitude or lack of seriousness. Possibly, the problem could be linked to students' job demands and level of motivation. One supervisor wrote "most students do not work hard enough because they engage in other jobs like General

*Table 1*  
*Impeding Factors Identified by Respondents*

IMPEDING FACTORS	RESPONDENTS			
	ABTs	STGs	SUPERVISORS	TOTAL
	[N=51] N [%]	[N=33] N [%]	[N=48] N [%]	[N=132] N [%]
Lack of books and other materials	46[90.2]	28[84.8]	40[83.3]	114[86.4]
Lack of Financial resource	43[84.3]	26[78.8]	44[91.6]	113[85.6]
Students lukewarm attitude	30[58.8]	24[72.7]	42[87.5]	96[72.2]
Delay in vetting work submitted by students	36[70.6]	18[54.5]	21[43.8]	75[56.8]
Supervisors lack of commitment/poor attitude	30[58.8]	17[51.5]	18[37.5]	65[49.2]
Lack of motivation	27[45.1]	16[48.5]	16[33.3]	59[44.7]
Students inadequate research skills	23[45.1]	10[30.3]	25[52.1]	58[43.9]
Poor student supervisor relationship	24[47.1]	10[30.3]	23[47.9]	57[43.2]
Ineffective structure of the thesis phase	26[51.0]	11[33.3]	18[37.5]	55[41.7]

Certificate Examination (GCE) marking and part-time teaching at the expense of the thesis work". What is very significant is that the problem was acknowledged not only by supervisors but also by students themselves. The findings revealed that as many as 36 ABT

and STG respondents, representing 42.8%, agreed that the demands of their jobs impeded their completion of the thesis.

Just as discovered by Tluczek (1995), this study revealed that one major difference between ABTs



and STGs was the priority in a student's life given to the thesis. As much as 75.5% of ABTs indicated that they experienced the lack of proper motivation and focus as an obstacle to completing the thesis compared to 54.5% of STGs. The lack of motivation could be related to the student not needing the degree for any definite career plans or as a requirement for entry into a new field which is also supported by the study. As compared to 9.1% of STGs, 29.4% of ABTs indicated that the master's degree was helpful but not necessary in terms of their future plans.

Delay in vetting work submitted by students to their supervisors was identified as the number four factor which hindered the thesis process. The problem possibly related to the general attitude of supervisors and the kind of student-supervisor relationship which is fully discussed later in this paper. What is crucial is that the problem was acknowledged not only by students but also by supervisors. Majority of supervisors (56.2%) agreed that difficulties working with principal supervisors and delay in vetting students' work constituted an obstacle to the successful completion of the thesis.

The identification of lack of

research skill as an impeding factor in the thesis process, possibly implies that training in research methods was inadequate. This suggests the need for an increase in the time allotted and attention given to courses in research methods. This is crucial because as noted by Smith, et al. (1993), the dissertation is often a student's first experience with a research project of this magnitude. It is again possible that the thesis process is detached from course work and experience and that students are unable to develop practical skills required for the actual field work. This suggests that students must be given the necessary exposure and research experience before they start their theses.

The results of the study also indicated that majority of respondents agreed that the lack of structure of the thesis phase of the master's degree programme as compared to the course work phase was an obstacle to degree completion.

Though one supervisor asserted that the lack of structure of the thesis phase presented an opportunity to students to work independently and made them responsible for their own work, this research found out that most students have difficulties working independently outside the formal lecture room with limited

structure. Several STGs and ABTs commented that when faced with the problem of balancing job, family and academic responsibilities, the responsibility they did not face daily was the one that was usually put aside. As noted by one ABT respondent, lack of any definite time frame leads to procrastination and the prolonging of completion of the thesis. The recommendation by some respondents of all the three groups (STGs, ABTs and Supervisors) that a definite timetable with associated tasks and dates for completing of the thesis be followed rigidly further suggests that the inadequate structure of the thesis phase is acknowledged as an important obstacle in the thesis process and needs to be addressed.

*The Attitude of ABTs, STGs  
and Supervisors  
Towards the Thesis*

The study revealed that in general, all the respondents were positive towards the thesis. This was a healthy development because as observed by Porter and Wolfe (1975), there is significant link between students' attitude and completion of the dissertation. According to them, if the student had a negative attitude towards the dissertation, delays were often experienced. On the other hand, those students with attitudes

supportive of the dissertation requirements are less likely to be subject to attrition. It is important to note that the majority of respondents (94.7%) were not in favour of abolishing the thesis as a requirement for the award of the master's degree. Also 92.4% felt the thesis is an intellectual experience of genuine substance and interest while 87.1% felt the thesis stimulates interest for future research.

The finding of this study that there was not much difference between ABTs and STGs in their attitude towards the thesis confirms the studies of Strasser (1977) and Porter and Wolfe (1975). They found that both ABTs and STGs have positive feeling about the dissertation and that surprisingly, even students who did not complete the dissertation requirement responded positively towards the dissertation. With such positive attitude on the part of ABTs, the implication is that, all other things being equal, they would be motivated to work hard and complete their theses on schedule.

It is important to mention however, that though in general STGs and ABTs had positive feeling towards the thesis, STGs were slightly more positive than ABTs. The possible reason for such difference was

probably STGs' feeling of accomplishment and superiority for having completed the thesis.

With the high level of support for the thesis as a worthwhile requirement for the award of the master's degree, perhaps what is needed is to enhance its process. Institutions could learn from the majority of ABTs and STGs who thought the thesis produced too much anxiety, by getting rid of all bottlenecks thereby enhancing the thesis process, while at the same time enforcing quality standards that help produce distinguished graduates.

#### *The Attitude of Students Towards Supervisors*

Though in general both STGs and ABTs had positive attitude towards thesis supervisors, STGs were more positive than ABTs. This could be natural and therefore not unexpected because, all other things being equal, students who have been successful in the thesis process are more likely to be satisfied with their supervisors than those still struggling to complete the thesis.

It is important to learn from the responses given by most ABTs in order to improve student relationship with supervisors and

strengthen the thesis supervisory role. The results of the study showed that nearly half (49%) of ABTs felt they received too little attention from their supervisors.

Also unlike majority of STGs (81.8%) only 43.2% of ABTs claimed their supervisors were co-operative. This suggests that students had less difficult time with supervisors who were available, co-operative, supportive and prompt in reading and returning materials. On the other hand students experienced difficulties with supervisors who exhibited the opposite characteristics. Again, since the findings indicated that ABTs had less effective relationships with their supervisors than did STGs, it is probably fair to conclude that one of the most important factors affecting completion of the thesis is the nature of the student's relationship with supervisors.

From the researcher's perspective, three reasons might account for poor student-supervisor relationship. First, the possibility that both students and supervisors did not understand their respective roles, which could be attributed to lack of effective communication about the nature of relationship between the two parties.

Possibly, as discovered by Hockey and

(1994), some supervisors adopted an implicit form of communication and failed to make clear and explicit certain taken-for-granted assumptions about the supervisory relationship which they assumed their students also held. The result of the lack of clarity in communication is that patterns of interaction may well be established and maintained which constitute a fertile ground for the breeding of misconceptions about the nature of supervision on the part of the student and about the student's understanding on the part of the supervisor. The feeling of not being well supervised could derive from the assumption that some students might define the concept of supervision quite differently from that of supervisors.

To ensure that there is good working relationship between students and supervisors, it is prudent that effective communication is established which would enable supervisors to know what students expected of them, while students also become aware of what supervisors expected of them. Corresponding to what Phillips and Pugh (1995) discovered in a similar study, this research identified the following as what the student and the supervisor expected of each other. Among others, students expected supervisors to vet their work in good time; to be

available when needed; to be friendly, open and supportive; to read their work well and be constructively critical; to have good knowledge and sufficient interest in their research.

Supervisors on the other hand expected students to be hardworking and persevering; to be resourceful or well read; to be analytical and have initiative drive; to be independent; to be conversant with research methods and statistics; to have regular consultation with them; to follow the advice they give; to have good writing skills and good command of the language.

Secondly, the poor student-supervisor relationship could be explained in terms of the fact that under normal circumstances supervisors would identify themselves more with enterprising and hardworking students who they felt were more anxious to complete their thesis than the lazy unenterprising students. As noted by Phillips and Pugh (1995), from the supervisor's perspective, "enterprising" students are not so problematic, as they equate with an ideal type of thesis student. They claim such students display autonomy, enthusiasm, and the capacity to develop intellectually to the point of generating original ideas. In contrast, difficult students

are those who at this level do not display such 'enterprise' and the aforementioned qualities. It is with these latter students that supervisors find their supervision more problematic.

Thirdly, supervisors' poor attitude and lack of commitment could account for the poor student-supervisor relationship. This seems to be supported by the students' written responses to the open-ended items which identified inadequate time to consult with students, too little attention and guidance, and delay in vetting work submitted as the three most important problems students faced working with their supervisors. The fact that supervisors might be overburdened with a lot of responsibilities should, however, not be ruled out. Majority of supervisors (62.5%) found combining thesis supervision and teaching to be somewhat burdensome. This is likely to be the case when one considers the fact that in the university, apart from their teaching schedule a lot of lecturers are charged with other responsibilities such as serving on various boards and committees, being hall master or counsellors and so on.

#### *Supervisors' Attitude Towards Thesis Students*

The study showed that most

supervisors had negative attitude towards thesis students. The researcher will not be far from right to speculate that such negative attitude could mar any healthy relationship that should exist between students and supervisors which could impede progress on the thesis process. As noted earlier, supervisors would identify themselves more with students they considered enterprising and hardworking than those they considered as lazy and unenterprising.

The negative attitude, first, relates to supervisors' feeling that most students lacked the skills of academic essay writing and that students often wrote on irrelevant issues. This brings into question the criteria for the selection of candidates for the master's degree programme. It is believed that unlike the undergraduate admission, selection of candidates for graduate programmes is expected to be more properly scrutinized. It is therefore expected that the master's degree student would be able to use advanced writing skills necessary to clearly and precisely write the thesis. Improving selection procedures in graduate programmes therefore becomes a crucial issue. Perhaps as part of the selection interview, candidates should be made to take a short written text basically to test their writing skills.

In any case this also suggests the need for training in the mechanics of writing as a means of improving students' writing skills.

Most supervisors also saw their students as not working hard enough and also not frequently consulting them. One supervisor commented that some of his students at times played hide and seek with him. This is ironical because most students also accused supervisors of not devoting much time to assist them through the thesis process.

The lack of diligence or seriousness on the part of students could be attributed to a number of factors including lack of relevant literature and materials and lack of financial resources which have been identified in this study as the most important factors which impeded the thesis process. Students could sometimes be stuck somewhere along the line because of the lack of materials or funds to propel them on. The problem could also be attributed to poor supervision. As perceived by many supervisors in a study by Bargar and Ducan (1986). Positive reassurance, enthusiasm and encouragement should be part and parcel of supervisors' input and are necessary for maintaining the student over such a prolonged period of arduous study. When such input is lacking, the student is not likely to be encouraged to work

hard. The student should, however, realize that because of the positive inspiration and negative turmoil that go hand in hand with the thesis experience, perseverance is needed through all stages of the thesis, from selection of a topic to writing recommendations.

The lack of seriousness associated with the thesis writing could also be linked to students' job demands. The study supports this. As much as 80.8% of the respondents agreed that the demands of the students' job impeded the thesis process. Perhaps the problem arose as some students did part-time jobs to supplement their income. It is also possible that some students are held back because of the demands associated with their employment as demonstrators or teaching assistants in the university.

It is hoped when there is good rapport between students and supervisors, some of the genuine concerns of the students could be identified and resolved. This calls for effective communication between students and supervisors which is vital in all supervisory relationships.

### **Conclusion**

It may be concluded from the results of the study that both students and supervisors share the blame for the long delays associated

with the completion of the thesis and the attainment of the master's degree. While some students could be accused of not being very serious with the thesis work and allowing the demands of other jobs to take precedence over the thesis work, some supervisors also did not seem to be co-operative and committed to their supervisory roles and spent long time vetting and returning work to students. The findings of the study also lead the researcher to conclude that successfully completing the thesis and earning a master's degree is more about persistence in spite of the many obstacles faced by the student. Since all students experience similar problems, the successful students will be the one who has the internal motivation and personal desire to succeed at the identified task, enabling him or her to overcome all opposition. It is however, important to state that the institution must create a congenial atmosphere that is conducive to degree completion by helping reduce obstacles faced by students.

### *Recommendations*

Based on the findings of the study and conclusions drawn from them, the following recommendations are made for facilitating the thesis process and completion of the master's degree. In formulating the

recommendations, some of the recommendations from ABTs, STGs and Supervisors were duly considered. The recommendations have been classified into two: Those for the university and those for master's degree students.

### *For the University*

Recommendations for the university are intended for review by all institutional components including administration, graduate school, faculties, departments, students and lecturers.

1. To cut cost which many student's claim hinder the thesis work, it is recommended that the university establishes the necessary links with industries and organizations which may sponsor the researches conducted by students. This implies the university should encourage students to embark on research studies geared towards pressing problems of industries, organisations and the nation as a whole.

To further cut cost, it is also recommended that students should be given intensive training in computer

application so that the analysis of data, typing of scripts and so on would be done by students themselves instead of hiring people to render such services for fees.

2. Since students' lukewarm attitude or lack of seriousness was identified as one of the major constraints on the completion of the thesis, it is recommended that unless absolutely necessary, students should not be granted extension of time to enable them have their study leave period extended. It is hoped this will compel students, majority of whom are on study leave to work hard to complete their theses within the stipulated time.

3. Recognising the important roles of supervisors and the importance of the student-supervisor relationship in the thesis process, it is recommended that both students and supervisors are periodically educated on their roles in the thesis process. This could be done through their participation in seminars or

workshops. Topics to be covered at such fora may include: student-supervisor relationship; how to serve as a supervisor; how to advise students in the thesis process; vetting of thesis work; and methods for shortening the time of thesis completion.

It is further recommended that students are made to select their supervisors. To effectively select these supervisors, it is vital that students seek advice from other students and also read literature related to the selection of supervisors.

#### *For Master's Degree Students*

Though these recommendations are directed towards students, it will be beneficial for supervisors to be aware of them.

1. Master's degree students should have thorough understanding of the requirements of a master's degree programme before starting the course. Prospective students should be aware of the various stages of the degree programme such as course work, examinations, written and oral thesis



- components. It is also in their interest to inquire about time requirements, skills required, the degree of independent work required for degree attainment as well as the emotional, psychological and physical stamina required to endure. The student should realize that the master's degree attainment is often associated with personal motivation and perseverance. Students should have complete and thorough understanding of why they want to earn the master's degree. This will motivate the student to work hard and to persevere in the face of difficulties and opposition.
2. Students should try to identify topic areas for their thesis as early as possible in the course of the programme. This will enable them focus well on the thesis topic and relate the coursework to the thesis process. For instance, it would be expedient to select a topic before being introduced to research methods and

statistics so that relevant questions relating to the topic could be asked for clarification and better understanding.

3. Finally, students should develop a programme plan of work for the entire thesis process that includes dates and resources for identification of thesis topics, selection of thesis supervisors, thesis proposal presentation, the collection of data and thesis defence or viva

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# *Report*

## **EMPLOYING MANAGEMENT BY OBJECTIVES IN MULTI-CAMPUS ADMINISTRATION OF A TERTIARY INSTITUTION, HOW FEASIBLE ?**

**Christie Okae-Anti**

Educational managers in tertiary institutions operate basically in four areas: to maximise results, by harmonising immediate and long-range goals; to establish precise goals and measurable objectives; and to evaluate progress toward pre-determined goals and objectives, to organise, motivate, communicate and strengthen superordinates, peers and subordinates (Hostrop, 1983). In order to achieve results in these areas it is assumed that the educational manager will adopt modern management techniques since academic institutions, though solely for teaching and research, still have some resemblance of corporate bodies. The institution may acquire property and let out facilities for its own good and for the well being of the community (community service). On the other hand some schools of thought are not in favour of employing modern management techniques like Programme Evaluation and Review Technique (PERT) or Management by Objectives (MBO) in university administration. Any innovative manager, however, would

like to try to incorporate one of these techniques in the management of academic institutions because they are corporate bodies in their own right.

Thus an academic institution whose management employs modern management techniques is not far from enhancing the efficiency and effectiveness of the institution.

### **Modern Management Techniques-Management by Objectives (MBO)**

Management by Objectives essentially means that the organisation determines exactly what it intends to accomplish, and allocates to every department or division what it must contribute so that its objectives may be met. By this system, every manager knows what the objective is for the entire organisation and what his own department must accomplish.

Without MBO an institution or a corporation could have a very strong desire to grow, but the approach might be haphazard. With MBO, the institution might

establish goals of short, intermediate or long-range duration. This would then require specific objectives for the various divisions or departments. Each division would have specific things to do in order for the university to attain the desired objectives. The specific numerical goals of each division should be easily measurable. In establishing objectives it should be possible to set a numerical base point from which progress can be measured and this is what MBO does better. MBO concentrates the organisation's efforts on opportunities rather than problems, and this can be of great help to a public relations programme of any institution.

Although Adamolekun (1989) asserted that MBO could not possibly be imported into the functions of most of the staff of the Registrar's department, an attempt

at using MBO would be of immense benefit if the Registrar is very innovative. Assuming that the measure of a manager's performance is the magnitude of his contribution to the achievement of central administrative goals, MBO agreement may complement and reinforce the attainment of the total organisational goals set by the central administration.

In employing MBO the registrar and others in his department would define the major areas of their responsibilities and establish measures for operation. For instance, in the major areas of the Registrar's department – Academic, Personnel and General Administration – routine, creative and problem-solving objectives may be initiated as part of the MBO plan. The department may then establish a goal, either short-term or intermediate. (See Table 1).

*Table 1 Measure of Performance of the major areas of the Registrar's Department*

Major Areas	Routine Objective	Measure of Satisfactory Performance
General Administration	Plant maintenance	Complement of quality of plant cleanliness & maintenance
Academic Affairs	Collate results from divisions	Timely publication of results
Personnel	Personnel appraisal	Staff development (Staff needs met)

The deputy registrar in charge of a major area could also define the specific responsibility of his own position and discuss this with the registrar until mutual agreement is reached and committed into writing. The divisions, departments, units and sections could also define common objectives, which should be consistent with the goals of the organisation. These objectives become measures of the superordinates' responsibility, hence they are committed to assist for total results and success.

The registrar's department which is the hub of administration could set problem solving objectives. If such objectives are made, probable innovations in the administrative process may be enhanced. For instance, a more effective means of participatory democracy in university governance could be developed while at the same time obtaining agreements as to who is accountable for what.

MBO could also be initiated in the human resource development sector of a university. The Deputy Registrar in charge of staff training and development could set objectives for various staff needs in the university and run workshops along these lines. This way both

career and personal development needs may be attained which could consistently promote the goals of the organisation. It is to be noted that career and personal or individual developments are inter-twined and very crucial in the development of an organisation.

Even though the above examples are in the Registrar's Department, it should not be taken to mean that the academic divisions or units cannot initiate plans using MBO. Adamelokun (1989) puts it that all the functions of MBO are present in the university teaching process without the Senate or any officials thinking about MBO. If university teaching process is more result-oriented then the challenge is widely thrown to a multi-campus establishment to embrace MBO.

Lessons to be drawn from MBO for a multi-campus establishment

- Each satellite campus must identify its goals and objectives.
- Each should define managerial responsibility in terms of expected results.
- Each should measure performance and achieve-

ment against those goals and objectives.

- Each must work within a certain time frame.
- The achievement and performance of each satellite campus should be the total result and success of the common goal for the university.

Thus the three satellite campuses of the University College of Education, Winneba, operating under a common mission may visibly embrace the principle of MBO, for after all, the large number

of disciplines and the inter-relationship through the division system put the university in a better position to assemble the necessary skills and expertise to attain the mission and visions of a young multi-campus university.

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## NOTES FOR CONTRIBUTORS

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JEM is published two times in the year, in May and November.

### Editorial Procedure

Manuscripts will be accepted from practising educational managers, planners, administrators, researchers and teachers in Ghana and overseas. Relevant papers on related experiences from authorities in corporate business are also welcome. Each paper submitted will first be checked whether or not it falls within the scope of, and conforms to, the stylistic requirements of the Journal. A manuscript that does not satisfy the requirements will not be sent for review. A report on the article and a copy of the journal's guidelines will be sent to the author. The manuscript may then be re-submitted after necessary corrections have been made.

All manuscripts that are acceptable will be subjected to anonymous peer evaluation, usually by at least two members of the Editorial Board. If the article is found publishable but requires specified changes the editor will ask the author to make the changes and re-submit. After acceptance an article may not be published anywhere without written approval from the Editor.

### Technical and Stylistic Requirements

1. Manuscripts which should be 10 to 20 pages in length should be submitted in triplicate, typed double-space on one side only of A4 paper. Contributors are requested to submit a copy of their

manuscript on a 3.5 high density computer disk, with file stored in a word processing format (Microsoft Word 6.0). Report of original research should consist of distinct sections and should appear in the sequence of these stages: introduction, method, result, discussion.

2. Articles should be accompanied with an Abstract of not more than 150 words in length, typed on a separate sheet. Brief Reports/ Comment need no abstract.
3. To ensure anonymity in the reviewing process the body of the paper should bear only the title of the paper on the front page as a means of identification. Authors are to attach to each manuscript a cover page giving the title, authors' names, professional status and/or responsibility post, institutional affiliation and addresses.
4. Tables diagrams, graphs and figures should be in the appropriate places in the body of the paper.
5. Authors should adhere strictly to the style in the fourth edition of the publication Manual of the American Psychological Association (APA).
6. The list of cited references for Articles should appear at the end of the paper. They should include the author's name, year of publication in brackets, title of publication, the volume and or page number (s), the place of publication and the publisher.
7. Explanatory footnotes should be used sparingly. They are to be indicated in the text by superscripted numbers preceding the reference page. At the end of the paper the footnotes should be listed in sequence.
8. Manuscript submission, including all subsequent editorial correspondence(s) should be addressed to:

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