# The Differences in Comprehension Between Students Who Select Independent Reading Books Based on Choice or Based on Determined Reading Levels By John D Birus

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#### Abstract

The study will identify any differences in comprehension between students who select independent reading book based on choice or based on determined reading levels. Research has shown that there is great value in choice within the classroom. Through choice students can take ownership of what they learn and are thereby more engaged in the material. Students involved in the study were broken into two groups. One group selected an independent reading text by interest, while the other group selected based on reading level. The students then answered questions designed to ascertain their comprehension of the text they read. The results of the study found no significant statistical difference in comprehension between the two groups.

# **CHAPTER I**

#### INTRODUCTION

#### Overview

First grade is a critical time for reading instruction. Prior to first grade, children establish a base understanding of letters, sounds and how they come together. Research in the past 15 years has established that first-grade reading achievement is predicted by letter knowledge, phonemic awareness, and decoding (Warner, Fay & Spörer, 2017). In first grade the basics of reading are established, and students begin to construct meaning from what they read.

Reading is an essential life skill in that it is one of the foremost ways in which we gain meaning from the world around us. Not only must a child understand the sounds and patterns in deciphering written language, but also develop and maintain an understanding of what the words mean. Thus, reading comprehension is the true purpose of reading. Reading comprehension is understood as a multifaceted and constructive process in which basic information processes and higher cognitive skills must be coordinated and self-regulated (Cain, Oakhill, & Bryant, 2004). As a child's reading ability increases so must their understanding of what they read, along with the ability to comprehend more and more complex concepts within the text. Comprehension is the real goal of reading, allowing for the information to pass from the words of the text into the minds of the reader.

Texts come in varied types or genres, each providing different content and formats. Due to this variety, there are some types of text that appeal differently to different readers. The interest in this study comes from a curiosity in the effectiveness of guiding students to select texts to read independently based on reading level. As observed within the classroom students are more successful in comprehending a text based on two key factors: choice and content. If the child can

select a book of his or her own and on a topic of his or her interest, a greater understanding of what he or she reads can result. Children's enjoyment of reading affects their reading success through all grade levels and into adulthood (Cain et al., 2004).

Adversely there have been recent pushes to have students select a text based only by a reading level, where the students still have some choice in their text but only to a select set of books that are within their reading abilities. Though there still may be text within their level that is of interest to the student, they are not allowed access to texts that may be above or below their reading ability that are of interest to them. The focus of this study is to see if students' interest in the texts' topic motivates them to better comprehend what they are reading regardless of their reading abilities. The question of how to guide students to select an independent text where they will be successful in comprehending it is the driving force of this research.

#### **Statement of Problem**

The purpose of this study is to determine improvement in students' comprehension based on the choice made when selecting a book. The study will identify any differences in comprehension between students who select independent reading book based on choice or based on determined reading levels.

# **Hypothesis**

There will be no difference in comprehension between students who selected independent reading text based on interest or reading level.

#### **Operational Definitions**

Independent reading will be times when the students read without the direct support of an adult.

Reading level choice is determined after a student has been tested to identify their reading level. They are given a range of leveled books from which they can choose a book. This allows them to select a book that is on or close to the level that they have been tested in.

Interest choice involves students selecting books based on what they are interested in. The text selected has no relation to their reading level.

Comprehension is the understanding of the content of a text. It involves the ability to retell the information of the text, determine important points of the text, and draw conclusions based on the information of a text.

Fountas & Pinnell Literacy is a leveling tool for student placement within a guided reading group. Levels are given to students on a letter scale from a to z, with a being easiest and z being most difficult. A student's level is determined by two main factors: reading accuracy and comprehension.

#### **CHAPTER II**

#### REVIEW OF THE LITERATURE

#### **Student Choice**

An effective classroom is a place of balance. A teacher must balance what the students must do while still allowing individual students to express and learn in their own way. The use of student choice is an effective way to do this. The teacher scaffolds and provides necessary direction while the students get to exercise their independent choices. The ability to self-select is key for students as they grow and mature. Students can learn a great deal from experiences that they have control in constructing. Students who successfully self-regulate their learning are actively engaged in the process of knowledge acquisition and engage in activities that enable them to strategically adapt their behavior, personal processes, and environment to support meaning making and goal attainment (Housand,& Reis, 2008). For example, in his thesis, *The* Effects of Choice on Children's Reading Comprehension and Attitude, an experimental group could ask questions about a topic using any method of their choice (Bowermaster, 1976). This essentially gave them freedom to choose their own method of information gathering and organization. The control group was given a pre-selected set of questions to ask. In the end both groups wrote an essay on what they had learned about the topic. The results indicated that individuals in the student-directed questioning group preformed significantly better on the measure of knowledge acquisition than did those in the control.

There is power in allowing students to make choices in the classroom. This is especially important in student book selection. Research suggests that increased motivation and engagement comes from the student's ability to choose what he or she reads based on personal interests. Research further supports the power of interest, motivation, and engagement (Wigfield,

Gladstone, & Turci, 2016). Students who select and use their own reading materials are more motivated to engage in reading. Students are also more likely to engage in reading even when not required to do so or when allowed to read books of personal interest (Ainley, Hidi, & Berndorff, 2002; Sanden, 2012). Self-selection of reading materials encourages skills in decision making and promotes pupil responsibility in making choices (Ediger, 2009).

Children are given boundaries when choices are made for them, often without their input. There are many sound reasons for this. However, as children develop, choice helps them to become more independent and allows them to take ownership of what they like and who they are. When a child can choose, they will become more invested in their choice because it allows them to take ownership of some part of their world. This translates into their learning in the classroom. Students are more engaged when they are given control of tasks they complete; this is often referred to as locus of control (Vieria & Grantham 2011). Student engagement studies report positive associations between academic achievement and internal locus of control. This means that if students feel as though that have control within their learning, their academic achievement will increase. This points to the power that choice can have in a classroom. In order to assist student achievement, especially in an area they may have some difficulty or aversion to, choice can be a powerful motivator.

Interest plays a key role in this process. Interest is a psychological state or predisposition characterized by focused attention, increased affective and cognitive functioning, and persistent effort (Ainley et al., 2002). Both reading interest and reading involvement include the activation of feelings or thoughts. Therefore, reading is associated with emotional and rational awareness and responses to what is read (Vieira & Grantham, 2011).

#### **Choice Within Independent Reading**

Using student choice during independent reading takes purpose and preparation. Much of the literature reviewed prescribed practices that would enhance the effectiveness of students choosing an independent book. The organization and set up of the classroom helps to ensure that students choose books effectively. This seems to be the caveat of student choice in book selection. If it is to be done correctly, it must be done with some organization.

The first step for creating an environment that allows for student book selection is in the books itself. Student should choose reading materials from a wide variety of fascinating library books. Thus, from a variety of topics and genres on display in the classroom, the learner may choose an interesting library book to read. Additionally, there needs to be time devoted to student choice. Students need ample opportunities to make choices and decisions (Ediger, 2009). If students are to pick the correct book, they must be allowed time. Students must be granted flexibility in classroom procedures (location and timing) and encouraged to engage in complex tasks (Vieira & Grantham, 2011). Teachers must maximize opportunities for students to choose and make decisions during the school day give students ownership in the classroom, empowering them as learners (Hall, Hedrick, & Williams, 2014).

# The Importance of Independent Reading on Comprehension

In the end the point of reading instruction is to create meaning from a text. Providing students with the tools and strategies to be able to do this is important. Allowing a wide range of book choices and opportunities is important, especially in the primary grades. Students in primary-grade classrooms need to become familiar with the characteristics and conventions of informational texts (Fisher & Frey, 2011). Because reading materials become increasingly demanding in later childhood and adolescence, readers must be fluent in decoding and recognizing words, continually expand their vocabularies and knowledge base, and learn to use

elaborate cognitive strategies to make inferences and analyze text critically (Wigfield, Gladstone & Turci, 2016).

Student selection of independent reading texts is important for autonomy, control, and motivation. This in turn allows students to have greater investment in what they read, which leads to increased comprehension. Students must actively engage with text to extract and construct its meaning, and they will become better readers if they are taught reading comprehension in an engaging, motivating context (Shanahan, Clallison, & Carriere, 2010). Research shows that when students are allowed opportunities for choice, they become more involved in their reading and read more. Increased reading volume positively affects reading achievement. The relationship between perceived autonomy and reading achievement has been well documented, particularly in elementary school students (Wigfield et al., 2016). Their perceived autonomy—being allowed to select books to read and valuing book selection—predicted their growth in reading comprehension across four months. Choice is an important factor in individual satisfaction. Student choice in learning enhances determination, ownership, motivation, and involvement (Fraumeni-McBride, 2017).

# **Summary**

The students' ability to choose and exercise some control in a classroom allows them to create and develop a personal and foundational way of thinking. Choice in what they read allows for more meaningful connections to what a student learns. Student choice, through a varied selection of books, time, and teacher scaffolding is an important part of building comprehension in students. It is through student choice that students are better able to take ownership of what they read, which determines what they remember.

#### **CHAPTER III**

#### **METHODS**

The purpose of this study was to compare the gains in reading comprehension that students who choose independent books based on interest make compared to students who choose books restricted to their current reading level.

# Design

The design of this study is quasi-experimental. Two groups will be created. One group will be reading independent texts based on interest. The other group will be reading independent text based on Fountais & Pinnell reading level. These groupings will be created heterogeneously by chance. The goal of Fountais & Pinnell Literacy is to allow accurate leveling of student for placement within a guided reading group. Teachers can assess and level students on a letter scale from A to Z, with A being easiest and Z being most difficult.

A student's level is determined by two main factors: reading accuracy and comprehension. The student reads a text and the teacher makes note of their accuracy, and then asks questions about the text to determine comprehension. Each student is assessed to determine the student's independent, instructional, and frustration level. The independent level is the level to which the student can read a text independently with 95-100% accuracy and a high level of comprehension. It is at this level, or any level below, that marks what a student can read without support. The instructional level is where the students is able to read with 95-100% accuracy but with limited or proficient comprehension. The frustration level is a text where accuracy and comprehension are very limited, marking a text too difficult for the student to read without a large amount of support. The level that will be used for this research is the independent level.

# **Participants**

The participants in this research were from Ridgeway Elementary School in Anne Arundel County Maryland. Ridgeway had 620 students. The school demographics were: 338 Caucasian, 124 African American, 57 Hispanic, 79 Multiracial, and 21 Asian students. There were 325 male students and 295 female students. There were 174 students who receive free or reduced lunch. The school was located in Severn, Maryland, a mostly working class community. The school contains grades from Kindergarten to 5<sup>th</sup> grade. The classroom in which the participants of this study are enrolled in was one of four 1<sup>st</sup> grade classrooms.

There were 24 students in the classroom who participated in the research. The classroom was made up of 16 Caucasian, 6 African American, and 2 Multiracial students. The Fountais & Pinnell reading level that was a mid-year first grade level was a level F. The students in this class ranged in independent reading level from levels F to N. This means that all students within the class were reading at or above grade level.

## **Instrument**

The students took a comprehension assessment that will be derived from the questions that were provided as part of the Fountais & Pinnell Literacy program. Questions pertained to details in the story. The questions asked about important parts of the story or details from the text. There were two versions of questions, one for fictional texts and one for non-fiction texts. Each version of the questions assessed the same content but were worded differently to address the difference in text type.

#### Procedure

The students were split into two heterogeneous groups, with a mix of above to on level readers, matching the students' levels within the groups as equally as possible. One group, group

A, selected text for independent reading based on their F&P level. They choose their text from baskets of books which have been organized based on the books level (ex: all books that are on a level J will be placed into one basket and labeled). The students in this group were told their reading level and were allowed to choose an independent reading book from a basket that is on their level or below. The students in the second group, group B, selected texts based on their interest alone. The students were not told their reading levels and chose their books based on genre and interest.

In a period of 4 days, students were given ten minutes a day to sit and read independently. They had to choose one book to read but could switch from a book if they wanted. They had to read at least one book completely within the four-day period. At the end of the four days, the students were asked to select a book that they read completely during the independent reading time. Each student was called one at a time to answer the series of comprehension questions with the teacher. The teacher recorded their responses and marked which group the students were placed in. The teacher marked the students answers as well as any additional understandings that were given. The questions were scored out of 5 with one extra point for additional understandings that were not addressed by the questions for a total score of 6. There were five questions with one point per question. Students who score 0-3 points out of 6 were marked as having limited to no comprehension. Students with 4-6 points out of 6 were marked as having satisfactory to high comprehension. It was desirable for students to score in the satisfactory to high range of comprehension.

#### **CHAPTER IV**

#### **RESULTS**

The purpose of this study was to compare the gains in reading comprehension that students who choose independent books based on interest make compared to students who choose books restricted to their current reading level.

The reading comprehension scores for a first grader who selected an independent reading text based on interest or reading level were analyzed using a t test for independent groups. The results are reported in Table 1.

Table 1

Reading comprehension scores for text selected based on interest or reading level.

Text	Average	N	Standard	t	Significance
Selection			Deviation		
Interest	4.8	12	1.14		2.12
				1.39	0.18
Reading	3.9	12	1.73		
Level					

The hypothesis that there would be no difference in comprehension between students who selected independent reading text based on interest or reading level is supported.

#### **CHAPTER V**

#### DISCUSSION

The hypothesis that there would be no difference in comprehension between students who selected independent reading texts based on interest or reading level is supported. Although the mean score for students who read a text based on interest (4.8) versus reading level was higher than the mean for students who selected a text based on interest (3.9), the difference was not statistically significant.

#### **Implications of Results**

Since there was no statistical difference in the data, it can be inferred that a student's comprehension of an independent text is not greatly impacted by their choice based on interest or reading level. Most students were able to maintain a basic level of comprehension regardless of how they chose their text.

## Threats to Validity

There were various threats to validity that could have altered the results of the study. Since the books were selected randomly, there may not have been texts to meet the interests of all the students. This means that some students within the interest group may not have selected a book based on interest at all, which would affect their comprehension.

The presence of other students and noise within the room may make it difficult for some students to keep their attention on one task for a prolonged period, especially at the age of the students tested. The presence of other students making even minimal noise could cause them to become distracted and give less focus to the text they were reading. This would affect their overall comprehension of the text.

The level of text selected by a student may have been below or above their reading ability. The students who selected books based on interest may have chosen a book of interest but far enough out of their reading ability that only minimal comprehension could be gained. This would affect their comprehension score during the study.

The physical location of where a student reads can affect their comprehension. Some students may need a comfortable spot to sit, others may need a more structured spot. The students may have chosen a reading spot that they believed would be best, but may have ultimately caused them to be in a position that hindered their comprehension. As an example, it was observed during the study that one student who chose a pillow to read on continuously had to adjust and re-adjust the position of the pillow. This means that less and less time was spent attending to the reading. Overall this could have hindered the student's comprehension.

# **Connections to Existing Literature**

The reviewed existing literature stated that students are more likely to engage in reading even when not required to do so or when allowed to read books of personal interest (Ainley et al., 2002). The literature also explained that students must actively engage with text to extract and construct its meaning, and they will become better readers if they are taught reading comprehension in an engaging, motivating context (Shanahan et al., 2010). This was not supported within this research statistically; however, it was observed by the researcher. Many of the students who selected a text of their choice, even one beyond their reading level, read for a more sustained time. This observation supports the literature in that self-selection of reading materials encourages skills in decision making and promotes pupil responsibility in making choices (McConachie, et. al., 2006; Ediger, 2009). The purpose of this research was to determine if a student's comprehension of a text could be influenced by their choice in independent

reading. The results showed no statistical difference. This does not include a larger picture of the student's comprehension. If this study were to continue, results may better align to the existing literature on student choice in reading.

# **Implications for Future Research**

For future research into this area, a longer study could provide more decisive results. This study was conducted over a period of a week. A longer study over the course of months with consistent checks on the students' comprehension over time could yield more statistically significant results. Providing a greater variety of text could also be used in future research. This could also be combined with other groups of students selecting based on interest and reading level using the same variety of text. The results from both groups could be compared and analyzed. Based on observations from the study, many of the students who selected a book based on interest read for a more sustained amount of time. This could lead to further research into this topic.

## **Conclusions**

The findings may not have shown any statistical significance, yet through observation of students, there was evidence of a difference in the students who selected based on interest versus reading level. Through observation, the students who selected a text based on interest seemed to read for a more sustained period. The students were less distracted and spent more time reading and attending to the text. The students who selected a book based on reading level tended to complete their reading more quickly and seemed to be less involved in their reading. Due to the hypothesis being correct and the researcher's observations of students, it can be concluded that both types of independent text selection can be incorporated into a classroom.

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