

TEACHING READING SKILLS: THE SUITABILITY OF COMPACT DISC (CD) AND CLASS TEACHERS' MOBILE PHONES FOR LESSON PREPARATION

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Abstract

Global focus on integrating technology into the school curriculum has led to an increasingly large body of research sensitising teachers to the need to embrace technology for improved pupil-centred classroom instruction. The main focus of such research has been to create a better and technologically friendly learning environment for pupils and to assist them to achieve the best possible learning outcome. However, in the developing countries there has been less research into the role of technology in enhancing teachers' lesson preparation for teaching reading skills. This research focuses on the use and acceptance of CDs and teachers' mobile phones as tools for storing teaching aids and for use in lesson preparation.

A thematic analysis of teacher interviews suggests a willingness by the teachers to use the devices as tools for enhancing lesson preparation. This led to the conclusion that teachers may be willing to use similar appliances in teaching other subjects.

Key words: Teachers, Compact Disc, mobile phone, usefulness, attitude

Introduction

There is a great focus on the teaching and learning of English in Nigeria. None of Nigeria's over 500 indigenous languages has assumed the status of an official language so English continues to serve as the official language. The pivotal status of English is also recognised and supported by the National Policy on Education, which states:

“The medium of instruction shall be the language of the environment for the first three years. During this period, English shall be taught as a subject. From the fourth year, English shall progressively be used as a medium of instruction” (National Policy on Education 2004, p.).

As a result of the above, it is not only important but also imperative that the Nigerian child learns to read and write English very early in their academic career. However, the level of literacy attained by the fourth year of school (Grade Four) is mostly inadequate to sustain pupils’ learning in an all English medium school environment (Adekola, 2007). This applies to the majority of pupils in this class who will usually be between eight and ten years old. They would have had between three to five years of schooling depending on if they started in nursery school or primary school. Most of such pupils are registered in either the low cost private schools or in the government schools (Tooley, Dixon, and Olaniyan, 2005).

Many reasons have been suggested for this shortfall in developing reading skills, prominent among which are the method of teaching, insufficient knowledge of the subject matter, and inadequate lesson preparation by the teachers (Fakeye & Ogunsuji, 2009). In addition, the guidance offered by the curriculum for the early years reading, up to Primary Two level seems insufficient (Eshiet 2013). Apart from the possibility of insufficient guidance, there is infrequent mention of additional tools which could aid the teachers’ preparation in the curriculum (Ekpo, Udosen, Afangideh, Ekukinam, & Ikorok 2007). There is, therefore, need for the creation of a more effective lesson planning process supported by the use of relevant teaching aids. This will support the progression of teachers and learners.

The most popular form of pedagogy of teaching beginning reading in many Nigerian schools, especially the government schools and the low cost private schools

is the rote learning method (Ekpo et al 2007). This method has been labelled as ineffective for early acquisition of reading skills because it does not engage the pupils (Eshiet 2010). Also, knowledge gained through rote learning is not easily transferable when the pupils encounter new words. As a result, many pupils do not achieve the required reading skills level for successful progress in their academic pursuits. In contrast to the rote learning method, synthetic phonics is a method of teaching reading that begins with teaching the smallest unit of speech sounds and how to represent them in writing (Chall 1996; Johnston & Watson 2005). Further research shows that the synthetic phonics method is suitable not only in first language (L1) contexts but also in second language (L2) situations (Dixon et al 2011; Ekpo et al 2007; Eshiet, 2012).

In recent years, there have been two extensive pilot studies on the synthetic phonics method in government schools and private schools for the poor in Nigeria (Ekpo et al, 2007; Eshiet 2010 unpublished). Both pilots concluded that the synthetic phonics method produced greater reading attainment. (Ekpo et al, 2007, p17) declares “teachers need to adopt the synthetic phonics method in their approach to teaching reading and this should be done at an early stage” The success of these pilots in public schools attracted the interest of policy makers in the synthetic phonics method and has resulted in mass training of Primary One and Two teachers in some parts of the country. In each location, the training was received eagerly and the teachers returned to their schools enthusiastic to implement the new method (Eshiet, 2013). The teachers’ reaction to the training was a desirable one as researchers agree that teacher attitude to curricular innovation greatly influences the success or otherwise of the innovation (Eshiet, 2013; Johnson 1994; Karavas 1996; Mesmer 2006; Gibbone et al, 2010). Further enquiries and follow up in one of the local government areas indicate

that many of the teachers implemented the synthetic phonics method with similar eagerness as shown at the training (Eshiet 2013).

Although the teachers showed a positive attitude to the synthetic phonics teaching method, the method posed a major challenge to the teachers who tended to forget the pronunciation of the sounds or mix them up. This was so because in all their learning and teaching experience, they had used only letter names. It became necessary to give them the sounds on a tool where they could easily playback when preparing their lessons or just listen to them when they wished. The immediate solution was to provide the teachers CD plates of the sounds and of songs which they could teach the pupils in order to remind both the teacher and the pupils of the sounds when necessary especially when teachers are preparing their lesson notes. In addition, the sounds were installed on the teachers' mobile phones.

The role of technology

The role of technology in education has been the focus of much educational research worldwide. This revolutionary move has caught up with providers and deliverers of education worldwide. Producers of educational materials often assume the use of technology in the classrooms at different levels of education. As a result, they have continued churning out teaching aids which assume that the use of technology has become globally possible and acceptable. Also, technological tools have become more readily accessible in recent years more than ever before.

Many studies (Jakopovic 2010; Agbatogun 2010; Gibbone et al 2010) reveal that teachers in developing countries have a positive attitude towards the use of technology in preparing for and in delivering their teaching. In spite of this, Agbatogun (2011) notes that the adoption of technology in Nigerian schools has been slow in coming as teachers are often reluctant to embrace technology.

The present work focuses on the acceptance of technological tools by teachers who implemented the synthetic phonics intervention.

Technology acceptance

One of the reasons for acceptance of technological innovations is familiarity with the tool. People tend to feel confident with tools that they are familiar with (Atkins and Vasu, 2010). Mobile phones are personal to the teachers and it was expected that they would feel very much at home with their phones thus it was hoped that using the teachers' mobile phones as a means of storage and playback would increase the frequency of use.

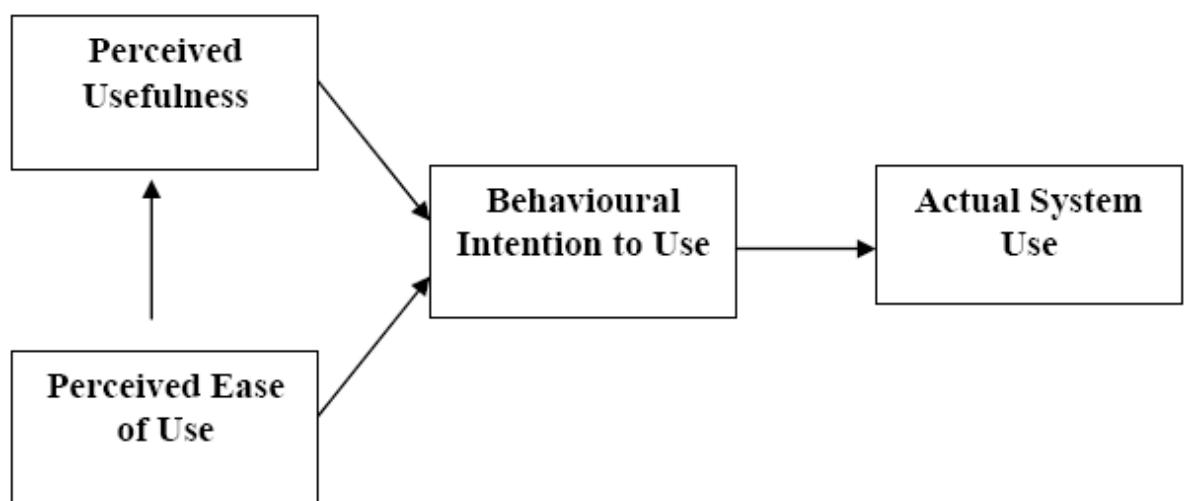
Other factors that have been known to influence the acceptance of technological innovations include age and educational qualification. There is no agreement among scholars about the effect of age on the acceptance of technology; while some assert that the younger the teacher the more easily they accept technology, others assert that age does not play a significant role in the acceptance of technology. Whatever the case, people of all ages have been known to accept the use of the mobile phone technology and as such, age is not expected to affect the acceptance of the storage/playback of the sounds on the mobile phone. Although teachers with higher qualifications have been reported to show greater willingness to use technology (Grant and Mimms, 2010), people with diverse educational qualifications are often known to access basic technological tools like the CD and mobile phones. The mobile phone has even been described as the most widely adopted technology in the world (Rainie, 2013).

Theoretical framework

The framework adopted by the research is the Technology Acceptance Model (TAM) (Venkatesh, Davis & Davis, 1989). This theory proposes that the intention to

use technology and the actual use of technology is determined by two factors- Perceived Usefulness (PU) and Perceived Ease of Use (PEU). PU is the extent to which the user believes that a technological tool is useful towards realising their objective. Perceived Ease of Use refers to the user's thought about how easy the tool is to use. PU has been found to be the major contributing factor to technology acceptance while the PEU is a secondary consideration (Agbatogun 2011).

Figure 1: Technology Acceptance Model, *Source: Venkatesh et. al. (2003, p.423)*



Research Participants

Participants in the study were nine Primary One teachers and the pupils in their classroom. The teachers were between the ages of 22 and 50. Their length of experience ranged between one and 20 years. They were all female. The pupils were Primary One pupils between age five and seven.

Procedures

Teachers from selected schools in Bonny Island were trained in the synthetic phonics method. The selection of teachers was opportunistic as all government schools in the local government area were invited for the training. Teachers from

some randomly selected low cost private schools were also invited to the training. After the training, the teachers were requested to participate in a study of the implementation and impact of the method on the literacy skills of the pupils. The study required visiting the classrooms of the teachers for classroom observation and to this end, I obtained the permission of the teachers to visit their classrooms having assured them that such visits did not have any government content but were solely for the purpose of following up on the training and giving feedback to the teachers. An observation guide designed by the researcher was used in tracking the teaching. The guide was shared with the teachers before the start of the supervision exercise so that observer and the observed were agreed on the expected outcome of the classroom procedures. It was hoped that this would help the teachers be at ease and make the observation procedure less obtrusive.

Design

The research used a qualitative data collection method, namely classroom observation and in-depth interviews of teachers. Classroom observation revealed the progress made by the teachers as they implemented the use of the technological tools. Teacher interviews gave data on the attitude of the teachers to the integration of the technology for lesson preparation.

Classroom observation

Classroom observation soon showed that one major challenge with the new method is the propensity of teachers to forget the sounds or mix them up. The immediate solution was to provide them with CD plates of the sounds and of songs which they could teach the children to remind teacher and students of the sounds. Although the teachers were grateful for the CD, they were unsure if they could access the basic requirement needed to play the CDs - electricity. Thus, they were not very

optimistic that the use of the CDs would contribute meaningfully to their preparation for and indeed their delivery of the teaching. Follow up on the implementation of the intervention revealed a hesitation to the use of the CDs for several obvious reasons. Some of the reasons given were lack of electricity in the school and at home, some faulty CDs, and lack of time to listen to the CD. A not so obvious reason appeared to be ignorance about the ease of usage and of the usefulness of the tool. Efforts at negotiating attitude change included discussions with the teachers about the ease with which the tool could be used and about the usefulness of the tool. Such discussions were done on a one-on-one basis during feedback sessions and also at the refresher training where the CD was played while all listened and appreciated the usefulness of listening to the CD in preparing the lessons. This resulted in greater use which led to improved skills of teachers as observed during classroom visits. Encouraged by the response of the teachers, the researcher requested to install the sounds software on teachers' mobile phones as a means of storage for the contents of the CDs; a request which the teachers granted happily. It was hoped that this would eliminate all the impediments to listening to the CD as the teachers would ensure their phones were properly charged. Also, given that the phone is a mobile device, the teachers had the ability to listen to the sounds in any location even whilst engaged in other chores thereby eliminating the need for extra time to listen to the CD. As such, the sounds of the English language could become a 'voice in their heads'.

Analysis of teacher interview data

The interview data was transcribed and recurring codes headings were identified.

Teacher's views about the storage of sounds in the CDs/mobile phones

Teachers were asked their opinions on using CDs and their mobile phones as a means of storing the teaching aid. All teachers interviewed were of the opinion that storing the sounds on the CDs and mobile phones was a welcome idea.

I like it on both CD and on my phone; I like the idea very much. It helps me to remember the sounds

Both CD and phone are good, very good; it is a good idea to have the sounds on the CD and mobile phone. I don't have problems remembering the sounds any more, it (my phone) reminds me

It is good, I like it.

How often the teachers listen to the sounds on mobile phone:

They all said they listened to the sounds frequently especially when preparing their lessons. The major reason for listening was that it served as a quick reminder when they forgot the sound. An additional reason for listening as some of the teachers stated was that it helped improve their pronunciation.

Very often, all the time, at least two times a day, even today, I forgot a sound and I listened to the recording for a reminder. I listen to it when I'm preparing my lesson

Every day, and many times a day. Before I start teaching phonics lesson each day; I listen to it at home too, with my children

Whenever I need to be reminded of a sound

Given the choice which would be the preferred means of storage: CD or phone?

All the teachers expressed a desire to have the sounds on CDs because they could easily share that with a bigger audience but for personal use, they preferred to have

the sounds stored on their mobile phones. The reason given by all was that they could play the sounds anywhere and at all times.

It will be the phone because I can listen to it anywhere, anytime

I like it on both; on the phone because the phone is always in my pocket and listen to it anywhere and anytime I want. I like it on the CD because I can then play it for the pupils

I prefer it on my mobile phone. I cannot go everywhere with my CD but the mobile phone is always on me.

How the storage of the sounds on CD/mobile phone contributed to their teaching:

The teachers all said it made a great impact on their teaching especially as it gave them fresh reminders of the sounds. Remembering the sounds had been the greatest challenge the teachers faced and so, a tool to help them remember was most appreciated.

The teaching is easier now; I can now differentiate between the sounds very well.

I now know the sounds, no more confusion (Demonstrated by giving an example of which sounds used to confuse her and says them correctly)

The CD helps me remember the sounds

I listen to the CD when I'm preparing my lesson and that keeps the sound fresh in my memory

My English pronunciation has improved greatly

I am now a standard to other teachers and they come to learn from me

Benefit to the pupils:

My pupils are very proud to sing the songs and pupils come from other classes to listen to them

Challenges that the storage on CD/mobile phones posed to teaching and how such can be resolved:

The only challenge identified by one of the teachers was the low volume of the sounds through the phone. It was not certain if this was peculiar to her phone, or if it was as a result of the size of her class. She suggested having the software reinstalled on her phone.

I have not experienced any challenge

The volume of the sounds on my phone is low, I will be glad if the sounds can be reinstalled and made louder. That way, I can play it for the pupils in the class

The teachers' claim to improvement in their knowledge of the subject matter is corroborated by the classroom observation evidence which showed great improvement in the teachers' knowledge of the sounds in the period when they started listening to the sounds on the CDs compared to when they did not and even more so when they had the sounds on their mobile phones.

Conclusions and recommendations

The teachers' experience of having the tools for preparing their lessons on CDs and on mobile phones is that it was a valuable addition to the synthetic phonics method of teaching English. The teachers were pleased to integrate this form of technology into their lesson preparation as it was easy to use and they were sure of its usefulness. They had witnessed their pupils change from reluctant to eager learners and from slow to fast and confident learners; becoming model pupils. Using the synthetic phonics method and the audio tools had also enabled some of the teachers to become model teachers whom colleagues consult to enquire as to how to acquire the knowledge. This has in turn boosted the confidence of the teachers, further driving the desire to improve. Teachers felt comfortable having the teaching aid stored on their mobile phones indicating that more attention should be focused on the use of the mobile phones as a tool for lesson preparation when necessary. Such aids should be those which require as little memory space as possible. As teachers become more familiar with a particular aid, (e.g. when they get used to the sounds and do not need to constantly listen to them anymore) they should be encouraged to delete those aids which are no longer needed so as to allow space for newer ones. Further research should be carried out to determine other tools which are readily available to the teachers and could be used to improve their skills at no extra cost.

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