ASSESSMENT OF ENGLISH ORAL READING FLUENCY RATES FOR GRADE SEVEN ENGLISH SECOND LANGUAGE LEARNERS IN TANZANIA

by

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Abstract:
This study aimed at assessing reading rates for learners in grade seven English second language (ESL) in Morogoro region, Tanzania. A total of 220 participants were randomly selected and assigned two grade appropriate English texts to read so as determine their reading rates. Fluency scale test was used to assess pupils’ reading fluency rates and the data was statistically analyzed using SPSS software. It was necessary to assess pupils’ reading rates in the study context because there are no established fluency rate norms set for grade seven pupils in the country. In this case the current study serves as a reference for improvement. Results show that grade seven pupils in Morogoro region had an average reading fluency rate of 101 words per minute (WPM) for fiction text and 95 WPM for non-fiction text. The difference in the two texts can be due to the length of words and difficulty level in non-fiction text against fiction text. The scored rate is below the adopted benchmarks which implies that these pupils are at risk in reading fluency, consequently, calling for immediate interventions. Essentially, the practices that the study has explored and presented concerning English oral reading fluency rates may rise awareness and inspiration of curriculum designers and policy makers to incorporate reading fluency skills into reading programs.

Keywords: English Second language, Oral Reading Fluency, Reading rates, Tanzania, Words per minute.

INTRODUCTION

Tanzania is a home of language diversity comprising about 164 ethnic groups speaking different languages (Languages of Tanzania Project, 2009). Nevertheless, this study does not stand for 164 ethnic languages because there is no clear number of languages reported across literatures. For
example, Taylor (1963) reported 120 languages, Grimes (1992) reported 112 languages, Lewis (2009), Maho & Sands (2003), Gordon (2005) reported 126 languages, while SIL (2004) identified 137 primary languages of which 2 of them are extinct and Muzale, & Rugemalira (2008) identified 156 languages. As argued by Legère (2007) that this difference is probably due to the fact that many languages in the country may be part of dialect continuum. Most of these languages belong to one of the major linguistic categories called Bantu, therefore it becomes difficulty to draw a straightforward line between one language and another because many of them are quite similar. Furthermore, there are Africans and Asians who speak different mother tongues, European and Arabs as well as other nationalities from different linguistic background live harmoniously in the country using Kiswahili as a lingua franca.

The national policy on language clearly states English as an official language and taught in primary school education from grade three as a subject and becomes language of instruction in secondary school education. Kiswahili remains a language of instruction in public primary schools while English used as a medium of instruction in private primary schools. English as second language in Tanzania is taught to primary school pupils in order encourage language diversity and develop adequate mastery of the language that will help them to cope with English language demands at secondary school and tertiary education (Ministry of Education and Culture, 1995). It is unfortunately that most of primary school pupils who complete their grade seven don’t have basic English language oral reading fluency (Uwezo, 2012). This implies that these learners will face critical challenges in the next year when they join secondary school because all subjects are taught in English except Kiswahili and other languages. According to Rugemalira et al. (1990), it was estimated that about 75% of teaching and learning process at form one classes in secondary schools was being led in Kiswahili rather than English language. To ease communication normally teachers and students use code switching in classroom. This is obviously an indication of incompetence in English language of which the study aimed at assessing reading fluency rates.

Essentially, the aim of this study was not to establish a baseline of reading fluency norms among grade seven leavers but to assess the level of oral reading fluency rate by testing and reporting observations of skills by quantifying the findings. It is worth understanding the concept of oral reading fluency and all related concepts from different literature.
Oral reading fluency is a term used to describe an ability of a person to read connected words in a text accurately, with appropriate speed and expression. Oral fluent reading includes three important features: reading accurate of connected text with appropriate conversational rate and expression (Hudson, Mercer, & Lane, 2000). A fluent reader decodes words in appropriate rate, accurate and automatic rendering minimal attention and effort (Rasinski, 2004). Rasinski expressed reading fluency in multidimensional ways; the first-dimension focus on the role of accuracy in decoding, second one stresses on speed and automatic recognition of words in a text, and the third-dimension focuses on comprehension. All these three dimensions are closely linked, for example accuracy and automatic reading constructs a situation for comprehension. Generally, many literatures argued that fluent reading is fast and a reader should maintain the flow of reading at an adequate rate so as to link information and inference for comprehension as stated by Grabe (1991). However, it should be clear that fluency does not rest on rapid reading but more concerned with reading at an appropriate rate along with acceptable expression and phrasing. Oral reading fluency is one of the most important language skills needed particularly by second language (L2) learners but it is unfortunately one of the forgotten skills.

Oral reading fluency rate refers to common way of describing reading speed that is measured in words per minute (WPM). For example, Jibril was provided with a text of 150 words and read it in two minutes and 10 seconds. WPM will be obtained by taking 150 words in the passage multiply by 60 which is equal to 9000 then divide by time spent by Jibril 130 seconds, equal to 69 WPM. This measurement applies only when assessing rate of reading fluency and can be represented in the following formula:

\[
\frac{\text{Number of words read}}{\text{Number of seconds to read}} \times 60 = \text{Reading Rates in Words Per Minute}
\]

Rate and accuracy can be measured by computing words correct per minute (WCPM) where number of errors is subtracted to WPM. This means if Jibril read a passage of 150 words at 69 WPM and made 4 errors his WCPM would be 65. Accumaticity is used as a proper term referring to quantitative measurement of number of words read correctly in a minute. It represents the total number of words read minus number of words that were skipped, misread, or inserted during
assessment process normally represented as WCPM or CWPM. The statistical calculation for WCPM is computed using the following formula:

\[
\frac{\text{Number of words read correctly in passage}}{\text{Time in seconds}} \times 60 = \text{Words read Per Minute}
\]

Reading fluency rate is the best way to identify learners who are struggling readers at their instructional levels. However, one should understand that there is natural variability in reading fluency rate of a specific grade level text. This variability is based on reader’s purpose, reader’s interest, text type and context. Similarly, Carver argues that variability is natural because some readers are just inherently faster than others, and this is obviously related to cognitive processing speed of an individual (Carver, 1990).

In theory and practice, the rate of oral reading fluency differs across languages. Setting benchmarks for specific language, therefore, is very important because among other aspects languages vary in terms of orthographies which is the key factor that influence reading fluency acquisition. In non-alphabetic languages oral reading fluency may take a bit longer to attain than in alphabetic languages (Liu, Chen, Liu & Fu, 2012; Nakamura & de Hoop, 2014). Furthermore, graphemes differ from one language to another which can in addition impact oral reading fluency rate (Cheng, Plaut & Perfetti, 2015). This means a language like Kiswahili which has about 33 graphemes will be easy to develop oral reading fluency than Chinese language that has about 3000 graphemes. Nevertheless, benchmarks postulate a means to track students’ reading trajectory (RTI International, 2017). Hence, every country needs to define reading fluency proficiency and reading rates for its specific language. There are many reasons to ascertain reading fluency benchmarks; first, to let education system articulate its reading fluency definition. Second, the system will use the established definition to provide a standard for other education systems to aim for. Third, it helps teachers and even non-experts such as parents to realize learners with proficiency in reading or struggling learners. The progress of a learner’s reading fluency can easily be assessed if it is set against reading targets.

Benchmarks can be established in two ways; first, using a team of experts. Normally, a panel of experts use various research data and experiences in their areas of expertise to set a credible baseline of which the policy makers adopt as benchmarks. Many countries have benchmarks set
by their own experts because it is more realistic and achievable. This study recommends this approach of setting benchmarks since the data are from real learning context. Second approach of setting benchmarks is by adopting one’s country benchmark. Usually, policy makers make assessment of benchmarks of various countries mostly countries of similar characteristics with theirs such as linguistic profile, education system, learners’ life experiences and a like. This approach is also good because it places the country’s reading proficiency standards in the scope of international benchmarks. However, since the benchmarks grows out of that particular community may lack validity.

Several literatures postulate the need of setting fluency benchmarks so as to capture learners’ reading progress. The benchmarks which were drawn from thirty-five (35) specific languages in twenty (20) countries indicated that many of the benchmarks set range from 40–50WCPM (RTI International, 2017). The study further shows benchmarks set for various languages in different countries across the world for grades 2 and 3 as follow; Egypt–Arabic language (50WCPM), Ethiopia–Afaan Oromo language (48WCPM), Ghana–English language (45 WCPM), Kenya–English language (65WCPM), Tanzania–Kiswahili language (50WCPM), Indonesia–Bahasa (59WCPM), Pakistan–Urdu language (60-90WCPM) and Papua New Guinea–English language (45WCPM) just to mention few.

As noted above oral reading fluency acquisition cannot be the same across all languages. Therefore, it is necessary for every country to study languages spoken by its community and establish fluency rate benchmarks depending on nature of those specific languages. Tanzanian primary school learners like many second language learners have insufficient reading skills that hinder their learning processes. Taking example from the study by RTI International (2017), the data shows that the reading fluence rate for grade 2 and 3 learners in Tanzania was an average score of 45 Words correct per minute which is far below the neighboring country Kenyan primary school learners who attained 65 words correct per minute. In another study by Rigole and Dulla (2018) indicated that grade two learners in Tanzania were able to read 28 correct words per minute (Ligolen & Dulla, 2018). Reflecting on the study’s benchmark of 45 words correct per minute only 16 percent was classified as fluent readers while the majority of them were classified as either emergent or struggling readers. Reading fluency (words decoding) is a lower level in language
skills but has significant impacts on reading comprehension referred to as a higher-level skill. In this case, being handicap in reading means to face difficulties in the whole learning process. This observation is in line with the study by Uwezo which asserts that reading fluency rate among grade two learners in Tanzania is quite poor (Uwezo, 2012). The study further revealed that most learners in grade two cannot read at all any English text. Uwezo (2010) argued that there was no significant gender difference in reading English, they were both performing poorly. In terms of geographical factor, reading English is a challenge to both urban and rural school learners though urban children are far better than rural ones. Essentially, English as second language is so far from the difficulty subject for primary school learners in Tanzania, immediate interventions are required.

The purpose of this study was to assess English oral reading fluency rates for grade seven learners whose English is their second language. To accomplish this task the study set three questions;

1. What is an average learner’ reading fluency rate?
2. Is the learners’ accuracy rate and level meet adopted benchmarks?
3. What is the difference between learners in public schools and private schools in terms of reading fluency rates and level of accuracy?

METHOD

Design

This study focused on determining English language oral reading fluency rates for grade seven pupils. The study was conducted for the period of two weeks just few days before starting grade seven national examinations. Since the fluence benchmarks established by Hasbrouck & Tindal, (2006) and adopted by the national oral reading fluency rates for grade seven are 128CWPM,136WCPM and 150WCPM through fall, winter and spring, the current study applied fluency score of 128WCPM to 150WCPM to judge whether grade seven pupils in Tanzania particularly in Morogoro region attain that defined fluency benchmarks nor underperform.
Participants

The study involved primary school pupils from grade seven level in Morogoro region. The total number of 220 students from 8 primary schools were randomly selected and assessed their oral reading fluency rates. These participants composed of n=150 pupils from public primary schools and n=70 pupils from private primary schools. The pupils’ native language was Kiswahili, who learned English as a foreign or second language. However, in private primary schools English is used as a medium of instruction while in public school Kiswahili is a language of instruction. According to the syllabus participants in both public and private primary schools had attended about 364 periods from grade III to VII equal to 242 hours of learning English language. In case of age, participants’ age was between 12 to 14 years, although grade seven pupils in Tanzania are usually aged between 12-13 years. In some circumstances there are pupils aged up to 15 years. Basically, assessment text I and text II were administered to all sampled pupils (220) from both public and private primary schools where text 1 was first administered then text II in the same period of assessment session.

Instruments

The study employed Fluency Scale Test. Every participant read two passages, text I and text II with 200 words and 150 words respectively. The text I was prepared based on normal life experiences or say fiction text while text II was extracted from science textbook. The two different text types were prepared as a recommendation by Brysbaert, M. (2019) who suggested that researchers in the area of reading fluency rates to include different text types in their studies as it would assist us to in-depth understanding of how fluency rates are contingent to the text type of materials. A researcher conducted the task using a recorder and stopwatch where all records were later analyzed both quantitatively in terms of WPM and WCPM and qualitatively as well. The process of determining correct and incorrect words followed the following guidelines; correct words were those words pronounced correctly in relation to context, hesitation, repetitions, and immediate self-correction say 2-4 seconds were still counted as correctly read words. Incorrect words were those words read with errors such as mispronunciations such as read for led, skipping, substitutions and if a learner takes about more than 4 seconds to pronounce the word was counted.
as an error. To ensure relevance or validity of the testing instrument the two texts were tested using readability formula as shown in the table 1 bellow.

Table 1: Passage readability Assessment

<table>
<thead>
<tr>
<th>Text I</th>
<th>Gunning Fog</th>
<th>Flesch Reading Ease score</th>
<th>The Coleman-Liu Automated readability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Index/Scale</td>
<td>6</td>
<td>83.6</td>
<td>6</td>
</tr>
<tr>
<td>Grade Level</td>
<td>-</td>
<td>-</td>
<td>6&lt;sup&gt;th&lt;/sup&gt; grade</td>
</tr>
<tr>
<td>Reading score</td>
<td>Fairly easy</td>
<td>Easy to read</td>
<td>-</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Text II</th>
<th>Index/Scale</th>
<th>8.4</th>
<th>77.9</th>
<th>9</th>
<th>6.9</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grade Level</td>
<td>-</td>
<td>-</td>
<td>7&lt;sup&gt;th&lt;/sup&gt; grade</td>
<td>6&lt;sup&gt;th&lt;/sup&gt; &amp; 7&lt;sup&gt;th&lt;/sup&gt;</td>
<td></td>
</tr>
<tr>
<td>Reading score</td>
<td>Fairly easy</td>
<td>Fairly easy to read</td>
<td>-</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Data Analysis

For each assessment, quantitative data were computed and analyzed statistically while qualitative information for reading expressions and volume, phrasing, smoothness, and pace were recorded, analyzed, and presented in terms of fluency level. Measures of performance were based on Hasbrouck & Tindal, (2006) who recommended a measure for mastery rates of 150WPM and 128WCPM to 150WCPM for grade seven. This article is processed with help of referencing tool endnotes instead of Mendeley following the model of offline automatic system by using Mendeley Desktop (Turmudi, 2020).

RESULT AND DISCUSSION

Result

The study presents descriptive statistics for English oral reading fluency rates and accuracy level as shown in Table 2 and Table 3 bellow. The study found that grade seven learners featured with mean reading fluency rate of 101wpm and 95wpm for text I and text II respectively.
Table 2: Descriptive statistics of reading fluency rate in WPM

<table>
<thead>
<tr>
<th>Text</th>
<th>N</th>
<th>M</th>
<th>Median</th>
<th>Mode</th>
<th>Fluencyscale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Text I</td>
<td>220</td>
<td>101</td>
<td>102</td>
<td>97</td>
<td>3</td>
</tr>
<tr>
<td>Text II</td>
<td>220</td>
<td>95</td>
<td>94</td>
<td>103</td>
<td>3</td>
</tr>
</tbody>
</table>

Note: Pinnell et al., (1995) categorized fluency scale into level 1,2,3&4

Table 3: Descriptive statistics of reading accuracy rate in WCPM

<table>
<thead>
<tr>
<th>Text</th>
<th>N</th>
<th>M</th>
<th>Median</th>
<th>Mode</th>
<th>Accuracylevel</th>
</tr>
</thead>
<tbody>
<tr>
<td>Text I</td>
<td>220</td>
<td>82</td>
<td>86</td>
<td>98</td>
<td>79.2</td>
</tr>
<tr>
<td>Text II</td>
<td>220</td>
<td>78</td>
<td>79</td>
<td>79</td>
<td>80.1</td>
</tr>
</tbody>
</table>

Research question 1: What are an average learners’ reading fluency rate? In order to respond to this research, question the author began by examining whether or not there was a functional difference between text I and text II. The average mean difference of 6wpm as it can be noticed from table 2 is indeed significant in reading rates. Generally, grade seven learners at Morogoro municipality scored the average mean of 101WPM and 95WPM for text I and text II respectively. The presence of disyllabic or polysyllabic words in text II affected learners reading fluency rates and hence, slowed their performance. Meanwhile, the attained score is far away from the expected reading rates of 150WPM which was adopted as the study prototype.

Research question 2: Is the learners’ accuracy rate and level meet adopted benchmarks? Table 3 above shows that the pupils’ accuracy rate is 82WCPM and 78WCPM for text I and text II respectively. If measured against the expected accuracy rate adopted in the study (128WCPM-150WCPM) these learners are considerably performing poor. The present data indicate that while reading rate for text I was more rapid than text II, reading accuracy was less in text I compared to text II. This may be because of the nature of the two texts. Text I was non-technical passage which used simple language with few difficulty words. This means decoding is faster than text II which was technical passage with number of difficulty words. It is noticed that pupils became extra careful...
when reading text II because of its difficulty level, therefore accuracy became higher than it was in text I.

Research question 3: What is the difference between learners in public schools and private schools in terms of reading fluency rates and level of accuracy? The study involved two categories of schools, public primary schools, and private primary schools. Table 4 below clearly indicates that pupils in private schools scored higher reading fluency rate compared to pupils in public schools. The same in terms of level of accuracy, private schools’ pupils are in better position than pupils in public schools.

Table 4: Descriptive statistics of reading rate in WPM and the level of accuracy in %

<table>
<thead>
<tr>
<th>School category</th>
<th>M</th>
<th>Independent level</th>
<th>Instructional level</th>
<th>Frustration level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public schools</td>
<td>98</td>
<td>49.7</td>
<td>39.6</td>
<td>10.7</td>
</tr>
<tr>
<td></td>
<td>87</td>
<td>82.4</td>
<td>17.6</td>
<td>0.0</td>
</tr>
<tr>
<td>Private schools</td>
<td>118</td>
<td>50.0</td>
<td>40.7</td>
<td>9.3</td>
</tr>
<tr>
<td></td>
<td>111</td>
<td>81.2</td>
<td>18.8</td>
<td>0.0</td>
</tr>
</tbody>
</table>

However, it is evident from data analysis presented above that the difference between the two school categories is not practical significant in terms of level of accuracy. For example, in text I 49.7% of learners in public schools were classified as independent level against 50.0% of learners in private schools while 39.6% learners in public schools belonged to instructional level against 40.7% leaners in private schools.

Discussion

The fluency scale test is one of the common tools used to measure reading fluency rate, accuracy, and prosody as well. Usually, teachers listen to learners reading a text loudly to make decision about learners’ reading progress (Zutell & Rasinski, 1991). In this study fluency scale test was found to be the best tool for determining reading rates. It could be denoted from the information presented above that pupils’ reading fluency rate measured in words per minute was actually below the adopted benchmark of 150WPM. Despite the fact that pupils in both schools performed poorly,
still private schools’ pupils achieved statistically better than public schools because their reading environment is conducive compared to public schools. Availability of teaching and learning resources, good infrastructure, teachers are well motivated and appropriate pupils-teacher ratio have significant contribution toward such achievements attained by private schools. However, the scored reading fluency rate is still promising to consider that English is their second language which is only spoken at school environment. Similarly, it is shown that pupils’ fluency level is 3 when measured in scale. This fluency scale places these pupils in the fluent category. In this study fluency was regarded as a distinct characteristic of oral reading unconnected to accuracy and rate. According to Pinnell et al., (1995), level 3 means a pupil reads primarily in three- or four-word phrase groups. Some minor groupings can be present. However, the majority of phrasing seems appropriate and maintains the author’s syntax. Slight or absence of expressive interpretation is present. Pupils who scored level four and three were regarded to be fluent while those scored two and one non-fluent. The accuracy rate as shown in table 3 was attained by noting number of words read correctly per minute. It was found that these grade seven pupils had insufficient reading skills. Most of them had difficulties in pronunciation and on sight words recognition. It was evident from the analysis that learners in private primary schools were somehow better in terms of fluency rate and accuracy because they use English language in all of their activities and the general means of communication is English language unlike learners in public school where English is limited to specific activities.

CONCLUSION AND SUGGESTION

The study aimed at determining English oral reading fluency rates for grade seven pupils in Morogoro region. Research questions which were formulated to support this study focused on determining fluency rates and accuracy also soliciting systematic difference between learners in public and private primary schools. The findings show that the average reading fluency rate is actually bellow the proposed fluency norms, hence, intervention should be initiated immediately. Success in learning process either, depends on reading fluency which is an important component in developing reading proficiency that every learner needs to acquire. In this case teachers have
great responsibility to ensure that reading programs across all levels are established and frequent follow up is made so as to track learners reading progress.

Notwithstanding the study limitations, it stands as one of the few exploratory studies on reading fluency rates in the country. Furthermore, the study has answered the question of whether or not primary schools’ pupils in Tanzania particularly grade seven reach the referred reading fluency norms, hence adding important constituent in the literature. In terms of practical implication, the study entails how to deal with struggling pupils by reasonably designing reading activities to assist learners with different levels of second language proficiency. Teachers have to conduct more practical activities merged not only in English language subject but across all taught subjects so as to develop their reading fluency and remedying reading crisis.

With the increasing interest in the study of reading fluency, this study although conducted on relatively few pupils, it indicates the need to invest more resources and efforts on reading skills so as to develop this important component in language. In respect to the study results, the author proposes tentative benchmarks of 120WPM in English language reading fluency rate for grade seven in Tanzania as an acceptable norm.

The study recommends future research to use larger sample size than the current one and extend it for a longer period of time so as to come up with more representative data that will help policy makers and curriculum designers to establish fluency norms. Likewise, other studies could be carried out to determine reading fluency rates in Kiswahili as learners’ first language. Furthermore, future study could also focus on methodological analysis of teaching and learning reading skills in respect to Tanzania context.

**BIO-PROFILE**

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