

# Primary School Managers Perceptions of the Importance of Computers in Primary Schools

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**ABSTRACT** Primary Education, within the overall system of formal education provides a foundation upon which other levels of education rest. Information and Communication Technology (ICT), in particular, the computer, plays an important role in the advancement of competitiveness in the global technological era. A study was, therefore, conducted in the southern part of Botswana to assess the school managers' perception of a computer in both private and government primary schools. The findings show that all private schools had computers and the school managers used them more in their administrative duties as compared to government primary school managers whose schools had very limited or no computers. Whilst School Management Teams (SMTs) from government schools indicated that they valued computers, they did not do much to secure the same through partnerships with parents and the community. It is concluded that the practical implementation of the concepts of partnership, self-reliance and creativity may not be understood by government school SMTs. Hence, it is recommended among others that workshops on the application of the three concepts be organized for them and that government must budget for computers for primary schools if the objectives of Vision 2016 are to be realised

## INTRODUCTION

According to the self perception theory, actions influence perceptions and attitudes, therefore people infer their attitudes and perceptions by observing their own behaviour and situations in which their behaviour occurs (Smith and Mackie 2008). Perceptions therefore play an important role in influencing how people react to life and vice versa. To this extent then, the school managers' perceptions of the role of the computer in the school is seen as a precept to how they (managers) are likely to influence their acquisition, their use, the extent to which they would motivate or de-motivate others towards using computers in the enhancement of school performance.

The 1994 Revised National Policy on Education (RNPE) for Botswana proposed that the society of Botswana be made computer aware and the work force be prepared to make the best use of Information Technology (Republic of Botswana 1994). In 1997, the Republic of Botswana

came up with a vision called 'Vision 2016: Towards Prosperity for All - Long Term Vision for Botswana' (Republic of Botswana 1997). One of the pillars of Vision 2016 is 'Sustainable and Diversified Development through Competitiveness in Global Markets'. The National Development Plan 9 (Republic of Botswana 2003) set out a macroeconomic outline and policy framework to address the theme of Vision 2016, hence, efforts to enhance competitiveness with reference to the global economy and increased availability of trained manpower, intensified research and developed and promoted financial markets. The Government of Botswana established a Commission for Science and Technology which developed a plan to guide the implementation of the Science and Technology Policy. The policy is to make Botswana a knowledge-based society and a major participant in the competitive world. One of the Botswana Government's major objectives of introducing ICT in schools is to develop in learners those skills that they can, in future, utilise in improving the quality of their lives. This is intended to help the development of the national economy, to reduce poverty hence improve the quality of life for all people of the nation (Sebetela 2003). It is expressed in the Ministry of Education's strategic plan of 2001-2006, that Government of Botswana intends to offer equitable lifelong education and training that is relevant and responsive to the rapid technological development and

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the changing socio-economic environment, to produce knowledgeable, skilled, enterprising and independent individuals (Republic of Botswana 2003).

In this respect, the Report of the National Commission on Education (RNCE) recognised that primary education is the most important level that provides a foundation upon which other levels of education rest (Republic of Botswana 1993). In this view the firmer the foundation is, the stronger the subsequent levels of education. To ensure this firm foundation, the Government proposes that all schools should have computers by 2016 (Republic of Botswana 1997).

By the same token, the more positive and sustained perceptions of the computer by primary schools managers, the better the preparation of the school child toward Information and Communications Technology (ICT) in subsequent levels of education and the better prepared the youth for a future ICT inclined society. It therefore became necessary to carry out a study of the primary school managers' perceptions of computers and their use in primary schools.

### Study Question

What are the SMT's perceptions of the importance of computers in primary schools?

### Study Objectives

The objectives of this study were to assess

1. the availability of computers at both private and public primary schools;
2. perceptions of managers of both government and private primary schools on the importance of computers at primary schools;
3. the extent of assistance sought on acquisition and use of computers;
4. satisfaction with the state of computers at primary schools.

## METHODOLOGY

### Research Design

According to Cresswell (2005), survey data helps identify important beliefs, perceptions and attitudes of individuals. Survey data is mainly collected using questionnaires or interviews. Baker (1999: 11) also describes surveys as focussing "*on attitudes, opinions, and pieces of*

*information about the conditions of life*". She further notes that surveys are mainly descriptive. It was, therefore, found to be appropriate to adopt a survey design as the study intended to establish the perceptions and opinions of SMTs with regards computers at primary school level.

### Delimitation

Botswana has six primary education regions. The study focused on some primary schools in one of the six primary education regions, the southern region made of villages of Mochudi Ramotswa and Molepolole as well as Lobatse town and Gaborone city.

### Population and Sample of the Study

A random sample was used to choose the southern primary education region and its schools because it possesses similar characteristics as the other five regions and therefore the findings would provide an insight into the situation particularly for government schools. The apparent similarities in government schools are defined in this case, in terms of the qualification of staff deployed to the schools, both managerial and academic; all government schools receive staff trained in Botswana Diploma offering Colleges of Education following a common curriculum; a few staff members trained at universities at degree level are deployed to all education regions. The teaching staff falls under the Teaching Service Management (TSM) in terms of their conditions of service which may influence the extent of their motivation in teaching. TSM is also in-charge of placement. The public schools also receive similar teaching and learning material resources from government. While private schools in Botswana are governed by the laws of Botswana, they are self financed, and do not necessarily get human resources from the government pool (TSM). While they use the government school syllabi, they also have a leeway to include extra curriculum content which makes them even more international than the government schools. Their main source of funding is the tuition fees and support from companies and parents.

From the southern region, sixty schools were chosen at random. Eight of these were private schools while the rest (52) were government or public schools. From the 60 schools, a convenient sample of 152 SMTs provided data. The

convenience was as far as those SMTs who were available in the schools at the time of research visits, were used. Of these SMTs, 14 were from private schools while the rest (138) were from government or public schools. The 14 SMTs from the private schools was the total population of SMTs in this region.

### **Instrumentation**

A questionnaire was selected as the main data collection instrument as it is one of the typical instruments in collecting people's beliefs and perceptions. The other reason for using a questionnaire was that there wasn't much time to individually interview all SMTs. Four research assistants were engaged for the study. Before filling in the questionnaire, the research assistants held some group meetings to go through the questionnaire so as to explain any ambiguities as appropriate. Both structured and semi-structured items characterised the questionnaire. A questionnaire was used to collect information from SMTs on the numbers of computers available in their schools, how these were acquired, who uses them, and what the computers are used for. The questionnaire was also intended to solicit information on whether or not there were computer specialists in each school.

Over and above filling in a questionnaire, 5 SMTs from private schools and 10 from public schools were also interviewed to corroborate the questionnaire data. According to Leedy and Ormrod (2005), emphasis with interviews is always placed on self reporting hence SMTs were interviewed on how they feel about computers in primary schools.

### **Consent**

In dealing with humans as research subjects, their rights to confidentiality, privacy and sensitivity to making demands on their time are important (Walliman 2005). In order to take care of these rights and sensitivities, permission was sought from and granted by the Ministry of Education and Skills Development to conduct the study. Schools were also contacted for consent. Both the schools and the SMTs were given an option to accept to participate or decline if they did not feel comfortable to. As noted by Leedy and Ormrod (2005: 183), survey questions were posed "*to willing participants*". The purpose of

the study was also explained to these participants in order for them to appreciate why it was important for them to participate.

## **RESULTS**

Data was coded, entered and analysed using Statistical Package for Social Sciences (SPSS) while interview data was transcribed into interview summaries and content analysis conducted. Data categories were identified and interpretations made.

A total of 152 SMTs (14 from private schools and 138 from government schools) responded to the questionnaire. To find out perceptions of SMTs on computers in primary schools, information was sought through the following statements: 'Availability of computers in the sampled primary schools'; Views on the importance of computers in primary schools; Assistance sought by SMTs on use of computers; Satisfaction with the state of computers in schools. The findings were, therefore, also presented as per each of the statements above.

### **Computer Availability**

Twenty-five government schools had computers. Twenty-two of these had one computer each, two had two computers each and one had 19 computers. Each of the 8 private schools had computers. Two of these private schools had 40 computers each, one had 26, one 25, one 21, one 13, one 7 and another one 4 computers.

The information on computer availability shows that government primary schools are still at the level of computer availability in European schools twenty years back as noted by Giesert and Futrell (2000), who said that it was unusual twenty years ago for a visitor on a school tour to see any computers in the classrooms. Only one public school, a special school for the deaf, had the most computers which were 19. Two public primary schools had two computers each while the rest of the 22 schools had one computer each. SMTs in most of the schools which had one computer each pointed out that though they had a computer, they did not actually use it because they did not have the expertise to. Six out of eight private schools had at least thirteen computers whilst only two had four and seven computers respectively.

### Views on the Importance of Computers

SMTs were asked to express their views on the importance of computers in primary schools. Views of all respondents from the 60 schools, (public and private) irrespective of whether or not they had computers in their schools were sourced. On the importance of computers in schools, the majority (149 or 98%) of SMTs from both private and public schools expressed that computers are important learning and teaching enhancers. All the SMTs from private schools (100%) indicated that computers are important at primary schools. From the public schools, only three SMT members out of 138 expressed that they did not know whether or not computers are important while the rest (135 or 98%) expressed that computers are important. An example of a specific response given by one SMT is that: *'We are living in a technology based era where computers do most of the work accurately and efficiently. So they are a necessity'*

The positive views about the importance of computers in primary schools by SMTs support what was noted by Griffin and Bash (1995) who see a computer as *'a part of the internal activities of the primary school classroom as the blackboard and the reading corner'* (p.13). Some of the reasons advanced for valuing computers, especially by SMTs in the private schools, were that the computers make work easier hence making school managers more *'efficient and effective in conducting their various duties such as record keeping, document preparation, internet purposes, electronic mailing, typing and printing'*. The SMTs in private schools also noted that computers not only make their work easy, but also *'enhance teaching and learning through providing multimedia, acting as a teaching aid as well as making it easy to produce other teaching aids, helping with spell check and drawing'* as pointed out by one of them. The private schools SMTs note that in the era of technology, computer lessons are also conducted for learners in a more realistic way rather than just talking about a computer in an abstract manner. It was further pointed out by some SMTs in private schools that supervision of teachers in terms of their ability to do work is made easy as they, teachers, are able to update their information through searching for information from the internet. Two of the SMTs from private schools commented that *'play is a valued process of learning, particularly during earlier years of*

*primary education, therefore children given an opportunity to play around with computers as part of their lessons learn better'*. This is regarded by SMTs from private schools as very important in their supervision and management of curriculum implementation by their teachers.

The computer is, therefore, viewed as important for, among others, motivation of learners, presenting lessons and teaching computing skills. This, in the view of SMTs from private schools, makes the work of the teacher easier, hence the work of the SMTs even easier in their supervision of instruction.

Whilst the majority of SMTs from public schools did not clearly articulate what the computers are needed for, and can be specifically used for, probably because they are not familiar with them, some mentioned internet, researching, typing and printing as some of the functions computers can play in schools. They noted that in the information era, their students should not be left behind by not having access to computers.

It is to be noted that the responses given above were not just confined to those who had computers in their schools but even those who didn't. This might be an indication that whilst some schools may not be having computers, they still recognise their importance hence a desire to have them. The views of the SMTs echo the views by the Botswana Government to fulfil one of the aims of Vision 2016, the 'Botswana National Vision' of having a *"technologically developed nation by the year 2016. This national vision emphasises the need for recognising the independence of information systems and networks" ..... and to further develop an environment conducive to free flow of information among all of the communities of Botswana"* (Republic of Botswana 1997:20). The Botswana National Development Plan 9, anticipated citizen empowerment through the use of information technology (Republic of Botswana 2003).

It is anticipated that using computers starting from primary school level, where the child's mind is easily moulded to learn, can be a best preparation to attain the aim of Vision 2016. The contention for a computer as a possible instrument of empowerment from as early as in primary schools, as desired by the SMTs, supports views by other researchers who began experimenting with the possibilities of using computers for learning. For instance, in the late 1970s the arrival of microcomputers was perceived as bringing personal computing empowerment to indi-

viduals, therefore schools were to prepare their students to realize the potential of the empowerment (Collis et al. 1996).

As information is power, for learners to have access to it through the power of the computer and therefore have an environment conducive to free flow of information can be an instrument of empowerment starting at such an early age, primary school level. As facilitators of learning in schools, the SMTs' positive perceptions of the computer can provide a basis for a step towards achieving the objective of the Botswana National Development Plan 9. The role of the SMTs in this respect, therefore, cannot be overemphasised hence their perceptions on the importance of a computer are very significant.

#### **Assistance Sought on Acquisition and Use of Computers**

As part of the Botswana Government policy on education provision because of current limited resources, no primary schools are provided with computers by the central government. Whatever computers are found in schools are either efforts by individual local governments or individual school efforts. Whilst it is currently part of the National Education Policy not to provide computers by the central government, it can be argued that the positive perceptions of computers by some SMTs should be a driving force to implement one of the Botswana National Principles, which is 'Self Reliance'. The SMTs were, therefore, asked about whether or not they make attempts to seek for the general community help with regards computers provision and use. Less than 50% of SMTs both in private and government schools sought assistance on the provision of computers from communities around them. Some schools especially public ones, had computers, few as they may be which were donated by the private sector as well as some local councils or authorities. Whilst the percentage is below 50, it is still significant in that computers are not easy to secure because they are expensive. The fact that all SMTs in private schools and 25 public schools out of 52 had at least a computer is an indication that they appreciated the importance of a computer. They went out and sought assistance from the local councils and communities regarding the provision of computers through donations. This positive initiative should certainly be seen as an indication of understanding of the importance of computers in primary

education, hence a positive perception and an appreciation of the concept of self help, one of the national principles of Botswana. The rest the schools (21) did not have a single computer. By implication it may be that the concerned SMTs did not seek for assistance on the provision of computers even though they expressed how important these computers were in primary schools.

As one of the ways of ascertaining whether there was commitment on the part of SMTs towards a need for computers at primary school level, respondents were asked about their role in encouraging staff to use available computers. In the private schools, 71% of SMTs indicated that they encouraged their staff to use computers while in the public schools only 33% indicated that they encouraged their staff to do so. SMTs in private schools also indicated that their staff made additional requests for computers usage time besides the time allocated. It was also disclosed by some private school SMTs (64%) that the teachers in private schools had to be encouraged to do so because they must teach a computer subject. Unlike in the public schools, all SMTs in the private schools indicated that they have a deliberate computer component in the school curriculum. This could be a reason why the private schools SMTs encourage their staff to use the computers and also made an effort to secure more. The inclusion of the computer component in the school curriculum could be giving them an incentive and a moral obligation to ask for more computer facilities from the community as well as using them more.

In the government schools, most SMTs noted that there are less requests made for use of computers by staff probably due to non-availability of computers and an absence of a computer component in the syllabi. The request to use computers as expressed by private schools SMTs corresponds with the value that is placed on the computers by the same SMTs while it is not the case with the government schools SMTs. This could be attributed to availability and non-availability of computers in private and government schools respectively; as well as non-inclusion of the computer curriculum in the public school syllabus.

#### **Satisfaction with the State of Computers in Schools**

As noted earlier, a total of 25 out of 52 government or public schools had computers while the whole sample of private schools (8) had

computers each. The sample which had computers was asked about whether or not they were satisfied with the state of computers in their schools. Thirty- six percent of SMTs from private schools expressed dissatisfaction with the state of computers, while the majority (74%) was satisfied. A large percentage (65%) of respondents from government schools revealed their dissatisfaction with the state of computers in their schools. Respondents were further asked to elaborate on why they were satisfied or not satisfied with the state of computers. Some reasons given for satisfaction were that there were enough computers in school; children progress well because of computers; computers make work easy; computers help in children's cognitive development; computers help prepare children for their future and that computers are useful for electronic mail and internet.

Most positive responses and actions about computers were mainly from private schools probably because they had more computers than public schools and probably because they had a better understanding of the use of computers. Whilst public schools SMTs expressed that computers are important, most schools did not have them and could not articulate what they are used for. It is the public schools which mainly expressed unhappiness with the state of computers in their schools. Some of the reasons given by public school SMTs for dissatisfactions were that computers are not available in public schools, of which the few that are available are not functioning and that there are no computer experts in schools.

## DISCUSSION

The discrepancies in responses from both government and private schools might be attributed to availability and non-availability of computers in both private and government schools respectively. A significant proportion (130 out of 138) of SMTs in government schools were either not satisfied with the state of computers or did not respond to the questions. This state of responses or non- responses could be attributed to a near absence of computers in the majority of government primary schools. As pointed out by Ford Martin (1987), behaviours usually, but not always reflect established beliefs, perceptions and attitudes. Whilst all SMTs had a positive perception of the role of a computer in primary schools, it is pointed out that the positive per-

ceptions by government school SMTs did not seem to have a positive influence on their behaviour in attempting to secure computers. The question is why then were the majority of the government schools SMTs not doing enough to try and secure computers independent of the support from the Government of Botswana as compared to private schools SMTs?

### Inclusion of Computer Component in the School Syllabus

It has been established that one of the factors for enthusiasm towards computers at private schools is the computer component in the primary school syllabus. If the Government of Botswana is indeed keen on developing an ICT inclined community by the year 2016 as per the National Vision 2016, why then is government not making a deliberate effort to introduce a computer component in the public primary school syllabus? The National Vision was established in 1997, more than ten years ago and NDP 9 which has also pronounced on the government's desire for an ICT literate nation has come and gone. One argues that even if SMTs were to try and mobilise for computers, the efforts may not necessarily be sustainable where the government is not committing itself through including in the syllabus a computer component and probably providing every school with at least a minimum of one computer laboratory with twenty or so computers to be shared. As noted by Afsharim et al. (2010) and Ely (1999), high level of computer access, presence of skills and competency are some of the conditions that encourage participation and utilisation of technology.

It is argued here that if government was to do that, SMTs and their communities would probably be motivated to supplement and complement the efforts of the government by securing additional computers. While one appreciates the fact that government may not be able to supply a full complement of computers, it is argued that, the mere fact that primary education is the foundation for subsequent levels of education, it is this foundation that needs to be made firm by ensuring that children acquire the basic skills in ICT even if this could come as a computer awareness course where learners have a basic appreciation of the computer. Unless some sacrifices are made by the government to accommodate ICT in primary schools, the dreams of Vision

2016, NDP 9 and the Revised National Policy on Education will be a mockery.

The SMTs in government schools could be de-motivated by non-provision of computers by the Government as well as non inclusion of the computer component in the primary school syllabus. This might be translated by the SMTs as no commitment by the Government to what it claims to value a lot, ICT. Whilst the Government is seen as key in the provision of both the computers and the computer component of the syllabus in the government primary schools, the SMTs are not exonerated from playing their part in realising their desires for a computer at primary school level. It is argued that all SMTs should also play their part of taking initiatives with regards computer acquisition. After all they are also part and parcel of Government situated at the operational level of educational policy implementation.

### **The Concept of Self Reliance**

The Government of Botswana has as one of its value pillars, 'Self Reliance' as a national principle. The Self reliance concept is part and parcel of the Botswana culture manifested through cooperatives (matsema, mephato molaletsa in vernacular). These are some of the indigenous ways in which Batswana cooperatively worked together to raise food, to perform agricultural tasks, and even help the needy to sustain themselves by giving a hand or offering gifts such as cows to poorer sections of the community. As noted by Kalayakgosi (2008:4) in the Botswana Daily News of 13<sup>th</sup> November, 2008, "*the spirit of self-reliance which Batswana are known for has played a pivotal role in shaping the country's development path.*"

It has to be noted that the concept of Self-reliance is achievable in situations where there is mutuality amongst collaborating parties and when there is an incentive and understanding, the very attributes which enhanced the traditional self-reliance practices. Tsayang (1998) notes that non-involvement in school activities by communities could be attributed to ignorance of the communities' expectations on their part. She further emphasises that in order for a community to be actively involved, it must have an understanding of what is expected of it and that, it must be represented by the enlightened with regards the expectation by the school. One's observation of

the cooperation in the private schools is that there is existence of this mutuality between the schools and their communities. This cooperation between school and community in the private schools is a manifestation of mutual respect between the two partners (school and the community) and acknowledgement of the contributions that either party could provide as well as an understanding by the community of its role.

It is observed that in the government schools, on the other hand, there is limited support provided by communities to schools other than that which comes from the Government. Could it be that there is no mutual respect of the community by the school and vice versa or could it be that parents in government schools do not see the value of education and their role in its provision, or could it be that the communities lack knowledge of what it is that they have to do? One can only assume that lack of support of public schools by parents and the community at large could be attributable to poor understanding of what is expected from the community by the community itself, lack of appreciation of the role of education by the community. The role of the SMTs in this respect is of paramount importance.

From the study it became clear that private schools tend to implement the national principle of Self-reliance as contrasted to government schools. The provision of resources such as computers is a result of managing in ways that fit the 21<sup>st</sup> century where according to OECD (2001) there should be shared decision making amongst the parents, SMTs and the community at large. The role of the manager in this case is of utmost importance because he/she must be a positive liaison officer. The SMT must create an environment where the school and the community can appreciate one another. In particular, the SMTs must entice the community to appreciate the value of its participation in education because community's positive perceptions of learning and education could lead to the same community seeing the need to provide resources such as computers. The SMTs in the government schools therefore have a big challenge ahead of them of creating an enabling environment for community participation through improved public education and communication. However, it stills must be reiterated that government as a major stake holder and a legal owner of public primary schools should kick start the ball and communities could follow.

While the concept of provision of resources to public schools by the Government is a good gesture especially with regards to resources that government has readily available, this support may have had negative implications on the creativity and ability to take initiative by the SMTs in government schools. Government's support of schools may have sent wrong cues and worked against the very principles of self-reliance, creativity and independence. This would be an unfortunate situation because, being supported should not be mistaken for abdication of responsibility by those being supported. Provision of education by the Government of Botswana should be seen by SMTs as a joint venture between schools and government and in fact a motivating factor. Most school managers are fully aware of the importance of computers in this modern era as indicated by the results, they are also aware of the fact that government cannot afford to provide everything to them. Could the mentality of being on the receiving side be responsible for limited initiatives to secure computers or could it be the nature of the parentage that is supposed to support the public schools?

#### **Fee and Non-fee Paying Scenario between Private and Public Schools**

It must also be pointed out that the differences in the computer availability between private and community schools could be attributed to the high fees charged in private schools which fees also go towards purchasing items such as computers while government schools are free of fee paying by the parents. Private schools indeed do charge fees and raise funds in various ways. Government schools do not charge fees as they are supported by government. It is argued however, that these very schools could take advantage of the fact that their parents are not charged fees and therefore could raise whatever resources for complementing what the government provides. One appreciates the fact that private school fees cannot be afforded by low income parents who mainly dominate public schools. This is probably the reason why such parents cannot take advantage of raising funds for their schools to acquire computers.

While it is appreciated that private and public school are clearly distinct in terms of fee charging, one assumes that the public schools could still learn from private ones, particularly

with regards fund raising. Such funds may not be as much as those acquired in private schools. It is also argued that public schools are not only associated with low income parents, there is a significant number of middle income parents. The reason is that there are very few private schools and these are located in urban areas and can only accommodate so many students and not more. Therefore, it is still argued that government schools which are already getting support should be even more equipped with computers than the private schools as the former should be doing an add-on to what government has provided already in the form of other facilities which must be provided for by parents in the private schools. The government schools already have a base to start from while private school must fend for themselves all the way. It is one's contention therefore that SMTs in government schools could exercise their creative minds and take this advantage and tap from the community through measures which can be acceptable to both parties (parents communities at large and schools) especially that they also have middle income parents.

#### **The Role of Teacher Training in Providing Computer Expertise**

The Government schools are resourced, from the human side of enterprise by degree holders, who are expected to be more enlightened to do the needful. The question that arises from this is why they are not making a difference in resources provision? What is their practical understanding of self-reliance, creativity and partnership with regards management of schools? Is there a need for a workshop on extrapolation of these concepts for the government primary school SMTs? As noted by Mueller (1997), support for family and school involvement begins with the school administrator, therefore school administrators need to do more in this regard. One of the reasons given for dissatisfaction with the state of computers was lack of expertise to operate same especially in public schools. This does reflect on the kind of teachers that teacher training institutions produce. In this era, it is assumed that almost all teachers need to be computer literate if they have to educate the learner or at least assist the learner. By implication, lack of computer expertise on the part of teachers means that colleges of education and universities which train



teachers should make a concerted effort to include in their teacher training curriculum some computer education courses not just awareness courses. The interest in teachers could be motivated from teacher training programme rather than experting teachers to generate it at school level.

### **Donation of Boarded Computers to Schools**

Many government and parastatals organisations which use computers dispose them within a period of two to three years. Computer recycling for the needy, a concept and a practice in Hong Kong (Education Bureau 2010) could be easily adopted if government school SMTs could create a platform where communities and parents can be loured into the schools. Obsolete computers as far as the tasks for which they were intended in companies are concerned, could easily be recycled to government schools where computers are mainly used for the basics in computer education. Institutions such as the University of Botswana frequently dispose off of their computers. However, such computers are not donated to schools because of the fear of being regarded as using schools as dumping grounds. This view as far as one is concerned, is counter-productive because primary schools do not use computers for highly technical functions, but for basic computer literacy. The donations of such computers are likely to impact positively on the SMTs and could be a motivation for the teachers to learn computer skills.

### **CONCLUSION**

It is clear that almost every member of the school management team is aware of the importance of computers despite the fact that in government schools such facilities are lacking. While perceptions of computers by SMTs in private schools seem to have influenced their initiatives to acquire computers, the contrast is in government primary schools whose positive perceptions of computers seem not to have influenced their ability to take initiatives to acquire them. One wonders whether failure by the Government to include in the curriculum, a computer component could be a reason for SMTs in public schools not making concerted efforts to acquire computers through self reliance efforts or could the government's provision of resources for public

schools be obscuring the SMTs mental capacities to take initiatives of securing computers independent of government support?

While perceptions can be a prerequisite for taking initiatives, it can also be a factor militating against such if perceptions are negative. As positive perceptions can influence behaviour, one's contention is that if efforts were to be made by government to provide computers in primary school, the question of resistance to change which normally come with introduction of new innovations such as computers would be minimal. The government, therefore, has one important hurdle nearly out of the way, the possibility of resistance towards computers. It is also concluded that while SMTs in private schools are creative and ready to raise funds in various ways to resource their computer labs, this is not the case with SMTs in government schools. The latter's attitude towards free education provided by the government to public schools could be an influencing factor on the non- action with regards acquisition of computers and their use through self- reliance and partnership moves.

To this end it may be inferred that the SMTs in government schools do not seem to understand the practical aspects of the concepts of partnerships, creativity and self- reliance even though these are very important in the lives of Batswana. Their perception of free education which is provided at primary school level may also be an obscuring factor with regards the practical implications of the concepts of partnerships and creativity. The traditional implications of self-reliance as was used by indigenous Batswana in the form of cooperatives does not seem to be linked to what the SMTs could otherwise do for their schools in order to raise resources such as computers for their schools. This scenario may need serious attention in the form of attempting to bring on board, SMTs from government schools to appreciating the three concepts which one feels are the keys to the development of education in Botswana.

### **RECOMMENDATIONS**

1. Government to budget for computers provision at government primary schools and accompany this with inclusion in the syllabus of a computer component. This is because primary education is the foundation for subsequent levels of education.

2. Workshops on practical application of concepts of partnership, creativity and Self-reliance be organised for government schools SMTs.
3. Government schools to be encouraged to liaise closely with private schools in order to learn from them how they manage to raise resources even though they are not supported by the Government.
4. A deliberate policy be made that organisations (government and parastatal) recycle their computers to primary schools instead of putting them out for auction.

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