



Improving Special Needs Pupils' Interest and Achievement in Reading in English Language Through MP4 Instructional Resource in Nsukka Local Government Area

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Abstract

The study examined the extent to which hearing impaired pupils' interest and achievement in reading can be improved using MP4 instructional resource in Nsukka Local Government Area. The study adopted a descriptive survey design. Two research questions were formulated which guided the study. The population of the study comprised 6 pupils who experience hardness in hearing out of the 23 deaf pupils in the centre for vocational and academic training for Special Needs Children, GRA, Nsukka. This study did not make use of sample as the population size is small and manageable. A structured questionnaire titled Application of MP4 Instructional Resource for Teaching Reading to Pupils with Hearing Impairment (AMP4IRRH) and an Interest Inventory developed by the researcher was used for data collection. The instrument was given to three experts for face validation. Two of the validates majored in English unit in the department of Arts education and one from Measurement and Evaluation, all from the Faculty of Education, University of Nigeria, Nsukka. The direct delivery and retrieval method was used for data collection. 6 copies of the questionnaire as well as 6 copies of the interest inventory were administered directly to the respondents by the researcher with assistance from the class teachers. To provide answers to the research questions, data collected was analyzed using mean and standard deviation scores. An overview of the overall results showed that hearing impaired pupils' interest and achievement in reading can to a high extent be improved through MP4 instructional resource. Considering the results of the study, the researcher among others recommends that: Government should provide digital resources such as MP4 instructional resource that is engaging and motivating in teaching reading to pupils who experience hardness in hearing.

Keywords: Special Needs Pupils, MP4 Instructional Resource, Hearing Impaired Pupils, Reading, Interest and Achievement

Introduction

Problems associated with the acquisition of reading skills world over is one of the utmost concerns of parents, teachers and the education industry mainly at the basic education level. Basic education according to the Federal Republic of Nigeria (FRN) (2013), in her National Policy on Education is the education given to children aged 0-15 years. It encompasses the early childhood/pre-primary education (0-5), and 9 years of formal schooling. The 9 years of formal schooling or basic education comprises 6 years of primary education and 3 years of junior secondary

education. This study will concentrate on pupils with special needs in primary education.

Primary education occupies a very prominent position in the Nigerian education system. It is the foundation of education in Nigeria. According to the FRN (2013), primary education is the first level of education given to children aged 6-11 years plus. In the view of Rose (2020), primary education is an education which children receive from the age of six to twelve years after pre-primary education, infant school and before gaining entrance into secondary school.

Pupils' can be described as young people or young school children found in the primary and elementary grades that demand a lot of supervision from their teacher due to their young age. Nwagbara (2018) defined a pupil as a young person especially between infancy and puberty. He or she is somebody under a legally specified age who is considered not to be legally responsible for his or her actions. A pupil, according to Morrison (2014) is a person who is taught by another, especially a schoolchild or student in relation to a teacher. Morrison further explained that pupils are young school children who are under the care or responsibility of a tutor or instructor.

Pupils with special needs can be explained as pupils who have difficulties or who are physically or psychologically challenged. Special needs pupils' include all school children who, for whatever reasons, are failing to benefit from school (UNESCO, 2018). Ozoji and Mugu cited by Unegbu (2016) define special pupils as "those with significant sensory deficits or unusual high intellectual that are not properly addressed in the regular programme". They further opine that a highly intelligent child is a child with outstanding achievement and ability who is not well catered for in the regular classroom. Similarly, Kami (2008) is of the opinion that children with special needs are those generally referred to as exceptional children with one form of disability or learning difficulty or the other. In the same vein, Akuogibo and Dada cited in Nwachukwu (2006) see the special needs child as one who:

deviates from the ordinary child such that he/she requires special attention, special services and other areas that could make life more meaningful and worth living ... those who require special education service in order to benefit from the regular school curriculum. They are those who learning difficulties or disabilities compel to require additional help in order to achieve their full educational potentials within the curriculum (p. 278).

In other words, special needs pupils are those school children who cannot benefit maximally from the regular classroom teaching/learning experiences on account of physical, mental, emotional and other sundry disabilities, which may or may not be easily identified. Therefore, special needs pupils are special children who need to be given special attention in the classroom. For the purpose of this study, the category of special need

pupils that will be looked into are those who suffer from hearing impairment.

Hearing impairment can be described as lack of normal hearing due to defects in the hearing mechanism. It can also be seen as a broad term that refers to hearing losses of varying degrees ranging from hardness of hearing to total deafness. Soliman (2007) opines that hearing impairment is a deviation in hearing that reduces the ability of the affected individual from communicating orally. Meadow and Erting (2010) describes hearing impairment as absence or a reduction in response to sound. Ugwuanyi (2009) explains that individuals with hearing impairment are those who due to accident or diseases are born either with hearing loss or develop hearing loss later in life. In the context of this study, hearing impairment shall be viewed as the inability of an individual to hear sounds naturally whether partially or totally.

Many scholars and researchers have classified hearing impairment based on the time of the onset, the degree and the site of impairment. The onset of hearing impairment refers to the period at which hearing problem starts in an individual which could be either congenital (at birth) or adventitious (after birth). (Babudoh, 2008). The degree of hearing impairment which is the most common classification is of two types namely, deafness and hardness of hearing. Individuals with deafness have no functional hearing at all whereas those with hardness of hearing can use amplified devices to hear to a certain extent though with distortion (Amaize, Adenuga & Oyewumi, 2018). This study is concerned with pupils who experience hardness in hearing.

Hearing impairment has serious long-term complications on the normal development of young school children. The most significant impact of growing up with hearing impairment especially those who suffer from hardness in hearing is the difficulty with absorbing or hearing sounds and this difficulty has a direct effect on their ability to develop speech and language skills for communication. In corroboration with this view, Ademokoya (2016) explains that pupils with partial hearing impairment find it difficult to hear speech, acquire speech and use speech for communication which makes these pupils find it very difficult in learning two basic language skills which are reading and writing that are basic to their literacy development

Reading is one of the most important skills required for children literacy skills and development.

According to Onwukeme (2010), reading is a psycholinguistic process by which a reader reconstructs a message which has been encoded by a writer in a graphic display. Reading is the process of looking at series of written symbols and getting meaning from them. For Baker (2011), reading is a process of identifying and understanding the meaning of characters and words in written or printed material. Baker further stated that reading starts with the use of the eye and memory to recognize shapes, patterns and letters of the alphabet, and ends with using past experiences and background knowledge to confirm what is read.

The importance of reading in the education of children cannot be over emphasized. According to Cunningham and Stanovich (2001), those who read well, read more and in the process, they usually gather a lot of experiences as well as language enrichment which give them advantage over their peers who cannot read. Onwukeme (2016), stated that the academic dilemma of children who cannot read is evident considering the fact that textbooks are meant to be read and understood. In addition, children need to read and understand examination questions in order to give correct answers. Reading is a major factor for children's success or failure in school. Onwukeme further stated that it is expedient for every child to develop the rudiments of reading. This implies that the ability to read and process information is a necessary part of primary school pupils' educational experience so as to help them gain the foundational experiences that prepare them for conventional reading once they enter secondary school.

However, notwithstanding the huge importance of reading, a lot of school children who experience difficulties in hearing find it difficult to learn how to read irrespective of the methods used in teaching them in the classroom because of the difficulty they experience in hearing. Johnson (2016) asserts that hearing impairment has serious negative effects on children's literacy development especially in the area of reading as these children to a great extent find it difficult to assimilate classroom instructions that could have assisted them in learning how to read due to their difficulty in hearing. Gallagher, Anastasi and Coleman (2016), aver that learning how to read is a challenge for pupils who are impaired in the ears. The authors further explain that this difficulty creates a great barrier to their academic success because virtually all aspects of learning involve reading. This makes it imperative to support them with special teaching tools or devices that

can assist these pupils in benefitting maximally from classroom instruction such as MP4 recorders, MP3, audio-visual resources among others.

An MP4 file can be described as a popular video format used to share, download and stream video content. It can also store audio, images and subtitles. Maynard (2020), expresses that an mp4 recorder is a container format for storing various types of audio and video that are encoded in the mp4 format. The author further explains that mp4 has a strong compression that makes it suitable for streaming and downloading videos over the internet as well as audio and images which makes it possible to deliver navigation and other interactive elements to different viewers.

MP4 players can be found in various forms including dedicated portable media players, software applications on computers and Smartphone's, and even web-based players. Maynard further opines that mp4 is a suitable resource for teaching hearing impaired students as it has a quality inbuilt sound system that can assist such learners in perceiving the content of the already prepared lesson. Going by the above analysis, it can be construed that mp4 player can be a very useful resource in teaching English language lessons especially for students who experience hardness in hearing taking into consideration the special features of mp4 which does not just enhance the students' ability to learn these lessons but as well boost their interest in learning since it can serve multimedia purposes.

Interest is the feeling of wanting to know or learn about something or someone. According to Ainley in Raymond (2013), interest is the feeling that accompanies or causes special attention to an object or class of objects. It is the feeling of a person whose attention, concern, or curiosity is particularly engaged by something. Terty and Offorma (2013) refer to interest as emotionally oriented behavioural trait which determines a student's urge and vigour to tackle educational programmes or other activities. This implies that interest is a product of self-initiated activities necessitated by attachment of self to identified objects. Maynard (2020), expresses that children who experience hardness in hearing show more interest in learning when various pictures are manipulated to be in motion, with a sharp sound that is loud enough to help them consume the content of the lesson. Therefore, if special needs pupils are taught reading lessons through mp4 players either through the recorder supported with a smartphone or on computers where they can watch the resource person teach how to read as well as hear the online teacher because of the loud capacity of its audio

sound, this can arrest their attention in learning how to read because naturally children love things they can watch coupled with the fact that through this resource, they can hear to a good level what the online resource teacher is teaching. This can to a great extent sustain these pupils interest in learning how to read as well as boost their achievement in reading.

Achievement has to do with reaching a required standard of performance. It has to do with something that somebody has succeeded in doing, usually with effort. It could also be referred to as the academic accomplishments of students as a result of exertion of efforts, skills, perseverance and practice La Shawn (2011) defined achievement as standardized test scores, grades, and overall academic ability and performance outcome. Okonkwo (2014) avers that achievement is an index for determining the academic success of students. To Uroko (2010), the academic achievement of an individual is his/her learning outcome.

Based on the above views of different authors, it is clear that achievement is concerned with the accomplishments of a person based on effort. However, literature has it that learning how to read is a challenge for pupils who are impaired in the ears thereby affecting their academic achievement in reading. Therefore, in order to help these pupils to partake of reading lessons and benefit from them, they require special teaching resources such as the mp4 that can assist them in hearing these lessons as they are only impaired in the ears and not in the brain. Thus, if these pupils are taught using resources that can aid their hearing abilities, it will to a great extent boost their academic achievement in reading that will as well help their performances in other school subjects. Based on the foregoing, the researcher is interested to find out if mp4 resource can improve hearing impaired pupil's interest and achievement in reading.

Statement of the problem

Pupils with hearing impairment experience so many challenges on the account of their hearing defect to such an extent that they find it very difficult to cope with classroom activities such as reading. Reading is an indispensable tool for learning. The importance of reading in the education of children cannot be over emphasized as the academic dilemma of children who cannot read is evident considering the fact that textbooks and indeed every school subject is meant to be read and understood for a better academic achievement. However, evidence has shown that a lot of special needs pupils especially those who

experience hardness in hearing at the primary school level find it difficult to learn how to read due to deficiency in hearing.

Based on the foregoing, it is pertinent that teachers in special schools make use of different modern resources such as mp4 players in teaching these pupils especially those who experience hardness in hearing. This is because if such resources are integrated in teaching reading lessons, it can help these hearing impaired children to learn different reading skills that will enable them become independent readers thereby boosting their reading and academic achievement. Thus the problem of this study put in question form is: to what extent can hearing impaired pupils' interest and achievement in reading be improved using mp4 instructional resource?

Purpose of the study

Generally, the purpose of this study is to determine the extent to which hearing impaired pupils' interest and achievement in reading can be improved using MP4 instructional resource in Nsukka Local Government Area. Specifically, the study sought to determine the following:

- 1) The extent to which hearing impaired pupils' interest in reading can be improved through MP4 instructional resource
- 2) The extent to which hearing impaired pupils' achievement in reading can be improved using MP4 instructional resource.

Research questions

The following research questions guided the study

- 1) To what extent can hearing impaired pupils' interest in reading be improved through MP4 instructional resource?
- 2) To what extent can hearing impaired pupils' achievement in reading be improved using MP4 instructional resource?

Methods

Descriptive survey research design was adopted in this study. According to Nworgu (2015), descriptive survey is a type of study which aims at collecting data on, and describing in a systematic manner, the characteristics, features or facts about a given population. Survey research design was



appropriate because the present study collected, described and interpreted the opinions of pupils with hearing impairment on how MP4 instructional resource can improve their interest and achievement in reading. The study was carried out in Centre for Academic and Vocational Training for Special Needs Children (CATVTRSNC), GRA, Nsukka. Nsukka Local Government Area is one of the seventeen local government areas in Enugu State, Nigeria. The local government is made up of four development centres which are: Nsukka Central Development Centre, Nsukka East Development Centre, Nsukka West Development Centre and Nsukka South Development Centre. It has its headquarters in Nsukka and it is composed of urban and rural settings. The choice of this area was made because of the fact that a lot of pupils who suffer from hearing impairment in this area lack the basic literacy skills and this could be traced to lack of effective resources used in teaching reading. This informed the choice of this area so as to ascertain if an alternative teaching resource such as the use of MP4 can improve the reading skills of hearing impaired pupils. The population of the study comprised 6 pupils who experience hardness in hearing out of the 23 deaf pupils in the centre for vocational and academic training for Special Needs Children, GRA, Nsukka. This study did not make use of sample as the population size is small and manageable. A structured questionnaire titled Application of MP4 Instructional Resource for Teaching Reading to Pupils with Hearing Impairment (AMP4IRRH) and an Interest Inventory developed by the researcher was used for data collection. The questionnaire consists of two sections: Sections A and B. Section A comprised of information regarding the demographic data of the respondents. Section B contained 10 items on how MP4 instructional resource can facilitate their hearing and understanding of reading lessons. The interest inventory sought information on

how MP4 resource can boost pupils' interest in reading. The instrument was based on a four point rating scale with the following response modes for clusters A and B and they are: Very High Extent (VHE), High Extent (HE), Low Extent (LE) and Very Low Extent (VLE) with weight scores of VHE= 4 points, HE= 3 points, LE= 2 points and VLE= 1 point. The instrument was given to three experts for face validation. Two of the validates majored in English unit in the department of Arts education and one from Measurement and Evaluation, all from the Faculty of Education, University of Nigeria, Nsukka. The validates were required to scrutinize the items of the instrument in terms of its relevance to the study, the adequacy of the items in collecting data to address the purpose of the study as well as the level and appropriateness of the language of the items of the instrument. Also, the experts examined the clusters and matched them with research questions. The experts made comments, suggestions and criticisms independently which helped the researcher to modify and produce the final instrument. The direct delivery and retrieval method was used for data collection. 6 copies of the questionnaire as well as 6 copies of the interest inventory were administered directly to the respondents by the researcher. The researcher discussed the contents of the instrument with the classroom teachers so that they could assist her with the mode of communicating with these special pupils so that the instrument will be administered in appropriate and effective ways. To provide answers to the research questions, data collected was analyzed using mean and standard deviation. The real limit of numbers was used for interpreting the data. Any mean score from 3.50-4.00 was regarded as Very High Extent, 2.50-3.49 as High Extent, 1.50-2.49 as Low Extent and 0.05-1.49 as Very Low Extent.

Results

Research Question One: to what extent can hearing impaired pupils' interest in reading be improved through MP4 instructional resource?

Table 1: Mean scores and standard deviations of hearing impaired pupils on the extent to which their interest in reading can be improved through MP4 instructional resource

S/N	Items	Hearing Impaired Pupils		
		MEAN	SD	DL
1.	I like learning through films	2.34	0.48	HE
2.	Teaching reading through films is interesting	2.66	0.46	HE
3.	If I can hear the teacher, I will be interested in the lesson	3.55	0.49	VHE
4.	I like learning how to pronounce words through films	3.40	0.49	HE
5.	Learning reading through a digital resource that is loud motivates me	3.22	0.54	HE
6.	I find classroom reading uninteresting	3.58	0.44	VHE
7.	I prefer learning reading through devices with loud sounds than lip reading	3.29	0.64	HE
8.	I prefer learning reading through resources that can assist my hearing abilities	2.65	0.47	HE
9.	Learning reading through online teaching can be very lively	2.74	0.43	HE
10.	I enjoy reading activities with different digital devices	3.34	0.47	HE
Cluster Mean		3.07	0.37	HE

Key: SD= Standard Deviation, DL= Decision Level, VHE= Very High Extent, HE= High Extent

Table 1 presents the assessment of hearing impaired pupils' on the extent to which their interest in reading can be improved through MP4 instructional resource. Based on their assessment as presented on the table, items 1, 2, 4, 5, 7, 8, 9 and 10 had mean scores of 2.37, 2.36, 3.40, 3.22, 3.29, 2.65, 2.74 and 3.34 respectively. This falls within the real limits of 2.50-3.49, indicating high extent. By implication, the respondents maintained that the above eight items can to a high extent improve their interest in reading through MP4 instructional resource. Equally, items 3 and 6 had mean scores of 3.55 and 3.58. This falls

within the real limits of 3.50 - 4.00, indicating very high extent. Generally, the table showed a cluster mean score of 3.07 with a corresponding standard deviation of 0.37. The standard deviations of the scores generated in all the items were small indicating that the variations of the scores from the mean were not far from each other. The above overall mean score falls within the real limits of 2.50-3.49, indicating high extent. This led to a concluding report that hearing impaired pupils' interest in reading can to a high extent be improved through MP4 instructional resource.

Research Question Two: To what extent can hearing impaired pupils' achievement in reading be improved through MP4 instructional resource?

Table 2: Mean scores and standard deviations of hearing impaired pupils' on the extent to which their achievement in reading can be improved through MP4 instructional resource

S/N	Items	Special Need Pupils		
		MEAN	SD	DL
11.	I find it difficult learning how to read through lip reading	2.79	0.40	HE
12.	Learning reading through finger spellings is difficult	2.90	0.28	HE
13.	My inability to hear clearly affects my achievement in reading	3.84	0.36	VHE
14.	If I can hear what the teacher teaches in reading lessons, I can do better in reading	3.69	0.46	VHE
15.	Learning reading through sign language can be difficult sometimes and it affects my achievement	2.59	0.49	HE
16.	If I can taught reading with a device with loud volume, it can help me learn how to read	2.82	0.39	HE
17.	Digital devices can help me learn how to read easily	2.60	0.48	HE
18.	If I can always rewind reading lessons, it will help me understand reading better	2.71	0.45	HE
19.	If my school uses online materials in teaching reading, it will help me perform well in reading	2.58	0.45	HE
20.	I can learn how to read if I am taught with different digital resources	3.68	0.42	VHE
Cluster Mean		3.02	0.41	HE

Key: SD= Standard Deviation, DL= Decision Level, VHE= Very High Extent, HE= High Extent

Table 2 shows the consideration of hearing impaired pupils' on the extent to which their achievement in reading can be improved through MP4 instructional resource. Items 11, 12, 15, 16, 17, 18 and 19 had mean scores of 2.79, 2.90, 2.59, 2.82, 2.60, 2.71 and 2.58 correspondingly. This falls within the real

limits of 2.50-3.49, indicating high extent. Likewise, items 13, 14 and 20 had mean scores of 3.84, 3.69 and 3.68. This falls within the real limits of 3.50 - 4.00, indicating very high extent. Commonly, the table showed a cluster mean score of 3.02 with a corresponding standard deviation of 0.41. The standard deviations of the scores generated in all the items were small indicating that the variations of the scores from the mean were not far from each other. The above overall mean score falls within the real limits of 2.50-3.49, indicating high extent. This is empirical evidence that hearing impaired pupils' achievement in reading can to a high extent be improved through MP4 instructional resource.

Discussion of Findings

The research questions that guided this study focused on the extent to which hearing impaired pupils' interest and achievement in reading can be improved through MP4 instructional resource. The result of the findings in table 1 showed that hearing impaired pupils' interest in reading can to a high extent be improved through MP4 instructional resource. This implies that pupils can be motivated in learning reading through MP4 instructional resource. This finding agrees with the postulations of Omoju and Abraham (2014) who stated that MP4 player can be a very useful resource in teaching reading lessons especially for students who experience hardness in hearing taking into consideration the special features of MP4 which does not just enhance the students' ability to learn these lessons but as well boost their interest in learning reading.

The result of the findings in table 2 showed that hearing impaired pupils' achievement in reading can to a high extent be improved through MP4 instructional resource. This is empirical evidence that if pupils are taught reading with MP4 instructional resource that it can help in their reading achievement. This finding is equally an eye opener as it communicates that if schools use MP4 instructional resource in teaching reading, it will help pupils with hearing difficulty to perform well in reading. This finding is in line with the earlier assertion of Maynard (2020) who stated that with the aid of different digital resources such as MP4 in teaching reading, that pupils with hearing difficulty can hear what the teacher teaches in reading lessons and as a result, can do better in reading.

Conclusion

Based on the findings of the study, the following conclusions were drawn.

- 1) Hearing impaired pupils' interest in reading can to a high extent be improved through MP4 instructional resource as it promotes motivation in learning.
- 2) Hearing impaired pupils' achievement in reading can to a high extent be improved through MP4 instructional resource
- 3) If special schools use MP4 instructional resource in teaching reading, it will help pupils with hearing difficulty to perform well in reading.

Recommendations

Based on the findings of the study, the researcher recommends that;

1. Government in conjunction with the school managements should organize seminars and workshops for the special needs teachers on how to teach reading through digital resources such as MP4 since it has been empirically proven to be motivating in teaching reading to pupils who experience hardness in hearing.
2. Government should provide digital resources such as MP4 instructional resource that is engaging and motivating in teaching reading to pupils who experience hardness in hearing.
3. Parents and guidance of hearing impaired pupils should provide them with MP4 players so as to assist them in learning how to read.
4. School managements should make provision for digital resource that has loud audio speakers so as to motivate pupils with hardness in hearing to reading.
5. Teachers should integrate the use of MP4 instructional resource in teaching reading to pupils who experience hardness in hearing in order to motivate them to learn how to read.

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