

BRIDGING THE GAP: LINKING SCHOOL AND THE WORLD OF WORK IN GHANA

Jophus Anamuah-Mensah.

University of Education, Winneba

Akwasi Asabere-Ameyaw

University of Education, Winneba

Stephen Dennis

University of Education, Winneba

ABSTRACT

The study sought to find out the views of pupils, teachers and parents on the usefulness of the educational curriculum (i.e. organization, content and methodology) and co-curricular activities in the preparation of pupils for future employment. Questionnaires and focus group discussions were used in collecting data for the study across the length and breadth of Ghana from rural, semi-urban and urban areas. Parents believed educating their children could lead to their economic empowerment by getting them well-paid jobs in the future. Teachers and parents as well as pupils themselves considered English, mathematics and science as the most useful subjects to prepare pupils for future work. Similarly, parents, pupils and teachers were in agreement on sports, games, quizzes, debates and music and dance as the most preferred activities of pupils. On the other hand, subjects least preferred by pupils were named by teachers, pupils and parents as pre-technical skills, re-vocational skills and Ghanaian Languages, probably because they were considered difficult, uninteresting and lacking job relevance. Respondents – teachers, parents and pupils – felt that the ability to carry out instructions correctly, punctuality, honesty and ability to work effectively as a member of a group are attributes learners will need to be equipped with in preparation for future work. It was also proposed that such attributes as respect of authority, tolerance and regular attendance should be imbued in learners at school in preparation for work. The other attributes proposed include computational skills, problem solving skills, initiative, logical thinking, creativity, adaptability, moral integrity, self-confidence, practical skills and job-centred skills. There was total agreement among pupils, teachers and parents over the relative emphasis schools placed on the preparation for further education with its focus on academic knowledge and the pursuit of success in national examinations than life in the community with its emphasis on citizenship and development of responsible attitude to life in the community. It is recommended that much needs to be done to raise the standard of all forms of career guidance and counseling in schools. For effective linkage of the school curriculum and future workplace ethics and skills and positive attitudes at workplace, it is strongly recommended that all stakeholders of education including industry and employers should be involved in the process of curriculum development.

INTRODUCTION

In most countries, there is a considerable gap between what is learned in the classroom and the real life context of pupils' present or future world (see Anamuah-Mensah and Towse, 1995; Stevenson, 1995; Muskin, 1997; Tabron and Yang, 1997). This is particularly true of the less-developed countries, where the needs of those not progressing beyond the compulsory stages of primary or junior secondary education are subservient to the perceived academic needs of those progressing further, and particularly by the small percentage proceeding to university. Part of the problem lies in the fact that teachers have limited experience of 'life outside the classroom' and no access to resource materials through which to emphasize relevance; part also lies in the extent to which most curricula are examination-driven, as a consequence of which teachers adopt a highly didactic, 'chalk and talk' approach to cover the curriculum and meet the expectations of students, headteachers, parents and politicians who judge educational success merely in terms of results.

Noah and Eckstein (1988) maintained that attempts to improve the school system may have made important things worse. Specifically, they noted that German business interests consider that reforms in both the organization and content of secondary schooling have led to deterioration in general education. In a review of the findings of a series of education projects by Save the Children UK, Molteno *et al* (1999, 2001) point to the stark evidence that the surge in numbers enrolled in primary education has led to a disastrous drop in quality and accuse inflexible state education systems of clinging to outmoded styles of classroom discipline and teaching methodology. Although there is the need for changes for improvement in educational systems, they need to be considered most carefully if they are to bring about effective improvement in the quality of school-leavers.

PURPOSE OF STUDY

Available evidence have revealed that pupils/students are not adequately prepared for the world of work by the education system in not only the developing countries but the developed countries as well. A number of attempts have been made to put things right, with varying levels of success (Noah and Eckstein, 1988; Anamuah-Mensah and Towse, 1995; Stevenson, 1995; Muskin, 1997; Tabron and Yang, 1997). The study sought to find out the views of pupils, parents and teachers on the usefulness of the educational curriculum and co-curricular activities in the preparation of pupils/students for employment.

METHODOLOGY

Research Design

Ghana is situated on the west coast of Africa. It is made up of ten administrative regions. For this study, the country was zoned into three – the southern, middle and northern zones. The southern zone included Greater Accra, Central, Western, Eastern and Volta Regions, the middle zone consisted of Ashanti and Brong-Ahafo Regions while the northern zone was made up of the Northern, Upper East and Upper West Regions. For each of the three zones, 12 schools were selected at random, four each from rural, semi-urban and urban areas. For each school, questionnaires were administered to all Junior

Secondary School 3 pupils and their teachers. For each school, twenty pupils out of those that completed questionnaires were selected to form a focus group for focus group discussion for the triangulation of information gathered from the questionnaires. Parents of the pupils that formed the focus groups were also made to complete questionnaires.

Participants

The study consisted of pupils, teachers and parents of pupils in basic schools in Ghana. The planned and actual sample sizes of the various stakeholder groups were as follows.

Table 1: Planned and actual sample sizes of the various stakeholder groups.

Stakeholders	Planned	Actual
Schools	36	36
Pupils	1500	1569
Teachers	200	137
Parents	400	168

A closer look reveals the following information about the groups:

Pupils: In many ways, the pupils were the main focus of the study, for the problems associated with the shortage of employment opportunities will directly affect them. Questionnaires were administered to 1569 pupils, 207 from 12 rural schools (116 boys and 91 girls), 833 from 12 urban schools (427 boys and 406 girls) and 529 from 12 semi-urban schools (305 boys and 224 girls).

Teachers: The teachers are believed to be the major source of knowledge for the pupils, as well as the main actors in curriculum implementation. Questionnaires were administered to 137 teachers, 23 in the rural schools (19 males and 4 females), 69 in the urban schools (45 males and 24 females) and 45 in the semi-urban schools (38 males and 7 females).

Parents: Parents are concerned about the educational opportunities available to their children. Questionnaires were administered to 168 parents, 52 in the rural areas (38 fathers and 14 mothers), 65 in the urban areas (41 fathers and 24 mothers) and 51 in the semi-urban areas (28 fathers and 23 mothers).

Data Collection Procedures

The researchers compiled a series of complementary questionnaires administered to the various stakeholder groups. The questionnaires consisted of a range of question types, particularly open-ended ones, aimed at eliciting both quantitative and qualitative data. Answering questionnaires is still far from common in the country, particularly in the rural areas, and to facilitate as many responses as possible, questionnaire items were expressed in simple terms. To support these responses and probe further, a series of focus group discussions were held for 20 pupils of each school.

The aim was to target pupils from a representative cross section of the country's schools, teachers from these schools and parents of pupils at the schools. Questionnaire based on the objectives of the study indicated above were prepared to suit the circumstances of each group and distributed to representative basic schools and parents. The questionnaires were administered under the supervision of a member of a national team, who was there to help resolve any problems which might arise. The focus group discussions were also led by the national team members who administered the questionnaires.

RESULTS AND DISCUSSION

Background of Pupils

Under the 1992 Constitution, basic education, made up six years of Primary and three years of Junior Secondary School, is compulsory and free for all Ghanaian children, i.e. Ghanaian children attend school from the age of six years (Primary 1) to at least the age of 15 (third year of junior secondary school). The third year Junior Secondary pupils in this study were aged from 11 to 27, with a mean age of 15.5 years. The large number of older pupils in the Junior Secondary School could be attributed to the late enrolment (i.e. after the statutory age of six years) of many pupils in primary school. This occurs especially for pupils in rural areas and in the most deprived regions such as the three northern regions as a result of a number of factors including poverty and long distance from school. There is a high drop-out rate at the primary level, and a large number of drop-outs rejoin later on. The percentage of girls in the study was 46.0%. The figure for the urban areas was higher than for the rural and semi urban areas, 48.7% as opposed to 44.0% and 42.3% respectively (Table 2).

Table 2: Age of Pupils

Location of School	Number of Students		Mean Age (yr)
	Male	Female	
Rural	116	91	16.0
Semi-urban	305	224	15.5
Urban	427	406	15.3
Total	848	721	15.5

Background of Teachers

With an average age of about 35, the teachers in this study were generally relatively young. On average, teachers in the rural and semi-urban schools were marginally older than those in the urban schools. Females made up 27.7% of the teachers in the study. The majority of female teachers in the study (63.2%) taught in urban schools, compared to only 45.5% of the male teachers (Table 3). This situation has arisen as a result of married female teachers whose husbands are working in urban areas and manage to avoid

working in rural schools. Some unmarried female teachers avoid working in the rural areas because of the fear of remaining single for the rest of their lives or getting married to rural husbands with little potential.

Table 3: Age, qualification and experience of teachers.

Location of School	Number of Students		Mean Age (yr)	Mean	Mean	Years at Post
	Male	Female		Qualification	Experience	
Rural	19	14	35.8	4.1	17.6	11.7
Semi-urban	38	7	35.1	4.3	10.5	9.8
Urban	45	24	34.4	4.7	10.0	7.5
Total	99	38	34.9	4.4	11.4	9.0

Qualification Codes: O Level = 1; City and Guilds = 2; A Level = 3; Teacher's

Certificate A = 4; Teaching Diploma = 5; Bachelor's Degree = 6; Master's Degree = 7

With few exceptions, all the teachers in the study were professionally trained, holding a Teacher's Certificate A, a diploma or a degree. The average qualification held by the teachers in the study was the Professional Teacher's Certificate A, although teachers in the urban areas had a level of qualification rather nearer that of the diploma. The levels of qualification were comparable in the rural, urban and semi-urban areas, reflecting the Ministry of Education's policy of requiring, until the implementation in 1996 of the policy of free and compulsory basic education policy, all teachers at the basic level to hold Teacher's Certificate. The Ministry's current policy is for all teachers at the basic level to hold a diploma, a move which requires a large number of teachers to be upgraded.

Every school has its own ethos which, to a large extent, dictates the academic and social climate of the school. Thus, teachers need some time to become fully immersed in the culture of the school. Here they had an average of over ten years experience, more in rural schools because, in spite of the government's efforts to provide incentives to those who opt to teach in the rural areas, newly trained teachers preferred to teach in urban schools. Moreover, urban teachers frequently move out of the classroom in pursuit of higher academic qualifications and well-paid jobs in the towns and cities. The teachers here had spent a number of years in their present schools and so were generally settled.

In addition to their responsibilities in the classroom, teachers were often expected to bear additional duties, mainly academic ones as headteacher, form teacher, guidance and counseling coordinator, or teacher responsible for sports, music, the library or culture, drama and quizzes, and also some non-academic ones as teachers' welfare chairman, staff secretary, Chaplain, PTA secretary and health master/mistress. Of those who responded, about 80% had academic responsibilities and about 20% had non-academic ones. There were no guidance and counseling coordinators and no library teachers in the rural areas. Not one teacher had a responsibility for liaising with business or industry.

The teachers had various subject backgrounds, mainly in social studies, mathematics, English, agriculture and science. There was not a single teacher in the whole of the rural areas that had specialized in life skills, business management or guidance and counseling, only one qualified in pre-technical skills and another in pre-vocational skills. No female teacher qualified in pre-technical skills or mathematics. These facts have a very significant bearing on the popularity of these subjects and the extent to which they contribute towards the preparation of pupils for employment. After all, teachers with a better knowledge of the subject material have better performance students (World Bank, 1995)

Poppleton and Riseborough (1990: 116 - 117) defined those teachers who saw their role narrowly in terms of classroom teaching only as 'restricted professionals', qualified teachers for whom 'personal relationships are not highly valued'. They described those teachers who interpret their responsibilities simply in terms of meeting the demands of the syllabus but who largely turn their backs on school at the end of the working day. On the other hand, they characterized those who focused on wider community and development issues as 'extended professionals', teachers whose 'distinctly high profile encompasses commitment to a broad range of professional roles and practices'. It is obvious, therefore, that to consider any improvement in both the enhancement of the career prospects of pupils and their preparation for the world, we need many more 'extended professionals', teachers willing to face up to new challenges and work with others, particularly in business and industry, in order to smoothen the transition from school to work for their pupils. Because their commitment to teaching can have a long-term effect on their performance in the classroom and the attitudes they pass on to their pupils, it was important to ascertain the extent to which teachers seriously chose teaching as a career or simply fell into it because there was little else for them to do. Over a quarter of a century ago Ndunguru (1976, xii) maintained that in Tanzania, teaching is chosen only as something to fall back on when nothing better can be found, which found uncomfortable echoes in a number of studies in the UK (ASE, 1991; Jenkins, 1999), in Brunei Darussalam (Yong, 1995) and elsewhere around the world. For instance, the 1999 Chairman of the ASE, Rebecca Edwards (1999: 8), once vowed:

Teaching is the last thing I will ever do! ... I really wanted to be a vet, but my A level results weren't good enough ... I wondered what to do next and I thought I might as well take a Certificate in Education course, while I made up my mind! After all, you can always get a job in teaching, if there's nothing else about!

However, Edwards went on to say that things began to fall into place and, after she had spent her first day of teaching, she never looked back. Whatever reluctance there may have been to take up teaching as a career, one dare hope that the same has happened here.

Sixty percent of the teachers in this study claimed a long-standing commitment to the profession. There was a measure of support for the argument that occupational choice is strongly influenced by cultural norms and expectations, with women tending to opt for more socially caring occupations such as nursing, teaching and social work, which may be considered an extension of the female sex role. This view of women in the more developed countries (Epstein, 1971) is shared in a number of less developed countries such as Zimbabwe (Chivore, 1986) and Kenya (Kibera, 1997). Indeed, Kibera (1997) has gone so far as to claim that although females attach a great deal of prestige and kudos to professional occupations in law, medicine, engineering and universities, they appear to prefer to enter low level service-orientated occupations like nursing, secretarial service, clerical and teaching jobs that are perceived as low status and have poor remuneration as well. Now, it is true that in Ghana, as throughout the less developed countries, the main obstacle to pursuing a professional career lies in not obtaining good enough grades in national examinations, but this is not the only reason and many who enter teaching could just as easily have followed one of these more socially acceptable careers had they had the desire to do so.

Background of Parents

Children generally regard their parents as role models. The educational backgrounds and occupations, and hence economic power, of parents tend to influence the attitude and performance of their children. For instance, educated parents tend to value their children's education more, buying books and other support materials, helping them with homework, and advising them on career options, etc. The parents exhibited the full range of educational experience, from no formal education at all to a university degree, with an average equivalent to junior secondary level (Table 4). Under ideal circumstances, parents with at least a secondary education might reasonably be expected to have a very positive influence on their children's education and career orientation. Similarly, they showed a wide range of occupations, with small businesses (much more common among mothers), farming (much more common among fathers and obviously much more common in the rural areas), teaching (more common among fathers) and housewife (exclusively mothers).

Table 2: Age and Qualification of Parents of Pupils

Location of School	Number of Parents		Mean Age (yr)	Mean Level of Education
	Male	Female		
Rural	38	14	47.1	3.7
Semi-urban	28	23	45.0	4.6
Urban	41	24	43.7	5.1
Total	107	61	45.2	4.2

Educational Level Codes: Illiterate = 1; Standard I – IV = 2; Standard V – VII = 3; Junior Secondary School = 4; Technical College = 5; Senior Secondary School = 6; College/University = 7

Purpose of Education and Function of Schools

Parents sent their children to school so that they might enjoy a better life than they themselves have had. They saw this best achieved through a formal academic education, firmly believing that good examination results would lead to more education, and in turn this leading to better jobs.

Subjects and Activities Most Enjoyed by Pupils

To get a balanced view of how the different groups might judge the present curriculum as a vehicle for preparing pupils for the world of work, it was decided to look first at what the pupils might like and what they might not, and later at the subjects and skills which they considered to be of most help when applying for jobs. Pupils named English, mathematics and science as the subjects they most enjoyed, because these subjects were interesting and enabled them to learn many of the generic skills useful when they left school and applied for jobs. English made them literate and improved their communication skills, mathematics gave them numeracy, and science helped them to gain skills useful in medicine, engineering, etc. Parents fully agreed. The teachers also picked English and science, essentially for the same reasons, but imagined that the pupils would also find social studies more enjoyable than mathematics. Actually, they did make mathematics their next choice (and for the same reasons as the pupils did) and so there was a fairly strong measure of all round agreement.

When it came to the activities pupils enjoyed, there was complete agreement over the choice of sports and games, quizzes and debates, and music and dance. Parents fully agreed with the pupils' choice, and teachers differed only in switching the order of the last two. Sports and games were obviously chosen for the health and fitness they promoted, but reasons for the other two are interesting. Quizzes and debates made them more literate and able to communicate with others, more aware of important issues (current affairs), and more able to 'think fast'. As one pupil remarked, 'we also learn

something from others', emphasizing the capacity this activity had for sharing ideas with their peers and molding opinions not originating with the teachers. Certainly, these skills would serve them well when they applied for jobs. Many felt that music and dance made them more aware of their cultural background.

Subjects and Activities Least Enjoyed by Pupils

It would not be exaggerating to say that the responses here have set some concerns. Parents confirmed the pupils' choice, naming pre-technical skills, pre-vocational skills and Ghanaian Languages in the same order. On the other hand, teachers named only one of these three subjects, pre-technical skills, picking mathematics and science instead of pre-vocational skills and Ghanaian Languages, although they placed Ghanaian Languages as the fourth least popular subject. It is obvious, therefore, that pre-technical skills and Ghanaian Languages have proved unpopular with the pupils, teachers and parents alike, and that pre-vocational skills were unpopular with the pupils and parents. It seems ironic at the very least, and not a little alarming, that the Ministry of Education should have seen fit to introduce into a full curriculum two subjects it has justified on the grounds that they would be instrumental in providing pupils with fundamental skills many of them would find useful when seeking employment, only to have them prove so unpopular. All three subjects proved unpopular because they were considered difficult, uninteresting, lacking job relevance, and suffering from a severe lack of trained teachers and resources. It is obvious that the feeling of difficulty and lack of interest can be explained by the inadequate circumstances in which the subject was taught, but it certainly comes as a surprise to see the unpopularity blamed on the lack of job relevance when this is one of the main *raison d'être* for including them in the curriculum. It did not help that there was a distinct lack of trained teachers and resources to teach these subjects properly since, as pointed out already, there was only one teacher qualified in pre-technical skills and another in pre-vocational skills in the whole of the rural areas, and no female teachers qualified in pre-technical skills. Avalos (2000, 460) sums up this situation neatly as follows:

Educational reforms generally precede attention to teachers. Often reforms are decided, new curricula and textbooks are written, and teachers are merely informed of their contents and procedures through participation in a few in-service days.

Given this situation, it is merely surprising that these subjects were not characterized as even more unpopular and unhelpful.

Teachers previously named mathematics and science among the subjects they thought the pupils most enjoyed, yet here they have named them among the subjects least enjoyed. This should come as no surprise, for the expression 'one man's meat is another man's poison' applies just as much to subjects taught in school as it does to anything else. The bulk of opinion rests firmly at the most enjoyed and least enjoyed ends of the spectrum, with little in between. The successful teaching of these two subjects depends on more resources being available, be they teachers in the case of mathematics or material resources in the case of science. Since success in these subjects is a pre-requisite to academic progress and the pursuit of careers in, for example, medicine and engineering,

the question of in-service training and the supply of resources needs to be addressed so that there is a considerable shift towards the positive end of the spectrum.

In a study of attitudes towards the teaching of science in Lesotho, Towse (1977) found that topics teachers thought pupils found difficult did not correlate very closely with those the pupils themselves found difficult. On the other hand, topics teachers thought pupils found difficult did correlate very closely with those they found difficult to teach. It is possible therefore, that some of the present negativity that teachers ascribe to science may arise out of the perceived difficulty of teachers in teaching it, particularly where schools lack the laboratories and resources needed to teach properly. Where differences exist between what pupils think and what others think they think, we should be careful not to dismiss pupils' opinions as automatically being of lesser value. There is some hope for the future. After all, the pupils rated science as one of their three most enjoyable subjects and with a greater input of training and resources it could, perhaps, become even more enjoyable and even more relevant.

Much of the problem with mathematics lies in the way it is taught, examinations focus attention on the drier aspects of the subject, aspects which may seem easier to teach but which the pupils invariably find dull. What better than to quote in full a recent letter to *The Independent* (Taylor, 2004):

The best way to improve maths teaching is not to teach it. Instead from primary school until, say, about age 14, pupils should be taught, or rather helped to acquire, logical, critical and creative-thinking skills. I remember from my own grammar school days how so few fellow pupils enjoyed maths. No teacher was able to say why, for instance, Algebra was important. So it was regarded as just one of those silly ordeals that teachers were there to plague us with. Maths is a thinking skill and needs to be set in that context, and more advanced maths related to more advanced thinking.

After about age 14 students should be able to appreciate the importance of mathematics and those with a liking for the subject should be able to study it as a discipline in its own right. Those who are not so inclined will nonetheless have acquired a range of essential life skills. Similarly, another writer (Povey, 2004) blames the crisis in science teaching on the rigidity of the curriculum and the attendant tests and examinations to which the pupils are all too frequently subjected. Although writing in and for the UK, his remarks have a much more universal ring about them:

Most teachers go into teaching wanting to inspire children – the national curriculum is so prescriptive and boring that this job is now far more difficult and the SATs make it more or less impossible for teachers to teach in an inspired way. As a result the numbers of children alienated from school is increasing. There is no room for imagination in SATs. These may seem little more than the cynical outbursts of two frustrated observers, but

there is far more truth than cynicism in their comments and they are merely echoing, albeit in perhaps stronger terms, what many others have been saying for years, educators and educated alike.

Many pupils admitted that they did not like sports and games, gardening or music and dance, even though others had previously given sports and games and music and dance as two of three activities they most enjoyed. In the case of sports and games, opinion was completely polarized; all of it at one or the other end of the spectrum, but with Music and Dance there was little polarization. Similarly, teachers thought pupils would least enjoy gardening, sports and games and practical work linked to Pre-vocational Skills, even though they had earlier referred to sports and games as the activity they thought pupils most enjoyed. Opinion was once more completely polarized.

Subjects Pupils Find Helpful in Getting Jobs

Pupils considered science, mathematics and English the subjects that would best help them to get jobs, all primarily because of their capacity to develop the skills most in demand by potential employers, in particular the practical skills in science, numeracy in mathematics and literacy and communication skills in English. They also valued skills such as logical thinking, problem solving, creativity and original thinking, which these subjects nurtured. To re-iterate, science was chosen more by girls than boys, quite significantly in the case of rural and urban schools though not in the case of semi-urban ones. English was chosen more by boys than girls in the rural schools, more by girls than boys in the urban ones but more or less equally in the semi-urban ones.

English was acknowledged as fundamentally helpful in the search for jobs, being named by all groups. This was the only subject to receive such unanimous acclaim. The pupils were the only ones not to consider pre-technical skills helpful, but two of the other groups (teachers and parents) concurred in regarding science as helpful. The teachers and parents shared their optimism over pre-technical skills but not over pre-vocational skills. There is a very strong argument for involving the employers in the implementation of these subjects and having them advise on appropriate steps forward. If the Ministry of Education is right to include these subjects in the curriculum, there is an even stronger argument for determining how and why the lack of competent teachers and resources in these subjects has been tolerated.

As for the subjects considered to be the least helpful, the pupils selected Ghanaian languages, pre-technical skills and social studies, all three chosen for lack of relevance to the workplace and, although not entirely relevant in terms of applying for jobs, they were also thought to be difficult and lacking in interest. Both the teachers and parents agreed with the pupils over Ghanaian Languages, but only the teachers agreed over social studies. The teachers and parents added religious and moral education, and the parents added French. Again, the key to these choices lay in a lack of relevance to the workplace.

In many ways, it was not so much the subjects but what was taught through those subjects which was important. In a survey conducted in the UK by Morton-Williams and Finch (1968), eighty-seven percent of school leavers considered that schools should teach pupils things that would help them get jobs, sentiments overwhelmingly supported by 89% of parents. In stark contrast, however, only 28% of headteachers and 47% of teachers considered that their role was to prepare pupils for paid employment.

Skills Required for Future Careers

Respondents were asked to judge how important sixteen generic attributes or skills were when it came to applying for jobs. These skills, largely personal and social skills, were rated higher by the adult groups than by the pupils which, perhaps, reflect a more contemplative approach by these other groups. There were only two skills which featured in the top six of each group's list, the ability to carry out instructions correctly and punctuality, though a number of others came close. Other skills considered important by the majority of the groups were the ability to carry out instructions correctly, honesty when dealing with other people and the ability to work effectively as part of a group. Relatively little attention was paid to the discussion of ideas by writing about them, understanding and presenting visual information and the ability to apply mathematics in the workplace.

The acquisition of these generic skills is critical at the junior secondary level, which is designed to be both terminal and continuing. Despite the fact that the majority of junior secondary pupils leave the formal education system at an early age, insufficient attention has been paid to the consequences of an early termination of their schooling and the requirements of the labor market. The current knowledge economy requires people with appropriate qualifications and skills to create a modern labor market. The country runs the risk of social exclusion for a high percentage of the school leavers at the junior secondary level if the appropriate skills are not taught. It is the belief of some scholars that it is through the moral climate of the school that such attitudes and values necessary to be a good worker are developed. It is suggested that these attributes should include punctuality, respect for authority, tolerance and regular attendance at place of work (Shipman, 1971).

The skills required for future careers were classified as cognitive, affective and psychomotor. Cognitive skills included computational skills, problem solving, communication skills, literacy, logical thinking, innovation, creativity, high IQ, academic competence and adaptability. Affective skills included humility, punctuality, self-discipline, moral integrity, interest, self-confidence, commitment, honesty and team work. Psychomotor or manual skills included practical skills, job-centered skills and typing. If these skills have not been practiced by the time they finish junior secondary school, many youngsters who finish their education at this stage will face a somewhat uncertain future.

Income Generating Work by Pupils

The pupils reported that there were as many of them engaged in part-time work as not. However, the parents reported matters somewhat differently, with a greater number reporting that their children were not doing any part-time work after school. It is possible that at least some of the parents were not aware of what their children were doing, however some parents who knew their children were working may not admit it because they did not want to be counted among parents who involve their children in commercial ventures or that some were working at home or on the farm for 'pocket money', which they felt did not count. The numbers of pupils working were highest in the rural areas.

Surprisingly, for a country heavily dependent on agriculture, very few pupils were working part-time in farming, particularly girls. In fact, most were engaged in trading, which basically meant wandering around the streets or waiting at road junctions and traffic lights to sell a variety of easily transported goods such as newspapers, sweets, fruits and water to pedestrians or passing motorists. Competition is fierce and the profit margin small, but there is a fairly ready market for such items. Production work included simple carpentry, the production of charcoal, basket weaving, brewing *pito* (home brewed beer) and making *kenkey* (a staple food). Service activity included hairdressing, simple car mechanics, shining shoes, weeding and tailoring.

Most of this work arose out of the efforts of the parents or the pupils. Given the nature of these activities, it was not surprising that the majority of them were working for their parents or for themselves. Their parents confirmed this but indicated more emphatically that most pupils worked for themselves. The motive for taking on this work was purely financial. Only a few conceded that their reason was to acquire work skills or orientation towards possible future employment. Parents agreed with the pupils that half of them worked an average of an hour a day after school and on weekends, and another third up to two hours a day. Some even worked early in the morning before school started.

Rural pupils readily admitted that this work affected their work at school significantly, while for the urban pupils the effect was less marked. For semi-urban pupils even less marked. Girls in the rural areas seemed to be more affected than boys. Neither of these findings should come as too much of a surprise in view of the longer hours that quite a number of rural pupils, particularly girls, work. Both the urban and semi-urban groups said that they still had enough time for their school work. The parents generally agreed with this, though most failed to explain why. They did, however, clearly suggest that the pupils were not likely to do as well in Mathematics, English and Science.

Ghanaian pupils show consistency with pupils in the US who were older but similarly working towards important examinations. Stern and Briggs (2001) reported that seniors who limited their hours of work had higher grade point averages than those who worked more than 20 hours per week and those who did not work at all. Similarly, the majority of pupils in the UK worked between six and 15 hours per week and that only a quarter worked more than 15 hours per week. Of greater concern than the actual number of hours

worked was when the work was undertaken. Undertaking paid employment during the week is more disruptive than working on the weekend (Hodgson and Spours, 2001).

Income Generating Work by Teachers

Research suggests that teachers act as role models for many of their pupils (Ndunguru, 1976; Entwistle and Duckworth, 1977), and so they have to take their responsibilities extremely seriously. For instance, although teachers are expected to be punctual to class and well prepared, they may well fall short of this expectation. As one pupil remarked in an interview, 'The teacher does not attend lessons even when he is around and pupils go to invite him to class.' They have to give as much attention as they can to their work, both in the preparation and in the execution. It is therefore reassuring that less than a third of the teachers had a second job, or at least admitted to having one.

Teachers had obtained this work largely through their own efforts and were working mainly for themselves. The work was usually in farming or part-time tutoring, with only a few engaged in other activities. No one was doing it for purely altruistic reasons and, indeed, everyone who responded stated clearly that they were doing it because their monthly income was too small. This is not the place to argue teachers' salaries. Suffice to say that to many teachers low pay is synonymous with low status. Since teacher status is closely related to public expectations, it is important that teachers should not be undervalued. It has been recommended (UNESCO, 1998) that teachers' status should be commensurate with the needs of education as assessed in the light of educational aims and objectives. It should be recognized that the proper status of teachers and due public regard for the profession of teaching are of major importance for the full realization of these aims and objectives.

The vast majority of these teachers were working the equivalent of up to an hour and a half a day, either after school or at the weekends, but they claimed to turn this work to their advantage in their teaching. In addition to the useful examples which made their lessons more interesting and relevant, it gave them insights into the problems, both academic and personal, which many of their pupils faced. As most of the extra work was in farming, part-time tutoring and trading, the experience gained was used to most advantage in subjects such as agricultural science, science and pre-technical skills. So far the advantages of this extra work appeared to outweigh the disadvantages, but if the time spent on it were to increase this would be at the expense of the attention they could give to their teaching and they could well end up failing to meet the educational aims and objectives referred to above.

Career Information and Guidance

A career in medicine was the most popular choice among pupils, but not necessarily as a doctor. A number opted for pharmacy, and girls were more inclined towards nursing. It might initially have seemed surprising that pupils, whether boys or girls, rural, urban or semi-urban, regarded self-employment so highly, particularly as traders. Teaching was

the next most popular choice, less so among the semi-urban pupils, with financial services, engineering, farming and administration or management also drawing some interest. Rather more girls than boys chose medicine, teaching, self-employment, accountancy and journalism, while more boys than girls chose farming and engineering. There was a remarkable measure of agreement from their parents, except perhaps for farming. Parents who themselves are farmers, particularly if they are operating at the subsistence level, see the hardships in their lives and automatically want something better for their children. Francis (2002) reports that in the more developed countries, girls' choices have changed since the 1980s, and that they now see their chosen occupations as reflecting their identity. That many girls chose professional jobs and those requiring high qualifications indicate that girls view these future occupations as careers rather than viewing paid work as a stop-gap before marriage.

Things may not have reached that stage yet in Ghana but they would appear to be moving in the same direction. Market trading continues to be the most important source of employment for the majority of urban women in Ghana. In 1991 for instance, the World Bank estimated that of the 82.72% of urban workers in the non-formal sector in Ghana, 58.73% were female traders (Dunne and King, 2003). In the past, many attributed this concentration of women in market trading to a lack of education and skills but many of these women are above average in both. However, the shrinking public formal sector, resulting from Structural Adjustment Programmes similarly demands a rethink of the connection between education and occupation (Dunne and King, 2003). Nonetheless, a number of girls were interested in professional careers and it is hoped that their aspirations will not be dampened by teachers trying to steer them into more stereotypical occupations.

The school has an important role to play in preparing pupils for continued secondary education, paid employment, self-employment and life in the community, as clearly set out by the Ministry of Education in the objectives for its junior secondary curriculum. Perhaps uniquely, there was total agreement among pupils, teachers and parents over the relative emphasis schools placed on the preparation for further secondary education, with its focus on academic knowledge and the pursuit of success in the national examinations. That is the school placed little emphasis on citizenship and the development of a responsible attitude to life in the community at the local, regional or national level, employment opportunities in the informal sector including self-employment but emphasized on employment in the formal sector with its implied emphasis on white collar jobs.

Career guidance took place primarily through personal recommendation, talks, interviews and visits to businesses. Hand-outs were rarely, if ever, used. Inevitably, the provision of guidance was at its lowest in the rural areas, where the absence of businesses and industries rendered that aspect of career guidance difficult to implement but even in the urban schools it was still quite modest. The picture was hardly encouraging and obviously there is much to be done to raise the standard of all forms of career guidance to an acceptable level. The teachers and parents tended to paint a similar picture in terms of

the relative importance of the different forms of career guidance although, inevitably, the teachers rated their schools' input higher than the parents and higher than the pupils.

There was very little reference to general talks and lectures, so one can only hope that whatever guidance was offered it was aimed personally at specific individuals. There was little evidence of pupils receiving advice on which subjects they should study in order to pursue their chosen careers. There was an almost unanimous call for improvement in the guidance and counseling offered to pupils, but few made substantive suggestions as to how this might be done. Of those who did, the feeling was that guidance and counseling sessions should be more thorough, frequent and include discussion of better informed pupil choices. Moreover, there had to be in-service seminars and workshops to train the teachers to implement such guidance more effectively.

Over half of the pupils believed that their teachers could have prepared them better for the transition to work, essentially through closer links between schools and businesses. Only a few called for an improvement in the teaching in schools. By a large majority, of more than six to one, all other groups agreed with the pupils that the educational system could have prepared them more thoroughly for the workplace. Thus, all the stakeholders in education were in agreement, strongly suggesting they should all be involved in the process of curriculum development and in at least some aspects of how the teaching and learning is organized in schools, practices that currently involve only teachers and, to some extent, teacher trainers. There is still a strong need to involve parents, administrators and employers.

Influence of Various Factors on Pupils' Choice of Careers

Of those pupils in part-time work, about a quarter admitted that this work had influenced their choice of career, partly because it appeared closely related to their career aspirations, partly because they had developed through it a strong interest in a career, and partly because they had developed job skills which would prove relevant later. In fewer cases, this work had prepared them for self-employment. However, the majority of pupils were adamant that it had not influenced their decision on careers because the two forms of work were unrelated. It seemed, therefore, that part-time work did not have much impact on the pupils' knowledge of jobs.

The biggest influence on pupils' knowledge of careers was the schools, followed by parents, television, siblings and other relatives. The least influential of the named factors was visits to the school by employers, visits to local businesses and their own part-time work. The schools represented not only the choice of the pupils themselves, but also of the other groups. There was broad agreement at the other end as well, with visits to local businesses, visits to schools by local employers and the pupils' part-time work proving least influential with most groups. Whereas visits to and from businesses had taken place in some urban schools, and to some extent in semi-urban ones as well, the same certainly could not be said for many schools in the rural areas.

Teachers have the capacity to directly influence their pupils' choice of careers. The achievements and attitudes of pupils have been shown to be related to the characteristics and achievements of their teachers (Lawrenz, 1975; World Bank, 1995). The influence of the school depends on the formal interactions and communication which take place between teachers and pupils in the classroom whereas television and radio act through the informal interactions pupils have with these media. The influence of parents and siblings is through both formal and informal means.

Nearly half of the parents regarded their own occupations as having little or no influence on their children's choice of careers. Many did not anticipate their children 'following in their footsteps' because the children saw these jobs as narrow and lacking in interest. Far fewer suggested that their occupation might have influenced their children's choice of careers, but when this happened nearly half of them claimed their children were interested in their jobs, some children had generic skills useful in such jobs, and a few had job skills relevant to those jobs.

Possible Introduction of a Work Experience Program

By a relatively small margin, the pupils favored the introduction of a work experience program towards the end of junior secondary school, thinking that this would lead to the acquisition of more knowledge and experience of work. Although it was really something of a *nonsequitur*, a few thought this might be a way for the pupils to earn some money. Many of those opposed to the idea simply considered it either a waste of time or inappropriate as they were too young. This seemed particularly surprising since many of them would have been in their final year of school and would very shortly be seeking employment anyway.

The other groups completely agreed with the pupils that there should be the opportunity to gain experience of the workplace before leaving school and were, if anything, more positive about it. Overall, the adults were much in favor, the strongest support being from the parents.

In advocating closer links between the worlds of school and work, Miller (1993, 2) offers three aspects of the education-business link: education for business, which seeks to improve the transition of young people from school to adult and working life by raising standards in careers education and guidance, education about business, which seeks to improve young people's economic and industrial understanding, and education through business, which seeks to raise standards across the whole curriculum by providing a resource, context and/or environment in order to improve the motivation and attainment of young people. However, the value of education-business activities is often judged by politicians, administrators, teachers, students and others in terms of education for business, rather than through or about business. This convergent rather than divergent view highlights a perception of education-business links that too often

means, especially in less developed countries, vocational education rather than the use of workplaces as sites for learning.

It is obvious that education-business partnership activities provide pupils with an excellent opportunity to develop these skills, but it is equally obvious that we must first ensure that the teachers have the right knowledge, skills, attitudes and values to become what Poppleton and Riseborough (1990, 117) call 'extended professionals', vocationally committed teachers whose open-ended contributions set teaching and learning in schools in as wide and relevant a context as possible.

CONCLUSION

The JSS curriculum sought to prepare pupils to enter into the world of work by linking the school curriculum to employment. For the school to be successful in this endeavor, subjects such as pre-technical skills and Ghanaian Languages taught at this level should be made relevant and interesting to the pupils. Another factor that needs to be considered is the recruitment of competent teachers capable of relating what they teach to the job market. What is taught and how it is taught can have great influence on the interest and perception of learners.

REFERENCES

- Anamuah-Mensah, J. and Towse, P. (1995): Bringing industry into the science classroom - problems, concerns and prospects associated with a paradigm shift, in van Trommel, J. (ed.), *Science and technology education in a demanding society* (Proceedings of the 7th IOSTE Symposium), Enschede (Netherlands): National Institute for Curriculum Development, Part 4, pp. 165-180.
- ASE (1991): *Only a teacher...?* Hatfield: Association for Science Education/British Association for the Advancement of Science/Royal Society.
- Chivore, B.R.S. (1971): Form IV pupils' perceptions and attitudes towards the teaching profession in Zimbabwe, *Comparative Education*, 22(3): 233 - 253.
- Dunne, M. and King, R. (2003): Outside theory: an exploration of the links between education and work for Ghanaian market traders, *Journal of Education and Work*, 16(1): 27 - 44.
- Entwistle, N.J. and Duckworth, D (1977): Choice of science courses in secondary school: trends and explanations, *Studies in Science Education*, 4: 63 - 82.
- Epstein, C.F. (1971) *Woman's place: opinions and limits in professional careers*, Berkeley: University of California Press.
- Francis, B. (2002): Is the future really female? The impact and implications of gender for 14 – 16 year olds' career choices, *Journal of Education and Work*, 15(1): 75 - 88.

- Hodgson, A. and Spours, K. (2001): Part-time work and full-time education in the UK: The emergence of a curriculum and policy issue, *Journal of Education and Work*, 14(3): 373 - 388.
- Jenkins, E.W. (1999): A profession no one wants to join?, *Science Teacher Education*, 25: 3 - 4.
- Kibera, L.W. (1997): Gender and occupation prestige in Kenya, *Papers in Education and Development*, (journal of the Faculty of Education, University of Dar es Salaam), 18: 97 – 107.
- Lawrenz, F.P. (1975): The relationship between science teacher characteristics and student achievement and attitude, *Journal of Research in Science Teaching*, 12(4): 433 - 437.
- Miller, A. (1993): Building Effective School-Business links, London. Department of Education.
- Molteno, M., Ogadhoh, K., Cain, E. and Crumpton, B. (eds.) (1999): *Towards responsive schools: supporting better schooling for disadvantaged children (Case studies from Save the Children)*, London: DFID Education Paper 38.
- Molteno, M., Ogadhoh, K., Cain, E. and Crumpton, B (eds.) (2001): *id21 education: communicating development research*, <http://www.id21>.
- Morton-Williams, R. and Finch, S. (1978): *Young school leavers* (Schools Council Enquiry 1), London: HMSO.
- Muskin, J.A. (1997): Becoming an independent entrepreneur in the formal sector of northern Cote d'Ivoire: what role can primary schooling play? *International Journal of Educational Development*, 17: 265 – 283.
- Ndunguru, S. (1976): *Educational essays for teachers*, Arusha: East African Publications Limited.
- Noah, H.J. and Eckstein, M.A. (1988): Business and industry involvement with education in Britain, France and Germany. In: Lauglo, J. and Lillis, K. (eds), *Vocationalising education: an international perspective*, Oxford: Pergamon Press, pp. 45 - 68.
- Poppleton, P. and Riseborough, G. (1990): 'Teaching in the mid-1980s: the centrality of work in secondary teachers' lives', *British Educational Research Journal*, 16(2), 105 - 124.
- Povey, M. (2004): Science in crisis, *The Independent, Education Supplement*, 12 February, p. 2.

- Shipman, M.D. (1971): *Education and modernisation*, London: Faber.
- Stern, D. and Briggs, D. (2001): Does paid employment help or hinder performance in secondary school? Insights from US high school students, *Journal of Education and Work*, 14(3): 355 - 372.
- Stevenson, R. (1995): The Huddersfield experiment, *Chemistry in Britain*, 31(11): 845 – 847.
- Tabron, G. and Yang, J. (1997): The interaction between technical and vocational education and training (TVET) and economic development in advanced countries, *International Journal of Educational Development*, 17: 323 - 334.
- Taylor, V.N. (2004): How to enjoy mathematics, *The Independent, Education Supplement*, 12 February, p. 2.
- Towse, P.J. (1977): An evaluation of the Lesotho Introductory Science Improvement Programme, with particular reference to the effects of this course on attitudes to, and an understanding of, science, M.Ed. thesis, University of Hull.
- UNESCO (1998): *World education report: Teachers and teacher education in a changing world*, Paris: UNESCO.
- World Bank (1995): *Priorities and strategies for education*, Washington, D.C.: World Bank.
- Yong, B.C.S. (1995): Teacher trainees' motives for entering into a teaching career in Brunei Darussalam, *Teaching and Teacher Education*, 11(3): 275 - 280.