

USING THE EWE PICTURE ARTICULATION TEST TO IDENTIFY CHILDREN WITH SPEECH AND READING DIFFICULTIES IN GHANA

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Abstract

This paper deals with how the locally designed Picture Articulation Test items in the Ewe language of Ghana are constructed and standardized on children between the ages of 3 years and upward. The test is used to identify children with speech difficulties, which impede their language acquisition, reading readiness and reading abilities. The test items which are made up of 29 consonants and 14 vowels (7 pure and 7 nasals) are 57 in number. The target speech sounds are found in prevocalic (initial), intervocalic (middle) and postvocalic (final) positions. Two nasal sounds /m, ŋ/ are found at the postvocalic positions. This indicates that unlike consonants in English, which can be found at the postvocalic positions, the Ewe speech consonants have only two sounds that can be found at this position. Despite this limitation, it is established that the Ewe Picture Articulation Test items expose children with speech difficulties and they are referred for diagnostic assessment. It is recommended that since children learn their local languages first and delays in communication influence their social, emotional and cognitive skills, there is the need to conduct screening tests in hearing and speech for early management from kindergarten to primary school levels.

Introduction

The development of every nation is pivoted on the citizens particularly children which when properly catered for become valuable assets of the country. To this end, children's social, emotional, cognitive and physical growth from 0 –5 years are critical to pediatricians, nutritionists and in terms of educational placement, educators are more concerned about their diagnostic assessment and intervention. In Ghana, researches carried out locally indicated that some basic school children have Learning Disabilities such that some are low achievers (Donani & Avoke 1996; Gadagbui 2002). Gadagbui (2002) found a positive correlation between children's poor reading and Mathematical

statements when a study was carried out on Methodist A, B, C, D Junior Secondary School (JSS) one students in Winneba.

Many reforms have been carried out as proactive measures but not much has been gained. This includes the FCUBE (Free Compulsory Basic Education of the 1992 constitution which mandates that every school going child must be in school. Currently, much is planned for Early Childhood Development and its inclusion in the educational structure. As a result the University of Education is expanding its programmes to cover Early Childhood Development Education Programme. This programme will start in September 2005. This implies that all children must be screened before they enter the formal education.

Many countries such as the United Kingdom, America and some Scandinavian countries have their own standardized non speech tests, speech language or vocabulary tests and articulation tests for assessing children before and after they have been admitted to school. Most of these tests are administered as early as day one or from 0 – 6 months. Some of these tests are manually given or automated to assess children's sensory abilities such as hearing and that of the brain. However, in Ghana for instance, it seems not much is achieved in assessing children in these areas before schooling or after it.

At best, preschoolers are admitted on the basis of birth certificate and weighing card. At most some private schools conduct oral interviews for these young children so as to find their communication level in receptive language and expressive language using the English Language. But should this be all or the ideal?

This researcher deems it necessary, to state that besides the above practices the African child for that matter, the Ghanaian child, should also be assessed through locally designed tests. These tests must be suitable to the child's age, vocabulary appropriate, environmentally friendly and safe and interest-sustaining to embrace all the speech sounds of the local language dominating the school community and the home. Since the foreign standardized tests are culturally tied (Gadagbui, 2003), and there are about 60 languages spoken in Ghana, most of which are unwritten, except for 11 of them (Gadagbui, 2005 unpublished) the child should be given an assessment test in the language he/she is good at.

In Ghana, the medium of instruction is for children to be instructed in the local language from Basic 1 – 3 and the English Language is used as a taught subject from Basic 4.

The Eve Language

Among the eleven (11) languages studied in the University of Education Winneba, Ghana, are Ga , Fante, Twi, Dagaare, Dagbani, and Eve. The presenter will discuss one local language test in Eve. This is the Eve Picture Articulation Test which had been administered on Eve children at the northern part of the Volta Region of Ghana and was found valid and reliable (Gadagbui,2003). Currently, it had been used on preschoolers of the southern sector where Anlo dialect is spoken.

Eve is not only widely spoken at the coastal and northern section of the Volta Region but also, dominates the south of Togo which is, Lome and the Republic of Benin. Dialectal

differences exist but they do not deprive users of the content and meaning. Examples, of the dialects are Anlo, Some, Uedome(Gbi), Agave, Tɔnu; Ave; Avenɔ; etc. The Eve Language has 43 speech sounds made up of 29 consonants and 14 vowels. These are /p, b; w; k,g; ts, dz; ʋf;s, z;f,v; tsy, ny, m, n, ŋ; kp, gb; h, x, ʎ, l, r, t,d; d; y/. The vowels are /a, u, i, e, ɔ, o, ; ā, ū, ĩ, ē, ɔ̄, ɔ̄, /.

Statement of problem

The West African Examination Results for Basic Education Certificate Examination is yet to show tremendous improvement in students performance at the Junior Secondary School (JSS) Level.

The Chief Examiner's General comments during the 1990 – 91 Basic Education Certificate Examination (BECE) stated that the students' English was bad and too ordinary to their level. Students have very little or no knowledge at all of the English Language (Chief Examiner's General comments 1990 – 1991 BECE Report p.6).

Series of researches of pupils communication skills indicated poor writing skills. In schools for the Deaf, Sign Language dominates among the pupils though the post linguals could be encouraged to speak, have speech therapy and sign when necessary. But the right to speak is down played to the extent that those who can speak are not functioning at that level due to lack of speech practice and reinforcement.

Besides, many teachers in the Basic Public Schools speak local languages whereas, many homes are also dominated with vernacular since many parents are illiterates. Siblings do not have much time to support the younger ones due to heavy house chores.

Children admitted to kindergarten go through the usual routine without proper checklist for any sensory impairment related to hearing and speech, vision or perceptual/cognitive skills.

It is upon this basis that this research is carried out to identify children with speech and reading difficulties as early as possible to avert greater difficulties in teaching and learning through early intervention.

Objectives

The objectives of this study are the following:-

1. To identify children with speech and reading difficulties.
2. To find common problems among children of the northern (Uedome) and southern (Anlo) sectors of the Volta Region.
3. To determine management procedures as early as possible for preschoolers identified with speech and picture reading difficulties.

Research Questions

1. What are the speech and picture reading problems existing among the children?

2. What are the common problems which exist among children of northern and southern Eve speakers?
3. What management procedures are available to the children/or do the children need?

Methodology

Research design

This research is adopting a simple descriptive approach. It is also to use percentage to calculate the client's correct responses obtained through observation. Criterion for declaring pass level is 80%. A failure indicates less score than 80%. Referral for diagnostic tests is possible since the Picture Articulation Test can equally be used as a screening test or a diagnostic test.

Population

Preschool children at the Dzelukofe Roman Catholic Basic School had been involved. The children are in kindergarten one with the age range of 3+ years to 10 years who predominantly speak Anlo dialect. All the children have normal hearing.

Sample and Sampling Technique

Out of the 78 kindergarten one A & B pupils put in one class, 40 pupils who were made up of 17 females and 23 males with the average age of 4 years participated in the research. This sample was selected purposively since they fall within this class level.

Instrumentation/materials

The items for the Eve Picture Articulation Test consist of 57 words representing the pictures. Real objects such as {taku} - headgear; [gari] - /cassava/ product; [awu]- /dress/; [tog] - /ear ring/ [akpa] - /tilapia/; [kpɔnɔ] - /biscuit/; [fofoŋ] - /sugar cane/; [aba] - /mat/ were used to supplement the pictures.

Procedure

Before the test, the tester established rapport with the children in a classroom as they recited rhymes and participated in story telling and singing. The actual test started with the individuals in a separate classroom. Presentation was made through conditioning trial by demonstrating how the child could respond to the test. The tester told the child that they were going to play a "language game", so if she pointed to the picture he/she should name it. The 57 pictures were presented in a set of three in a row. Each set has the single target sound in the prevocalic, inter-vocalic and post-vocalic.

Analysis of Results and Discussions

Research Question One:

What are the speech and picture reading problems identified?

The over all performances of the 40 pupils showed that 22 (55%) had scores between 81-98 percent correct responses. This is an indication that they had passed since the pass score is 80 percent but had very few picture reading/identification problem. Six (15%) had between 70-79 percent. These had passed marginally or performed a little below the

pass score of 80 percent. Twelve children could not perform well, however, out of this number, ten (25%) had scores ranging between 49 – 67 percent. The remaining two children (5%) had 0-18 percent. One of the two children actually called the serial numbers written by the pictures that he was familiar with but not a single picture was he able to name. This revealed that the 12 pupils had performed poorly with picture reading, identification and language acquisition.

These 12 pupils need assistance to acquire the vocabularies which represent the names of the pictures. This is what Vygotsky (1978:860) cited in Ocloo et al (2003) called the Zone of proximal development. This means that the level that the child is currently achieving, can be improved if given the assistance from a more capable peer or adult. This zone is also described as “scaffolding” because the child needs a more competent person to expand his/her understanding. Scaffolding provides selective assistance to the child.

Research Question Two

What are the common problems which exist among children of northern and southern Ewe speakers?

i. Dialectal differences

Dialectal differences in the articulation of the sibilants /s, z, f/, were pronounced. Pictures representing “/hand/ and /groundnut/” with the equivalent [asi] and [azi] were pronounced as [afi] and [a□i] respectively. In other words the /s/ and /z/ became palatalized; [fofoŋ] became [fonfom] reflecting regressive assimilation – the nasal velar sound /ŋ/ influenced the articulation and it was approximated to bilabial nasal sound /m/ at the final position.

A Togolese also depicted similar dialectal differences as in [Yleti] as [wloti] - /star/; yida – as [aya] /comb/; [vidzi] as [b b] - /baby/ and [tsinyui] as [esi] - /water/.

ii. Articulation Errors

There were articulation errors of substitution, omission and epenthesis (addition).

For substitution error, [ɖiɖi] became [didi] or [dedi]; [fofoŋ] became [fonfom];

For omission error, [Yleti] was pronounced [leti]. For the error of epenthesis, [ɖiɖi] was pronounced by one child as [dindin] or [a ɖiɖi].

Limitations

i. Ambiguity of picture

Some pictures seemed to be ambiguous to the children. For instance, [afe] - /house/ was given the name [xɔ] /room/ or “masalatsi” (mosque) or [tsyɔtsyixɔ] – church. The explanation given by the children was that a house should have many rooms and doors with windows. This was logical and rational enough for acceptance. Another observation was that some pictures should have had brighter colours for easy identification.

ii. Uncommon Pictures/Objects

Certain pictures and names were not common since they were seasonally available and used. Examples are [lo] – crocodile; and [fãfã] – which is a type of fish caught only in November and December of each year from the sea.

iii. Children were confined to a classroom picture book and had no experience with association of similar concepts to other picture books.

Research Question Three

What management procedures are available to the children / what do the children need?

1. Clinicians who administer the Eve Picture Articulation Test must take into consideration the dialectal differences within the environments so as to give a valid assessment.
2. Surveillance should be made on children with articulation problems for a period and if self-corrections are not made, they can be referred for a speech and language therapy.
3. Teachers must assist children to get incorrect words said correctly through practice.

Conclusion

From the above research findings, it is observed that the Eve Picture Articulation Test is valid for identifying children with speech and reading difficulties and should be encouraged to be used by trained teachers.

Recommendations

Some pictures should be modified to suit the environment and given brighter colours. Children should be encouraged to generalize classroom information to concrete things and other picture books having similar items. This demands that children should have supplementary picture books and do more of picture/object association outside the classroom. Children should have more fun with play materials and attractive pictures to build up vocabulary.

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