Evaluating Year-end Oral Reading Records of First Graders in terms of Prosody Proficiency

Mustafa Kocaarslan¹, Akile Ergün²

¹Primary School Teacher Training Department, Education Faculty, Bartın University, Turkey
²Classroom Teacher, Turkey

Correspondence: Mustafa Kocaarslan, Primary School Teacher Training Department, Education Faculty, Bartın University, Turkey.

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Abstract

Prosody is evaluated as an important factor in fluent reading and in literature it is expressed as a significant reading skill that affects comprehension. Prosody -described as a fluent reading ability of a reader with suitable sentences and expressions- includes stress, intonation, duration (time passed on voicing a word) and pausing properties that contribute to effective reading of a text. First grade students are supposed to have fluent reading abilities at the end of the year and they are expected to develop effective prosodic reading. Therefore, the aim of this study is to examine first grade students’ oral reading performances in terms of prosodic competences. Study sample in this study which has been conducted using descriptive survey model consists of 49 first grade students who participated in the study voluntarily in four different classes in a primary school in the city centre of Bartın in Turkey. For the evaluation of the reading prosodies of the students, their oral reading performances of a narrative and an expository text are recorded for one minute with a video camera and these records are evaluated with reading prosody rubric. As a result of the analysis, it is observed that students’ reading prosody score means are low in both narrative and expository texts. According to reading prosody scale, it appears that 59% of the students are at low level in narrative text and 41% of the students are at low level in expository text. Additionally, as a result of Mann-Whitney U test it appears that gender of the students does not make a significant difference in oral reading prosodies of the students in both narrative and expository texts.

Keywords: oral reading, reading prosody, first grade students

1. Introduction

It is very important to have an efficient reading skill in terms of learning and academic success when individuals start their formal education. Reading, as a basic skill, has an unquestionable place in carrying out the learning activities. At the same time, in terms of teachers and parents, becoming a fluent reader is thought to be one of the most significant tasks for students that should be completed in the first year of their school life.

Fluent reading is one of the most important dimensions of basic reading skill. However, fluency appears to be neglected and unnoticed feature of reading (Carreker, 2005; National Institute of Child Health & Human Development [NICHD], 2000). In the literature, as fluency is mentioned as one of five important components of reading in National Reading Panel (NRP) report, this situation has provided that the researchers and implementers’ attention should be focused on this point (NICHD, 2000; Pikulski & Chard, 2005).

Fluent reading is defined as an ability to read a text quickly, accurately and with proper expression (NICHD, 2000). A fluent reader reads the words effortlessly by using proper meaning units and recognizes the words quickly. Students having fluent reading ability know how to group words quickly in order to gain meaning from the text because they read the words automatically (Tankersley, 2003).

Fluent readers read accurately, quickly and with a natural voice tone and proper expression while reading aloud on the other hand non-fluent readers read slowly and with unnatural voice tone because they have difficulty in recognizing the words (Penner-Wilger, 2008; Rasinski, 2004). Samuels argued that when students lack fluency, they read slowly, tensely, hesitantly, not accurately and with poor intonation and poor expression (as cited in Carreker, 2005). As individuals who cannot read fluently overloads their working memory at word level, working memories of these individuals fail to
understand the text being read (Perfetti, 1985).

Fluent reading is composed of three significant components (Penner-Wilger, 2008):

- Accuracy of word decoding
- Automaticity of word recognition
- Prosody of oral text reading.

Prosody is one of the most important dimensions of fluent reading. Although reading speed has a central role in developing fluent reading skills, another factor which is so important is prosodic reading (Kuhn, Ash & Gregory, 2012). Prosody is defined as an ability to read smoothly, with proper expressions and proper meaning units (Deeney, 2010). Dowhower (1991) expresses that prosody is a linguistic term that defines rhythmic and tonal features of speech and he states that prosodic reading is an ability to read with an effective rhythm and melody patterns.

According to Basaran (2013), prosody means to read a text tunefully and with a natural voice. Naturality in the voice is provided with proper expression, articulation, volume, intonation, stress, rhythm and pause according to the content of text. Prosody is one of the most basic demonstrators which show that reader grasps the text. According to Rasinski (2004), if a reader reads a text quickly, accurately but without expression, if s/he gives the words equal stress, ignores most of the punctuations, if s/he does not understand word phrases and not pay attention to commas and the other punctuation marks for pauses, it is not possible to say that the reader can completely understand the text.

It is very important for educators to understand that reading fluency is a vehicle for reading comprehension. Many experts has reached a consensus that reading aloud with good prosody promotes reading with comprehension (Penner-Wilger, 2008; Courbron, 2012; Erekson, 2010; Hicks, 2009; Mira & Schwanenflugel, 2013; Basaran, 2013; Paige, 2012; Rasinski, 2010; Whalley & Hansen, 2006; Yıldırım, Yıldız, Ates & Çetinkaya, 2009). Readers use appropriate prosody through their understanding of the context of the text and by using text cues (Deeney, 2010). Appropriate phrasing, intonation, and stress among readers implies that the reader is comprehending (Valencia, Smith, Reece, Li, Wixon, Newman, 2010).

In the NRP report, it is recommended that the teachers should evaluate the students’ reading fluency regularly (NICHD, 2000). When it is considered the efficacy of prosody in the fluent reading and the other reading success, evaluation of prosodic reading competence with certain periods provides both teachers and parents with important data in order to decrease reading problems and choose suitable methods and materials.

As in the other countries the first grade students are supposed to have accurate and fluent reading abilities towards the end of the year in Turkey and this situation generally causes anxiety for teachers, school administration and parents. In Turkey, when the studies on fluent reading or prosodic reading are examined, it is observed that the studies are conducted on either 2nd or 5th grade students (Yıldız et al., 2009; Bastug & Akyol, 2012; Yıldırım, Bebek & Turan, 2012; Bastug & Kaman, 2013; Yıldız, 2013; Keskin, Bastug & Akyol, 2013) or teacher candidates (Ulusoy, Ertem & Dedeoglu, 2011; Ulusoy, Dedeoglu & Ertem, 2012). In this respect, it is especially important to conduct the research on the first grade students and towards the end of the year in terms of the data which comes out. Furthermore, there is not enough evidence that the reading prosody differs according to the text types.

Accordingly, the aim of this study is to evaluate year-end oral reading performances of the first grade students in terms of prosodic proficiency. For the aim of the study, following questions are attempted to be answered.

First grade students who participate in the study;

1. At which level is their prosodic reading proficiency in narrative texts?
2. At which level is their prosodic reading proficiency in expository texts?
3. Does the prosodic reading score in narrative texts differentiate significantly according to the gender?
4. Does the prosodic reading score in expository texts differentiate significantly according to the gender?

2. Method

2.1 Research Design

This study which aims to examine the first grade students’ oral reading competences at the end of the year in terms of prosodic proficiency has been conducted by using descriptive survey model. In the descriptive survey model, it is important to observe and describe the situation as it exists without any change and modification (Karasar, 2007). In descriptive survey model, research is done with a smaller group chosen from population and numerical or quantitative explanations are produced about tendencies, attitudes and ideas of individuals (Creswell, 2009).
2.2 Participants

Participants of this study comprises of 49 first grade students studying in a primary school which has mid-level socio-economic status in the centre of Bartin in Turkey. 21 (42.9%) of the students are female and 28 (57.1%) of the students are male in this study. Convenient sampling method which is one of the purposive sampling methods has been used. This sampling provides speed and practicality to the researcher because in this sampling method the researcher chooses easy-to-reach situation (Yıldırım & Simsek, 2006).

2.3 Data Collection Tool and Materials

In this study, as a data collection tool, “Reading Prosody Rubric” has been preferred which has been developed by Zutell and Rasinski (1991) and adapted to Turkish by Yıldırım, Yıldız, Ates and Cetinkaya (2009).

1. Reading Prosody Rubric: In the Reading Prosody Rubric, prosodic reading competences of the students are assessed by examining the oral reading records for 60 seconds. In this rubric, prosody is evaluated in four dimensions; “expression and volume”, “meaning units and intonation”, “smoothness” and “pace” and the students are given 1-4 points for each dimension according to their reading fluency. According to this rubric, a student’s score changes between 4-16 points; if the total score of the student is 8 or under 8, it is a worrying situation in terms of reading fluency, if the total score is more than 8, it means the student is successful in reading fluency. Dimensions of the scale, features to be observed in each dimension and points are given in Appendix 1.

2. Texts: In order to determine prosodic reading competences of the students, a narrative and an expository text which are appropriate for the first grade level of primary school have been used. Texts have been chosen by Akyol, Yıldırım, Ates, Cetinkaya and Rasinski (2014, p.18-20) from the book which is composed of texts prepared for evaluation of reading. The narrative text, “Crow” is composed of 79 words and the expository text, “Health” is composed of 99 words.

2.4 The Collection and Analysis of the Data

The data of the study were collected in the last week of May in spring term of 2013-2014 Education Year by examining the reading proficiency of the first grade students. After determining the school and the first grade students for the study, the teachers and these chosen students have been informed about the study by the researchers and the study has been carried out at appropriate hours for the school administration. The texts have been read aloud by the students and recorded by the video cameras. Then, these records have been analyzed.

IBM SPSS 21 statistics have been used for the analysis of the data attained from the research. Reading records of the students have been analyzed by the first author and a reading expert using ‘Reading Prosody Rubric’. The data has been transferred to the digital environment and analyzed there. Descriptive statistics such as percentages, frequency and averages of the students’ oral reading video records have been obtained. The Kolmogorov-Smirnov test, prosodic reading scores of the students who have participated in this study do not have normal distribution according to gender variable (p<.05), therefore Mann-Whitney U test has been preferred (Büyüköztürk, 2007; Can, 2013).

In terms of the reliability of the study, reading records of the students have been evaluated by the first author and the other expert separately. Prior to evaluation, Reading Prosody Rubric has been used with sample reading records and similar studies in literature have been examined studiously. Cohen Kappa coefficient has been calculated in order to describe the consistency between the evaluators. Cohen Kappa coefficient (κ) is a statistic that measures the agreement between evaluators for the qualitative (categorical) items. In this study, Cohen Kappa coefficient which demonstrates the percentage agreement between the two evaluators varies between .81 and .86. According to Altman (1991), if the value kappa is above .80, it means that there is an excellent agreement between the evaluators. In the process of analysis, reading records that the researchers feel in a dilemma have been reviewed again and the researchers have discussed until they agree upon the prosody score of the reading record.

3. Results

Descriptive statistics of first grade students related to prosodic reading scores depending on text type are given in Table 1. When Table 1 is analyzed, it is seen that the mean of prosodic reading scores in narrative text is 8.48, standard deviation is 3.10 (χ=8.48, SD=3.10); and the mean of prosodic reading scores in expository text is 8.61, standard deviation is 3.09 (χ=8.61, SD=3.09). These values show that prosodic reading scores of students are close in both narrative and expository text and it is a little above 8 point which is accepted as critical value. Also, it attracts attention that prosodic reading score distribution is almost the same for both text types.
Table 1. Descriptive statistics related to prosodic reading scores

<table>
<thead>
<tr>
<th>Prosodic Reading Score</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Narrative Text</td>
<td>49</td>
<td>8.48</td>
<td>3.10</td>
<td>4-16</td>
</tr>
<tr>
<td>Expository Text</td>
<td>49</td>
<td>8.61</td>
<td>3.09</td>
<td>4-15</td>
</tr>
</tbody>
</table>

3.1 At Which Level is Their Prosodic Reading Proficiency in Narrative Texts?

Percentage and frequency values of first grade students’ prosodic reading scores in narrative text are given in Table 2 and Figure 1. When Table 2 is analyzed, it is seen that prosodic reading levels of 29 students (%59.2) are at low level (frustration level for reading skill), 13 students (%26.5) at good level and 7 students (%14.3) at very high level. According to these values, more than half of students don’t have sufficient reading prosody in narrative text.

Table 2. Percentage and frequency values related to prosodic reading level in narrative text

<table>
<thead>
<tr>
<th>Prosodic Reading Score and Level</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>4-8 points (Low or Frustration Level)</td>
<td>59.0</td>
</tr>
<tr>
<td>8-12 points (Good Level)</td>
<td>27.0</td>
</tr>
<tr>
<td>12-16 points (Very High Level)</td>
<td>14.0</td>
</tr>
</tbody>
</table>

3.2 At Which Level is Their Prosodic Reading Proficiency in Expository Texts?

Percentage and frequency values of first grade students’ prosodic reading scores in expository text are given in Table 3 and Figure 2. When Table 3 is analyzed, it is seen that prosodic reading levels of 20 students (%40.8) are at low (frustration) level, 25 students (%51.0) at good level and 4 students (%8.2) at very high level. According to these values, almost half of students don’t have sufficient reading prosody in expository text.

Table 3. Percentage and frequency values related to prosodic reading level in expository text

<table>
<thead>
<tr>
<th>Prosodic Reading Score and Level</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>4-8 points (Low or Frustration Level)</td>
<td>41.0</td>
</tr>
<tr>
<td>8-12 points (Good Level)</td>
<td>51.0</td>
</tr>
<tr>
<td>12-16 points (Very High Level)</td>
<td>8.0</td>
</tr>
</tbody>
</table>

3.3 Does the Prosodic Reading Score in Narrative Texts Differentiate Significantly According to the Gender?

The results of Mann-Whitney U test which is run whether first grade students’ prosodic reading scores in narrative text differ depending on gender are given in Table 4. When Table 4 is analyzed, it is seen that the mean rank of male students’ prosodic reading scores is (χ=26.55), and mean rank of female students’ prosodic reading scores is (χ=22.93). At the end of Mann Whitney U-test results, there is found no difference between male and female students in prosodic reading scores in narrative text [U=250.5 p>.05]. In other words; prosodic reading proficiency of male and female first grade students are at similar degree.

Table 4. Mann Whitney U test results related to students’ prosodic reading scores in narrative text according to gender

<table>
<thead>
<tr>
<th>Narrative Text</th>
<th>N</th>
<th>Mean Rank</th>
<th>Rank Sum</th>
<th>U</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prosodic Reading Scores</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>28</td>
<td>26.55</td>
<td>743.50</td>
<td>250.5</td>
<td>.373</td>
</tr>
<tr>
<td>Female</td>
<td>21</td>
<td>22.93</td>
<td>481.50</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. p > .05

3.4 Does the Prosodic Reading Score in Expository Texts Differentiate Significantly According to the Gender?

The results of Mann-Whitney U test which is run whether first grade students’ prosodic reading scores in expository text differ depending on gender are given in Table 5. When Table 4 is analyzed, it is seen that the mean rank of male students’ prosodic reading scores is (χ=26.41), and mean rank of female students’ prosodic reading scores is (χ=23.12). At the end of Mann Whitney U-test results, there is found no difference between male and female students in prosodic reading scores in expository text [U=254.5 p>.05]. In other words; prosodic reading proficiency of male and female first grade students in expository text are at similar degree.

Table 5. Mann Whitney U test results related to students’ prosodic reading scores in expository text according to gender

<table>
<thead>
<tr>
<th>Expository Text</th>
<th>N</th>
<th>Mean Rank</th>
<th>Rank Sum</th>
<th>U</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prosodic Reading Points</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>28</td>
<td>26.41</td>
<td>739.50</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>21</td>
<td>23.12</td>
<td>485.50</td>
<td>254.5</td>
<td>.418</td>
</tr>
</tbody>
</table>

Note. p > .05

4. Discussion

One of the most important objectives in school life for first grade students is to read the texts fluently which are chosen according to the first grade level. In our country, towards the end of year, activities called as “reading fest” are
conducted in order to evaluate first grade students’ reading proficiency, and first graders display how well they accomplish this basic objective in presence of families and school administration. However, evaluating reading competences of first grade students in this way is not enough. Evaluation of reading competence in a scientific way (word recognition, fluency, prosody etc.) within certain periods in a year is of critical importance in terms of guiding students’ reading development and teachers’ instruction process. The authors unfortunately could not find any study which evaluates fluent reading competences of first grade students in Turkey. A significantly large part of studies has been conducted on higher grades (Yıldız, Yıldırım, Ates & Çetinkaya, 2009; Yıldırım, Yıldız, Ates & Çetinkaya, 2009; Bastug & Akyol, 2012; Yıldırım, Bebek & Turan, 2012; Bastug & Kaman, 2013; Yıldız, 2013; Keskin, Bastug & Akyol, 2013). In fact, first grade is considered as the most critical period in terms of evaluation of reading proficiency. In this period, providing reading development in an appropriate way and necessary instructional interventions at the right time plays a key role on prevention of possible reading disabilities.

When study results are examined, it is observed that prosodic reading competences of first grade students which are retrieved from oral reading records at the end of semester are generally at frustration level. Considering that 8 point and below in the reading prosody scale are at frustration level, it is clearly understood that this situation is not pleasant.

In the analysis which are done according to text types, it comes out that reading prosody of more than half of the students (%59) in narrative text are at frustration level. Considering that more narrative texts are preferred in the first grade for reading development, this percentage is problematic in terms of prosodic reading level. Moreover, it is found out that reading prosody of nearly half of the students (%41) in expository texts are at frustration level. In the research conducted by Yıldız, Yıldırım, Ates and Çetinkaya (2009) a similar finding has been obtained and it is observed that nearly half of the fourth grade students participated in the research are at frustration level in terms of prosodic reading proficiency. However, in this research an evaluation has not been made according to type of text.

When another finding of the study is examined, there was no significant difference between male and female students' prosody scores although male had higher scores. Gender differences have been reported in reading research. Generally, reading achievement is higher for girls than for boys (Aikens & Barbarin, 2008; Berninger, Nielsen, Abbott, Wijsman, & Raskind, 2006; Chatterji, 2006; Logan & Johnston, 2009; McCoach, O’Connell, Reis, & Levitt, 2006), and reading difficulties are more prevalent among males than females (Hawke, Olson, Willcut, Wadsworth, & DeFries, 2009). This result obtained from this study seems to be inconsistent with the literature. Male students in this study may have received high prosodic scores for different reasons (such as the socio-cultural level of their parents).

When all these findings are evaluated, it can be observed that reading prosody of the students participated in the research is at better level in expository texts. It can be considered that this result is because of the structure of the expository texts. Expository texts -for structural reasons- include so many technical terms and words that the students generally do not encounter much in their daily life. This situation can be interpreted that the students read expository texts more carefully and by paying attention to prosodic features. Moreover, as a result of the study, it is understood that gender does not make a difference in reading prosody. Although male students score higher in both types of the texts, these results are not found statistically significant. According to Fuchs, Fuchs, Hosp and Jenkins (2009), studies are required to examine how narrative as opposed to expository material affects oral reading fluency’s capacity to serve as an indicator of overall reading competence.

According to Kuhn, Schwanenflugel and Meisinger (2010) fluency helps the reader to create the meaning by combining the accuracy, speed and prosodic reading skills. Studies reveal that in general fluent reading, and specifically prosodic reading increase understanding of what is read and what is listened and they predict reading motivation to some extent (Yıldız, Yıldırım, Ates & Çetinkaya, 2009; Penner-Wilger, 2008; Courbron, 2012; Erekson, 2010; Hicks, 2009; Rasinski, Rikli & Johnston, 2009; Rasinski, 2010; Kuhn, Ash & Gregory, 2012; Mira & Schwanenflugel, 2013; Paige, 2012;Yıldırım, Yıldız, Ates & Çetinkaya, 2009; Bastug & Akyol, 2012; Yıldırım, Bebek & Turan, 2012; Bastug & Kaman, 2013; Yıldız, 2013; Keskin, Bastug & Akyol, 2013).

In Basaran's research (2013) which is conducted with fourth graders, it is found out that prosody predicts deep comprehension better than the other reading skills. Yıldırım and Ates (2011) state in their compilation study that studies have found a positive relationship between comprehension and prosodic reading, they predict each other reciprocally and studies which aim to improve prosodic reading contribute to improvement of reading skills. Accordingly, Griffith and Rasinski's study (2004) show that teaching prosody helps students improve both reading comprehension and other fluent reading skills.

4.1 Limitations of the Research and Directions for Future Research

To put it plainly, this study was limited with first grade students only in Bartın/Turkey. For this reason, it cannot be said that participants represent of the population. To achieving a more a comprehensive data, further research might involve students who study in different grades and a number of different variables such as accuracy of word decoding and
automaticity of word recognition. Besides, it is thought to be important to demonstrate how text reading prosody and speech prosody are related to students’ attitude, motivation and comprehension by conducting correlational studies and it is thought to be important to conduct experimental studies aiming at teaching a specific skill directly.

References


Yıldız, M. (2013). The role of the reading motivation, reading fluency and reading comprehension on Turkish 5th graders’ academic achievement. *Turkish Studies-International Periodical for the Languages, Literature and History of Turkish or Turkic, 8*(4), 1461-1478.


### Appendix A. Multi-dimensional Reading Prosody Rubric

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Expression and volume</strong></td>
<td><strong>Reads without any expression and a feeling. Reads the words just to get them out. Makes a little effort to make the text sound natural. Tends to read in a quiet voice.</strong></td>
<td><strong>Reads with some expressions in his/her reading. Uses the voice sound like natural language in some parts of the text but the reader does not do this in the other parts. Still reads in a quiet voice.</strong></td>
<td><strong>Reads with expression appropriate to the text. Reads in a natural way. Expressions and volume vary according to his/her interpretation of the text.</strong></td>
<td><strong>Reads with expression and volume like natural language for most of the text. Occasionally reads without expression and feeling. Generally, volume is appropriate throughout the text.</strong></td>
</tr>
<tr>
<td><strong>Phrasing and intonation</strong></td>
<td><strong>Reads in a monotone voice. Mostly reads word by word, he/she does not pay attention to the phrases and word groups while reading.</strong></td>
<td><strong>Frequently reads in two or three word phrases so this causes a choppy reading. The ends of the clauses are not clear because of using inappropriate intonation and stress.</strong></td>
<td><strong>Reads with a mixture of run-ons, there are mid-sentence pauses for breath and some choppiness. There is reasonable stress and intonation</strong></td>
<td><strong>Generally, reads with good phrasing; adhering to punctuation, stress and intonation. Appropriate phrasing gives the feeling of the expressions in the text.</strong></td>
</tr>
<tr>
<td><strong>Smoothness</strong></td>
<td><strong>Frequently reads with extended pauses, hesitations, false starts, sound outs, and repetitions</strong></td>
<td><strong>There are some 'rough spots' that cause frequent pauses and hesitates in the text and break the smoothness.</strong></td>
<td><strong>Reads with occasional breaks in smoothness that are the result of difficulties with specific words</strong></td>
<td><strong>Reads smoothly with some breaks. Difficulties in words and/ or sentence structures are resolved quickly most often through self-correction.</strong></td>
</tr>
<tr>
<td><strong>Pace</strong></td>
<td><strong>Reads slowly and laboriously.</strong></td>
<td><strong>Reads moderately slowly.</strong></td>
<td><strong>Maintains an inconsistent pace (fast and slow) throughout the reading.</strong></td>
<td><strong>Consistently reads at conversational pace throughout the reading.</strong></td>
</tr>
</tbody>
</table>

**Total Score:**

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