# HEADMASTERS AS TECHNOLOGICAL LEADERS IN IMPLEMENTING ICT IN THE SCHOOLS FOR THE BLIND: A CONTENT ANALYSES ON CONTEXTUAL LITERATURES OF GHANA

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## ABSTRACT

*Schools for the blind in Ghana started teaching and learning of Information and Communication Technology (ICT) a little over a decade ago. Even though the visually impaired students are able to pass their ICT exams each year, headmasters continue to lament over challenges affecting the smooth learning of the subject. The objective of the paper is to explore the role of headmasters as technology leaders in addressing these learning challenges in the schools for the blind. This paper is written as a result of content analyses from contemporary and contextual literatures on the subject matter. It first highlights both the opportunities and challenges of teaching ICT to the visually impaired. Secondly, the review also led to two pressing challenges; inadequacies of headmasters and teachers' knowledge on Assistive Technology (AT) and the inadequacies of supply of these technologies. Thirdly, the government of Ghana's support on ICT education lacks concentration on the schools for the blind. Even though Evidence-Based Teaching and promoting learning without borders through ICT mediated instructions are some of the most effective strategies used in other schools for the blind elsewhere, headmasters and their teachers in Ghana are yet to adopt these approaches in the schools for the blind. As an implication, it is speculated that the role of headmasters in the schools for the blind has not gone beyond the routine monitoring and supervision of school activities to complex decision making and problem-solving as technological leaders. Hence, this paper highlights both the theoretical and practical gaps for future studies.*

**Keywords:** ICT, Assistive Technology, Blind and Visually Impaired, Evidenced-Based Teaching, Decision Making

## INTRODUCTION

Empirical evidence shows that the individuals who are completely blind and those who are visually impaired – those with visual acuity lower than 6/60, display normal behaviour patterns without exhibiting any cognitive, emotional and behavioural disorders (Pasqualotto, Lam, & Proulx, 2013). Research has shown that the visually impaired (VI) learners exhibit an equal level of astuteness and skills of sighted people and that there is no link between the intelligent quotient (IQ) of VI learners and their impairment (Vidhya & Kumari, 2015). Additionally, VI learners acquire high cognitive, affective and psychomotor skills associated with the improvement of learning abilities. In the absence of visual input, VI learners extend the use of auditory, tactile, olfactory and kinaesthetic senses so that they can live independently in a satisfactory manner. It is plausible to argue that VI individuals can perform better than sighted individuals when it comes to attentiveness and the ability to identify and remember objects around them (Wan, Wood, Reutens, & Wilson, 2010).

Previous studies have shown that in Ghana, visually impaired learners have demonstrated their superiority in Education, Law and Information Technology. These individuals have shown that disability is not an inability (Nkansah & Unwin, 2010). However, the schools for the blind still face a lot of challenges in teaching and learning of ICT (Agangiba, Nketiah, & Agangiba, 2017; Mantey, 2017).

However, not much research work has been done to investigate what role headmasters could play to enhance effective teaching and learning of ICT in schools for the blind in Ghana. In fact, there is dearth of research done on ICT for the visually impaired studies in Ghana (Ampratwum, Offei, & Ntoaduro, 2016).

The study attempts to answer the following objectives:

1. To explore the role of headmasters as technology leadership in enhancing effective teaching and learning of ICT.
2. To explore the challenges facing the teaching and learning of ICT in the schools for the blind in Ghana.

The paper is structured as follows: The introduction describes the justification for the study in Ghana. The second section is devoted to literature review on the relevant subtopics in the study. The third section explains how the literatures were obtained and analysed. The fourth section is devoted to the findings from the study while the fifth section concentrates on the discussions. The sixth, seventh and eighth sections are on conclusions, recommendations and the limitations respectively.

## LITERATURE REVIEW

### The Present State of the Visually Impaired from the Global Perspective

Recent statistics from the World Health Organization (WHO) (2019) suggests that the number of persons with visual impairment is increasing around the globe in spite of the fight against this disability. The report indicates that 1.3 billion people have some form of visual impairment out of which 39 million are blind. Out of this number, 19 million are children of whom two-thirds live in middle and low-income countries. Twelve million school children are suffering from visual impairment due to refractive errors, an impairment which can be easily treated, while 1.4 million children have permanent visual damage. Generally, World Health Organization (2019) classified visual impairment based on the degree of acuity of sight of the person either as mild, moderate, severe or blindness as explained below.

- Mild impairment – this refers to a person with visual acuity below 6/12
- Moderate impairment – this refers to a person with visual acuity below 6/18
- Severe impairment – presents a person with visual acuity below 6/60
- Blindness – this is the highest form of visual impairment presenting visual acuity lower than 3/60 (Fricke et al., 2018).

The global objective of WHO is to decrease the prevalence rate of preventable visual loss from the rate of 3.18% in 2010 to 2.37% in 2019, thus a 25% reduction by 2019. Globally,

it is estimated that approximately 1% of children below the age of 14 have some form of visual impairments ranging from mild to blindness (Aghaji, Okoye, & Bowman, 2015).

Narrowing down to Africa, the continent of Africa has approximately 7.1 million blind people out of the world's blind population of 1.3 billion which includes 4 million children. Given the insufficiency of data and the various methodologies used for estimations, researchers know this figure is most likely higher. Currently, childhood blindness prevalence rate in Africa is between 0.5% and 1.1% with Malawi having the highest percentage (Kende & Quast, 2016).

In relation to Ghana, a report in a maiden national survey in 2016 on blindness shows that the prevalence rate is approximately between 0.74% - 1.07%, with about 8000 visually impaired children in Ghana (Ampratwum et al., 2016).

**Evolution of Visually Impaired Education in Ghana**

Many historians have argued that Ghana was among the first countries in Sub-Saharan West Africa to establish education for visually impaired persons as far back as the 1930s when the European Missionaries started the Castle Schools. Children who were blind received recognition in 1936 when Reverend Haker started educating two blind children, namely Benhandt Ofori-Addo and Isaac Ofori-Atta. These two students were taught in English and craft work, and later how to use Braille to read and write (Mfum-Mensah, 2004). Ten years later, Basel Missionaries officially started the school for the blind and the visually impaired at Begro and Akropong in 1946 in the Eastern Region of Ghana following the initiative of Reverend Haker. Available records indicate that these schools adopted different materials for teaching such as the Braille and the typewriter machines but were made to follow the curriculum of regular education (Mantey, 2017; Mfum-Mensah, 2004).

The adoption of Information Communication Technology for Accelerated Development (ICT4AD) in 2003 by GES marked the beginning of ICT education in Ghana. Therefore, in 2007, GES introduced the ICT for All (ICT4All) policy into all basic schools in Ghana including the two basic schools for the blind. Since then, ICT has become an examinable subject in the schools for the blind and it is taught twice a week as a core subject. Each of these schools have the following departments: Kindergarten, Primary school, Junior High school, Vocation/Technical, and Adult Literacy. The total number of blind learners in these schools are 624; 370 are boys and 231 are girls with 79 teachers (Ministry of Education, 2015).

A quick overview of available data indicate that these schools have not been well-equipped with computers and their accessories to ensure effective teaching and learning of ICT. Hence, the schools for the blind seem to suffer from marginalisation in terms of easy accessibility and usage of ICT and AT devices (Ampratwum et al., 2016).

**Best Pedagogical Approaches for the Visually Impaired**

Research on education suggests that teaching the visually impaired is a very difficult task, more so than teaching normal children. Approaching this task with a clear understanding of what teaching is all about as well as choosing the best pedagogy will enable teachers to overcome their challenges when handling VI learners. The visually impaired therefore

requires exceptional instructional pedagogy to enable them to develop the required skills being taught (McDonald & Rodrigues, 2016). According to Scott (2015), the UNESCO's working report stated rethinking pedagogy for the twenty-first century is as critical as identifying new competencies that today's learners need to develop. School leadership must focus on pedagogies for "Promoting Learning Without Borders" through the use of technology and internet mediated learning to support the VI to 'learn how to learn' (Scott, 2015). This recommended pedagogy is not yet adopted in Ghana.

On the contrary, Killian (2014) posited that what matters in teaching is the approach used and therefore recommended Evidenced-Based Teaching (EBT) technique for teachers in special education especially for VI learners. The findings from Chen and Dote-Kwan (2018) is in line with Killian (2014) that Evidence-Based Teaching is an effective pedagogy for teaching visually impaired children.

**Teaching and Learning of ICT in the Schools for the Blind in Ghana**

Researchers have defined teaching as a collaborative action of sharing information and experiences for the development of an individual. Other definitions include the transmission of knowledge from the teacher to the learner and creation knowledge by the learner facilitated by the teacher (Herring, Koehler, & Mishra, 2016). The aim of integrating ICT to the VI was to equip learners with the basic skills needed to bridge the digital gap between VI learners and the sighted. To ensure that effective teaching and learning is carried out in classrooms of VI learners, the teacher must be seen as a facilitator and a guide but not as 'knowledge bank' (Herring et al., 2016).

Weisman (2012), on the other hand, opined that teaching becomes meaningful when it is seen as a Science and Art of imparting knowledge; it is a science because it follows systemic principles and theories, and its an art because it requires creative skills and innovation.

A close observation of the schools for the blind in Ghana shows that the schools for the blind follow the same general ICT syllabus by Ghana Education Service (GES) for all basic schools. Teachers in these schools do not use any modern teaching techniques mediated by the internet or ICT. ICT as a core subject is taught twice a week for a period of 70 minutes each per lesson. The lessons are often held in classrooms but once in a while, it is held in the ICT laboratory for pupils to have a taste of the computers and other available ATs. Some of the topics in the syllabus are; an introduction to personal computers, keyboard and mouse skills, keyboard shortcuts, introduction to Microsoft Office Word, the internet and the World Wide Web (WWW), and information retrieval among others (Ampratwum et al., 2016). If the number of students exceed the available computers, the learners sit in pairs for the lesson. Currently, both schools for the blind have a 20 persons capacity ICT laboratory donated by the Ghana Investment Fund for Electronic Communications (GIFEC) and other non-governmental organisations. Some of the devices in these ICT laboratories are desktop computers, electronic Braille machines, an embosser and a language translating software. The computers are installed with Job Access with Speech (JAWS) and Non-visual Desktop Access (NVDA) software (Ampratwum et al., 2016).

Again, Ampratwum et al. (2016) found that there is a correlation between a teacher's ICT competency level and the skills development of the learners. For instance, according to the study, 95 % of VI learners indicated that they lack practical skills in the use of ICT. He further added that some of the students blamed their teachers for not engaging them in the practical lesson. Teachers, on the other hand, attributed this challenge to inadequate time allocated for practical lessons as well as frequent breakdowns of the software and hardware devices.

## METHODOLOGY

The study relied primarily on peer-reviewed articles on the role of headmasters in enhancing teaching and learning of ICT for the VI in Ghana as well as the challenges faced by the headmasters in their schools.

The search for publications was initially restricted to only local (Ghana) peer reviewed journal articles, review articles, books and book chapters. The process started by using these keywords *Technology Leadership*, *Headmasters' Role in Teaching and Learning of ICT * and *Schools for the Blind in Ghana*. These keywords led to many other keywords such as *school leaders*, *Pedagogy*, *Challenges affecting teaching and learning of ICT*, and *Visually Impaired Learning*. Information from the search was explored, read and coded to the point of theoretical saturation (Fusch, Fusch, & Ness, 2018). As a result, the search results showed a total of 56 peer reviewed journal articles, books and book chapters out of which 45 articles were deemed fit and selected for this paper based on the following criteria as shown in Table 1.

Table 1: *Criteria for Selecting Journal Papers for the Study*

| Criteria | Description of Criteria |
|---|---|
| Content | Articles that describe the concept, practices and examples of technological leadership. |
| Process | Articles associated with the process of teaching and learning of ICT, especially for the blind. At the core, it is a search for information pertaining to how headmasters in Ghana perform their roles as technology leaders. |
| Context | Articles that are associated with the context of Ghana and educational improvements by the Ministry of Education. |
| Research Methods | Articles that depict Quantitative, Qualitative and Mixed Methods so that a variety of tactics can be explored, understood and analysed for the gap for research. |
| Focus of study | Articles concerning headmasters as technology leaders in implementing change, especially in the setting of the schools for the blind in Ghana. |

| | |
|---|---|
| Time Frame | All articles selected were published in international journals between 2010 and 2019. This time span was to ensure that the paper identifies the trends in the conduct of research reviews over time (Hallinger, 2018). |
| Authorship | Common authors and subject experts were also sought from between 2010 and 2019 |

## FINDINGS

As mentioned in the objectives of the study, this concept paper was aimed at finding how headmasters in Ghana perform their roles as technology leaders. The literature search, however, found a dearth of literature on technology leadership in Ghana. The literature also showed that headmasters function more as administrators and managers than leaders in technological approaches which are increasingly advocated in international literatures.

On the other hand, the second objective which sought to explore the challenges facing the headmasters in the teaching and learning of ICT in schools for the blind in Ghana identified a number of challenges. Results from literature reviews have yielded a lot of information which were grouped into themes. The information was thematically analysed and highlighted with the key challenges as follows: (a) Lack of Technical Knowledge on the usage of Assistive Technology (b) Inadequate supply of ICT and Assistive Technology devices and (c) Lack of Internet Facilities and Regular Electricity Supply to schools.

These themes will be further elaborated together with the discussion that resulted from the reflections of the researcher in the next session.

## DISCUSSION

### The Role of Headmasters as Technology Leaders in Ghana

The aim of technology leadership is to integrate and supply technology for teaching and learning and to bring a transformation for improvement in performance as well as output of the institution (Al-Hariri & Al-Hattami, 2017). Findings from the first research objectives have indicated that little research work has been done on technology leadership (Kor & Opare, 2017). In a comprehensive and systematic literature review done on African school leadership, Hallinger (2018) reported that just a handful of papers had been written on the apparent challenges of local conceptions of school leadership. He therefore, recommended that this imbalance should be rectified in future researches. Research has shown that the more technology is applied to teaching and the management of a school process, the better the quality of the school. Adams (2018) stressed that technology leaders must be goal–oriented, hands-on and hip-deep in the curriculum and instruction, and acquire skills in three areas, namely “strategy, innovation and leadership” (p. 171).

Other studies have shown that school leaders play an important role in supporting the implementation of changes, beginning from setting goals until its accomplishments. Therefore, an effective school principal does help to boost the performance and the integrity of education (Veeriah, Chua, & Siaw, 2017).

Contrary to the above assertions, the duties and responsibilities of headmasters as outlined in the *Headmasters Handbook for Basic Schools* in Ghana has no component on technology leadership. The handbook mentioned five major roles for headmasters (5M) as (i) Managing people, (ii) Managing instructional time, (iii) Managing co-curricular activities; (iv) Managing learning resource (v) Managing financial matters (Bush & Glover, 2016).

From the above roles, headmasters see themselves as administrative managers more than technology or transformational leaders. In the absence of effective leadership, school improvement hardly occurs. Available data, therefore shows that headmasters tend to function more as administrators and managers, ignoring the instructional, transformational and distributed approaches which are increasingly advocated in international literatures. School leaders' predominant focus on managerial approach which emphasises on formal accountability to the top hierarchy who appointed them and neglects the school-level stakeholders (Kor & Opare, 2017) .

Adams and Md Yusoff (2020) posited that school leaderships often stand tall in the limelight because of their roles and responsibilities in ensuring the effectiveness and the accountability in their work. Hence, the principal has much capabilities of improving the results of students learning by creating conducive learning environments and influencing teachers, organisational policies and procedures.

To be able to revise this trend, the role of school leaderships in transforming the teaching and learning process must go beyond managers and supervisors in the schools. For the past few years, the government of Ghana through the National Computerisation Policy has been trying to make sure that every school becomes technologically driven and to close the Digital Divide (DD) among schools. Though a good initiative, this has given headmasters an additional responsibility in confronting these challenges as a way of complementing the government's efforts. According to John Maxwell, every institution rises or falls on the head of the leader (Maxwell, 2007)**.** Furthermore, Thannimalai and Raman (2018) concluded in their research that headmasters serve as the predictors of technology and have a direct impact on technology outcomes in schools.

Even though Adams (2018) argued that in general terms, leaderships play just about 20% of the students' learning output, yet their impact on school transformation cannot be underemphasised. It is evident from the above discourse that headmasters play a pivotal role in the advancement of effective teaching and learning in their schools.

Findings from the first research objectives have also indicated that there are no structured decision making for headmasters to implement the teaching and learning of ICT. The review shows that apart from routine decisions, headmasters are confronted with a number of internal challenges which occur normally without any clear solution or have non-existent policies. This often creates challenges which Hart (2018) described as a "professional dilemma".

To enable headmasters to address these challenges, the paper has further expanded its search in terms of managerial and leadership models, and this led to the conceptualisation of the Decision-Making Tree (DMT). Other theories from Lewin's (1947) Organisational Change Model (OCM) necessitate the explanation in relation to the

Technological Pedagogical Content Knowledge (TPACK) framework. In the field of educational technology, the term TPACK is a framework that describes knowledge base content for teachers to effectively teach technology. It emphasises on effective integration of technology into every content and methodology in the classroom (Herring et al., 2016). As the findings from the second research objectives indicates, managerial processes and decision-makings are part of the internal challenges of schools for the blind are lacking in literature, prompting the need for future research. It showed that irrespective of the field, a successful organisational change brings about novelty, incessant improvement, and sustainability which is necessary for the long-term success of every institution (Khan, Ajaz, Khan, Khan, & Fatima, 2016). Also, Serrat (2017) posited that "Decision-making is where thinking and doing overlap" and is the key to organisational success (p. 574). OCM and leadership decision making therefore contributes significantly to enhancing effective teaching and learning. However, these models are not yet in operation in the schools for the blind in Ghana.

**Reflection on Organisational Change Model**

This section will reveal the researcher's reflection pertaining to the literature and its relation to the OCM. It is speculated that OCM could be used to address challenges in organisations, by referencing through three stages or phases namely Unfreeze, Change and Refreeze as theorised by Lewin (1947).

The DMT that enables headmasters to address internal and external challenges is shown in Figure 1.

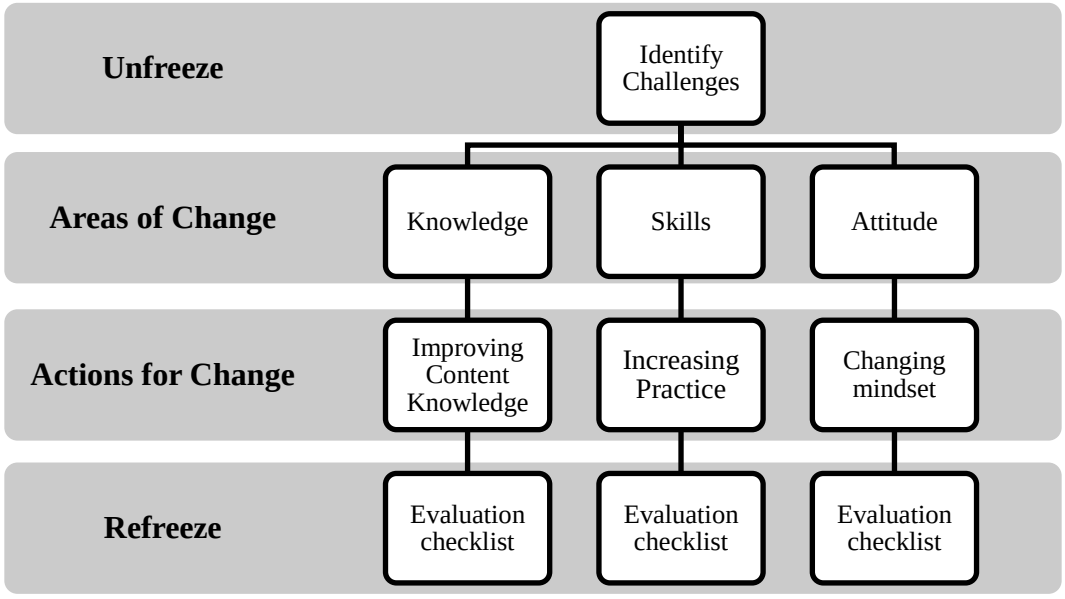


*Figure 1.* Decision-making Tree for headmasters to solve challenges

To conceptualise a model for transforming ICT teaching and learning demands a strong technology leadership with a passion for change. To affect a change that will improve students' learning calls for a robust leadership approach which can direct headmasters to focus on finding solutions to the challenges confronting teaching and learning.

**Challenges affecting Teaching and Learning of ICT in the Schools for the Blind in Ghana**

Findings from the second research objectives also indicated that headmasters are confronted with challenges which impede effective teaching and learning. These challenges have been classified as internal and external challenges so that they can be addressed properly. The internal challenges are issues within the domain of the school and can be handled by the school's leadership without government or external involvement. These challenges include insufficient ICT and assistive technology skills of teachers and negative perceptions of some teachers concerning the use of ICT by visually impaired learners. The external challenges, on the other hand, are those that are beyond the capacity of the local school's leadership and therefore require the intervention of government and other external bodies such partner institutions and Non-governmental Organisations (NGOs). These challenges include inadequate supply of assistive technology devices, inadequate number of qualified ICT teachers, limited funding and lack of internet connectivity. As indicated in the findings, these challenges were analysed and reflected under the following themes.

**Lack of Technical Knowledge on Assistive Technology**

Studies have shown that even though schools for the blind have well-qualified school leaders and teachers, they still exhibit insufficient technical knowledge in the use of High-Tech ATs. This challenge is attributed to the kind of training they had on the use of these devices (Rony, 2017; Wong & Cohen, 2011). Earlier research on teachers' AT usage pointed out that inadequate training for ICT teachers is one of the serious challenges faced in providing effective teaching and handling of ATs in the schools for the blind in Africa (Mwakyeja, 2013). These challenges are not only limited to teachers in developing countries alone but also in some schools in developed countries such as the United States and Singapore. A survey in the schools for the blind in Singapore revealed that teachers did not have the mastery of all the devices available (Wong & Cohen, 2011). Teachers are more comfortable with the use of Low-Tech than High-Tech Assistive Technologies. In support of the findings above, Rony (2017) showed that 75% of ICT teachers in the visually impaired schools in Bangladesh asserted that they were not comfortable with modern assistive technology devices in the classroom. Therefore, the lack of teacher ICT competency and technical know-how have had a toll on the performance on VI learners in Ghana.

Another challenge affecting the continuous use of AT devices is the lack of "culture of maintenance" which happens to be a common practice in many schools in Africa (Ajuwon, Meeks, Griffin-Shirley, & Okungu, 2016). In the schools for the blind in Ghana, for instance, a study shows that many Braille devices and computer accessories are 'left to rot' in the stores due to lack of maintenance and repairs. The above challenges were confirmed by Opoku et al. (2017) who posited that teachers in the schools for the blind were not trained on the use of modern AT devices and therefore require the assistance of skilled personnel to enhance their work.

**Inadequate Supply of Assistive Technologies to the Schools for the Blind in Ghana**

Research shows that the supply of educational materials and facilities to schools in Ghana is skewed against the schools for the blind (Opoku et al., 2017). For instance, in 2013, the

government of Ghana provided computer laboratories and internet access to 459 schools but none of these devices went to any of the schools for the blind**.** It could be argued that VI persons learn best through concrete experiences and learning by doing, such as hearing and touching. Failure to use AT devices, therefore, implies that the lesson was not well taught. The above views are not different from Ampratwum et al. (2016) who reported that 95% of final year students in the schools for blind in Ghana complained about being weak in keyboard skills and the Job Access With Speech (JAWS) application because most of these ATs were not functioning effectively.

The findings of Ampratwum et al. (2016) agreed with Mprah, Edusei, Owusu, and Dahamani (2015), that the lack of teaching and learning materials are the major barriers hampering effective work output in the schools for the blind in Ghana. The above literature pointed out that, there is an inadequate supply of appropriate teaching and learning materials (Assistive Technology).

**Lack of Internet Facilities and Regular Electricity Supply**

The internet continues to link billions of users worldwide to form a global village. According to Fricke et al. (2018), there are about 3.2 billion people globally who are using the internet in diverse ways. However, research has shown that there are still over 60 % of the world population who are not connected to the internet and most of them are in Sub-Saharan Africa. Internet users in Africa accounts for 28%; much lower than the global average range of 45%. Among the two main challenges given for this low patronage on the internet were lack of accessibility and lack of knowledge on how to use it. Irregular electricity supply and lack of internet connectivity are some of the major challenges impeding the effective teaching and learning of ICT in most countries in West African sub-region. The Alliance for the Affordable Internet (A4AI) 2017 Report scored Ghana a higher mark of 50.01% in the Affordable Drivers Index (ADI). Ghana was placed 26$^{th}$ out of the 58 countries surveyed in Africa, Latin America and Asia. The report suggested that Ghana has improved upon their internet connectivity and accessibility performance from the previous 45.1% in 2014 ADI ranking. Ironically, none of the schools for the blind in Ghana currently have internet connection (Inan, Namin, Pogrund, & Jones, 2016). The lack of internet connectivity has widened the digital gap between the developed and the developing nation while affecting the performance of ICT teaching and learning in schools for the blind.

**CONCLUSION**

The purpose of the current study was to determine the role of the headmasters as technology leaders in enhancing effective teaching and learning of ICT in the schools for the blind in Ghana as well as the challenges these headmasters face.

One of the most significant findings that emerged from this study is that there is very limited literature on technology leadership from the local context. Again, the role of the headmasters as technology leaders in the schools for the blind in Ghana has not gone beyond routine management and supervision of school work. The schools for the blind in Ghana are saddled with the internal and external challenges in the teaching and learning of ICT.

These papers suggested that in general, headmasters as technology leaders have a vital role in shaping teacher's professionalism to promote effective teaching and learning. Again, adopting the best decision-making module plays a key role in minimising the challenges headmasters faced in the discharge of their duties referred to in this study as "Professional Dilemma". The review shows that the teachers in the schools for the blind in Ghana are not able to use the best pedagogies that are being practised in other parts of the world. Subsequently, headmasters need to focus more on supporting teachers' Technology Pedagogy Content Knowledge (TPACK) as part of their professional learning, since this is a very important indicator of effective teaching and learning.

## LIMITATIONS

This review paper is part of an ongoing project by the researchers on headmaster' technological leadership for effective teaching and learning of ICT in the schools for the blind in Ghana. It sought to present the views of different researchers on the subject matter. Even though the studies are about the schools for the blind in Ghana, the views and opinions expressed in this paper do not directly represent the official position of the schools concerned. Findings and conclusions are solely the views of the authors based on the information available to them.

## RECOMMENDATIONS

The paper identifies a number of gaps based on which these recommendations are made. To begin with, headmasters must step up their role as technology leaders in ensuring that effective decisions are made to handle the challenges of teaching and learning of ICT in the schools for the blind in Ghana.

Again, headmasters must give priority to the development of teacher professionalism to boost their TPACK competency level to enhance effective teaching and learning in the schools for the blind in Ghana. The government must give a priority to internet connectivity in the schools for the blind to enable the schools to benefit from internet mediated lessons.

The government must commit support to the schools for the blind through regular supply and maintenance of assistive technology devices and software applications.

Considerably more research work needs to be done to determine how Organisational Change Module could enhance headmasters' decision making in the content and context of schools for the blind in Ghana.

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