The Effect of Age-Grading on Reading Performance.

At present, there is virtually no empirical evidence of the success of educational techniques designed to minimize the interference of black English on the acquisition of reading skills. The 180 black, inner-city third and fifth graders who participated in this study were selected in order to determine whether the discrepancy between performance on reading tasks, presented in standard English, black English standard orthography, and black English nonstandard orthography, varies with grade level. Subjects were administered equivalent listening comprehension, oral reading, and oral reading comprehension tasks in standard English and black English. An analysis of data suggests that, while there is no significant difference between the correlations between scores for standard and black English forms of the listening comprehension tasks at either grade level, correlations between scores for standard English, black English standard orthography, and black English nonstandard orthography forms of the oral reading and oral reading comprehension tasks were significantly higher at the fifth-grade level than at the third-grade level. (KS)
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THE EFFECT OF AGE-GRADING
ON
READING PERFORMANCE
Studies of black English-speaking children's aural comprehension of standard English have indicated that many black English-speaking children develop the ability to understand black English to some degree (Barritt, 1972; Bierly and Bean, 1972; Goodman, 1971; Levy and Cook, 1973; Sims, 1972; Torrey, 1969; Troike, 1972; Weener, 1969). Researchers have found an inverse relationship between age and percentage of nonstandard features used by black, lower-SES children (Light, 1971; O'Neill, 1972). This occurrence, called age-grading, has been described by several researchers (Dillard, 1972; Loban, 1966; Stewart, 1964). Age-grading refers to language variation in terms of the age of the speaker. It is believed to be a very important sociolinguistic factor in the dialect of black children (Dillard, 1972). In areas where black English comes in contact with standard English, age-grading tends in the direction of standard English most of the time. O'Neill (1972) has suggested that the school experience tends to reduce the amount of nonstandard dialect interference. However, by the time this dialect interference is reduced, the child may have lost much valuable time in academic learning.

In order to avoid this loss of valuable time in academic learning, numerous techniques have been suggested for minimizing the interference of black English on reading instruction. Interference is the tendency of individuals learning a new dialect to impose the sounds and structures of their primary dialect on the unfamiliar sounds and structures they are trying to master. These educational solutions include dialect-based readers and transition texts.
neutralization of dialect differences, dialect rendering of extant materials, and language experience activities.

At present, there is virtually no empirical evidence of the success of any of these educational techniques. Furthermore, those researchers who believe the black English-speaking children are suffering from dialect interference because of systematic differences between black English and standard English do not agree on when dialect interference is sufficiently reduced so that the use of standard English reading materials no longer creates a problem for black English-speaking children.

The purpose of this study is to determine whether the discrepancy among performance on standard English, black English standard orthography, and black English nonstandard orthography reading tasks varies with grade level. It is hypothesized that: (1) the correlations among scores on the standard English, black English standard orthography and black English nonstandard orthography forms of the oral reading and oral reading comprehension tasks are significantly higher at the fifth grade level than at the third grade level; (2) there is no significant difference between the correlations of scores on the standard English and black English forms of the listening comprehension task at the fifth grade level and at the third grade level.

Subjects were 180 randomly selected black, inner-city, third and fifth graders in a large northeastern urban area. All subjects were administered listening comprehension tasks, equivalent forms in standard English and black English, and oral reading and oral
reading comprehension tasks, equivalent tasks in standard English, black English standard orthography, and black English nonstandard orthography. Examples of these tasks are shown in Table 1. Passages and questions were translated into black English by a black person who speaks both dialects and is familiar with the inner city culture.

Listening comprehension was measured by having each subject listen to the passages and questions on audio tape. The audio tapes were prepared by a black female who speaks standard English and black English. All responses were recorded on audio tape and later transcribed. Oral reading was measured by having each subject read passages from the three dialect forms of the oral reading task. On the black English standard orthography form of the oral reading task the words were written in standard English orthography while on the black English nonstandard orthography form the words were written the way they are pronounced by a speaker of black English. All oral reading was recorded on audio tape and later transcribed. Oral reading comprehension was measured by the questions which accompany the oral reading passages. Each set of questions was presented immediately following the oral reading of the corresponding passage. Questions were presented and responses recorded as they were for the listening comprehension task. Order of presentation of the reading tasks was counterbalanced across dialect forms.
Pearson product-moment correlations and Z tests were used to test the hypotheses. The correlations between the dialect forms of the listening comprehension, oral reading, and oral reading comprehension tasks were calculated for each grade level. The differences between each pair of correlation coefficients, i.e., the correlation coefficients at the third grade level and at the fifth grade level, were tested for significance using the Z test. Since the distribution of correlation coefficients is not symmetric, the Z transformation was used to normalize the distribution. The significance of the difference between each pair of correlation coefficients was then tested by the Z test (Snedecor & Cochran, 1967). Decisions were made at the .05 level of significance. The correlation coefficients and Z values for each pair of correlation coefficients at each grade level are shown in Table 2.

Hypothesis one was not supported by the data. No significant differences were found between the correlation coefficients between scores on the standard English and black English standard orthography forms and between scores on the black English standard orthography and black English nonstandard orthography forms of the oral reading and oral reading comprehension tasks at the different grade levels. The author suggests that these findings resulted because of the strangeness of the nonstandard orthography to both grade levels. Since only standard English instructional materials are used in the schools from which subjects were selected for participation in this study, it can be assumed that the nonstandard orthography was strange.
to subjects at both grade levels. The correlation coefficients between scores on the standard English and black English standard orthography forms of the oral reading and oral reading comprehension tasks were found to be significantly higher at the third grade level than at the fifth grade level. An examination of the standard English and black English standard orthography forms of the oral reading and oral reading comprehension tasks suggests that the effect of age-grading may have been masked by the fact that there were more syntactical differences between the standard English and black English standard orthography forms of the oral reading and oral reading comprehension tasks present in the more advanced passages and questions than in the lower level passages and questions. The author suggests that the relatively fewer differences between the standard English and black English standard orthography forms of the oral reading and oral reading comprehension tasks at the lower levels may account for the significantly higher correlation coefficients at the third grade level than at the fifth grade level. At the higher levels of the oral reading and oral reading comprehension tasks, where there are more differences between the standard English and black English standard orthography forms, there is more opportunity for differences between performance on these two forms of the oral reading and oral reading comprehension tasks to emerge.

Hypothesis two was supported by the data. No significant differences were found between the correlation coefficients between scores on the standard English and black English forms of the listening comprehension task at the different grade levels. The results seem to indicate that the third and fifth grade subjects used in this study
may be aurally bidialectal and the degree to which they are aurally bidialectal did not change significantly with grade level.

Some implications of this study may be drawn for teachers. First, black English-speaking children who do not exhibit interference from their primary dialect when confronted with beginning reading materials written in standard English may exhibit interference once the materials become more difficult and more syntactical differences between standard English and black English emerge. Second, the degree to which black English-speaking children are aurally bidialectal at grade three will probably not increase significantly over the next two years.

This study by no means settles the issue of when dialect interference is no longer a problem for black English-speaking children learning to read standard English. This study dealt solely with subjects who had already been exposed to reading instruction. Furthermore, the subjects in this study had probably never been exposed to black English reading materials prior to their participation in this study. Finally, comprehension was limited solely to factual comprehension; no inferences should be made to other more difficult types of comprehension tasks (e.g. critical and inferential comprehension).
References


Baratz, Joan C. "Should Black Children Learn White Dialect?" ASHA, XII (September 1970), 415-417.


Fasold, Ralph W. "What Can an English Teacher Do About Nonstandard Dialect?" The English Record, XXI (April 1971), 82-91.


### Table 1

**Examples of Reading Tasks**

<table>
<thead>
<tr>
<th>Grade One</th>
<th>Dialect</th>
</tr>
</thead>
<tbody>
<tr>
<td>&quot;One day I was going to school, I stopped to see the puppies. This one climbed out of the box. He climbed into my school bag. I went to school.&quot;</td>
<td></td>
</tr>
</tbody>
</table>

1. Who stopped to see the puppies?
2. Where was he going when he stopped to see them?
3. What did the puppy climb into?
4. What did Jimmy do after the puppy climbed into the bag?

<table>
<thead>
<tr>
<th>Grade Three</th>
</tr>
</thead>
<tbody>
<tr>
<td>If your pet is a cat, give her some fish now and then, and a little meat on the days when she doesn't have fish. Cooked vegetables are good for her, if she will eat them. Give your cat some green food if she can't get out of doors to find it for herself. Kitty likes lots of milk, too, of course. And catnip is good for her.</td>
</tr>
</tbody>
</table>

1. What three things are you told to feed your cat?
2. What days should you give her cooked vegetables?
3. When should you give your cat green food?
4. What does Kitty like a lot?
Table 1 (continued)

<table>
<thead>
<tr>
<th>Reading Task</th>
<th>Dialect</th>
<th>Grade One</th>
<th>Grade Three</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>BLACK ENGLISH</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>I'm in school. Everyone was very still. I heard a puppy go Bow-wow! I looked in my school bag!</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>If your pet is a dog, feed him well, but not too well. Give him one good meal a day, and two when it's very cold. Feed him dog biscuit, or else give him scraps of meat and vegetables and cereal and brown bread from the table. Brush your dog, and give him a bath with soap now and then, and he won't have fleas.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Listening Comprehension

1. Where's Jimmy?
2. The room, quiet, or noisy?
3. Who Jimmy hear?
4. What Jimmy find?

1. What five foods you told to feed your dog?
2. How many meals a day you told to give your dog in July?
3. Where you get most of the food for your dog?
4. What reason the author give you for brushing and bathing your dog?
Table 1
(continued)

<table>
<thead>
<tr>
<th>Dialect</th>
<th>Grade One</th>
<th>Grade Three</th>
</tr>
</thead>
</table>

Redding Task

**STANDARD ENGLISH**

1. **Who was coming up the street?**
2. **Who ran to meet the man?**
3. **What was the girl hoping her father had for her?**
4. **The surprise was for what kind of girl?**

Many people were busy all week on an empty lot near the park. Several boys were cleaning it off. Seven of them picked up old boards, sticks, and dry branches. Others cut the tall grass and carried it away. Then all the girls raked the ground and made it smooth. At last two men came and built a strong fence. Then the children had a safe playground.

1. **What were the people in the story making?**
2. **Where were they making the playground?**
3. **Who raked the ground and made it smooth?**
4. **What did the men do to make the playground safe?**

A man was walking up the street. When he came to a yellow house, he stopped. A little girl ran to him. "Hello, Father," she said. "Do you have a big surprise for me?" The girl laughed. "I am very good;"
### Table 1 (continued)

<table>
<thead>
<tr>
<th>Dialect</th>
<th>Grade One</th>
<th>Grade Three</th>
</tr>
</thead>
</table>
| BLACK ENGLISH STAND | This boy make a boat one day, "Where can I play with it?, he ask. Daddy say, "Get in the car with me, we can take it with us."
"Stop," the boy say when we seen some water. "Can I play with it here?". "Yea, " Daddy say. "Have fun". |

1. What the boy make?
2. What he going to do with it?
3. What he seen when he was riding in the car?
4. When he seen the water, what he ask his Daddy to do?

It was pet day at the fair. Children was waiting for the animal parade to start. They had trained their pets to do a lot of tricks. There was a tall boy who have a goat that make him get in trouble. It kicked and tried hard to get away from him. When it heard the band, it got quiet. In the parade, it danced so good, it got a prize.

1. What kind of day was it at the fair?
2. What did the children train their pets to do?
3. What animal got the boy in trouble?
4. What did the goat do that made it win a prize?
Table 1  
(continued)

<table>
<thead>
<tr>
<th>Dialect</th>
<th>Grade One</th>
</tr>
</thead>
<tbody>
<tr>
<td>A cat wanna fin her kittens.</td>
<td></td>
</tr>
<tr>
<td>Her look in de house an all over de farm. But she ain't fin dem.</td>
<td></td>
</tr>
<tr>
<td>Den a movvah cat seen a girl. &quot;Mew,&quot; her say. &quot;Hep me fin me kittens.&quot; De girl was laffin an she say, &quot;Look, you kittens is comin to fin you.&quot;</td>
<td></td>
</tr>
</tbody>
</table>

Grade Three

<table>
<thead>
<tr>
<th>Grade Three</th>
</tr>
</thead>
<tbody>
<tr>
<td>One day in de summah, twin brovahs walk to de lake wid der uncle ta fish. Dey be sittin waitin fo some fish to bite. Den a boy got dis bite. He got so escited, dat he drop de pole in de watah. De fish swim way wif it fass. De fish disappear. De surprised boy look at his uncle an den he laffed.</td>
</tr>
</tbody>
</table>

1. How dem boys an der uncle git to de lake?  
2. Wha dey to whin dey was waitin fo de fish ta bite?  
3. Wha de boy do whin he got a bite an got escited?  
4. Whin de boy get surprised whin de pole was loss, wha he do?  

1. Wha de cat lookin for?  
2. Wha it look in?  
3. Who de cat tell fo hep?  
4. Who come to fin de cat?
Table 2
Correlation and \( z \) values

<table>
<thead>
<tr>
<th>Pearson product-moment correlation between</th>
<th>Third grade level</th>
<th>Fifth grade level</th>
<th>( z )</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Correlation</td>
<td>Correlation</td>
<td></td>
</tr>
<tr>
<td></td>
<td>coefficient</td>
<td>coefficient</td>
<td></td>
</tr>
<tr>
<td>Standard English oral reading and</td>
<td>.99</td>
<td>.97</td>
<td>2.11</td>
</tr>
<tr>
<td>Black English standard orthography oral reading</td>
<td>2.65</td>
<td>2.11</td>
<td>-3.53*</td>
</tr>
<tr>
<td>Standard English oral reading and</td>
<td>.77</td>
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<td>1.10</td>
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<tr>
<td>Black English nonstandard orthography oral reading</td>
<td>1.01</td>
<td>.80</td>
<td>.63</td>
</tr>
<tr>
<td>Black English standard orthography oral reading</td>
<td>.76</td>
<td>.80</td>
<td>1.10</td>
</tr>
<tr>
<td>Black English nonstandard orthography oral reading</td>
<td>1.00</td>
<td>.80</td>
<td>.68</td>
</tr>
<tr>
<td>Standard English oral reading comprehension and</td>
<td>.97</td>
<td>.89</td>
<td>1.41</td>
</tr>
<tr>
<td>Black English standard orthography oral reading comprehension</td>
<td>2.15</td>
<td>1.41</td>
<td>-4.90**</td>
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<tr>
<td>Pearson product-moment correlation between</td>
<td>Third grade level</td>
<td>Fifth grade level</td>
<td></td>
</tr>
<tr>
<td>-------------------------------------------</td>
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<td></td>
</tr>
<tr>
<td></td>
<td>Correlation</td>
<td>z value</td>
<td>Correlation</td>
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<tr>
<td>Standard English oral reading comprehension and Black English nonstandard orthography oral reading comprehension</td>
<td>.76</td>
<td>1.00</td>
<td>.74</td>
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<tr>
<td>Black English standard orthography oral reading comprehension and Black English nonstandard orthography oral reading comprehension</td>
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<td>.97</td>
<td>.79</td>
</tr>
<tr>
<td>Standard English listening comprehension and Black English listening comprehension</td>
<td>.69</td>
<td>.85</td>
<td>.77</td>
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</table>

*p < .01
**p < .001