IMPROVING READING INSTRUCTION FOR STUDENTS AT-RISK IN
EARLY EDUCATION IN RURAL AREAS: A REVIEW OF LITERATURE

By

Patricia A. Hooper

SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENT FOR THE
DEGREE OF MASTER OF ARTS IN EDUCATION
AT NORTHERN MICHIGAN UNIVERSITY

July 18, 2010

APPROVED BY:

DATE:
Table of Contents

Abstract ......................................................................................................................... 5

Chapter I – Introduction................................................................................................. 6

  Statement of the Problem ............................................................................................... 6
  Research question(s) .................................................................................................... 7

Chapter II – Review of the Literature

  How We Read ............................................................................................................. 7
  Five Critical Components of Reading ......................................................................... 8
    Phonemic Awareness ................................................................................................ 8
    Phonics ...................................................................................................................... 9
    Comprehension ........................................................................................................ 10
    Vocabulary ............................................................................................................... 12
    Fluency .................................................................................................................... 14

  Characteristics of Successful Reading Programs ..................................................... 15

  Three-Tier Response to Intervention Model ........................................................... 16

  DIBELS ....................................................................................................................... 17

  Reading Recovery ...................................................................................................... 18

  Read 180 ................................................................................................................... 19

  Save the Children Program ...................................................................................... 20

  Time in the Core Reading Program .......................................................................... 23

  Rural Schools and Reading Achievement Scores ..................................................... 24

  Challenges for Rural Schools ................................................................................... 25

  Early Intervention ..................................................................................................... 27

Chapter III – Summary ................................................................................................. 29
Chapter IV-Recommendations and Conclusions………………………………………………32

References …………………………………………………………………………………….34
Abstract

Reading is a skill that most people use daily. In schools reading is the center to the learning of all subjects. There are five components of reading. Each area is separately mastered, but equally as important in the process of reading. Small rural schools face challenges in teaching reading to their students and successfully intervening when the process does not come easily. There are several interventions that have been found to be effective, but all of them share the same characteristics of quality of teaching, time, and regular exposure to appropriate level reading materials. To implement effective reading programs the rural schools do not need to purchase expensive programs, but need to be creative with the resources they have available.
Chapter I - Introduction

School districts are facing a number of challenges today, and foremost among them is to improve student achievement in the face of declining enrollments, increasing budget deficits, and increasing state and federal mandates. Rural schools districts face these and other challenges, including attracting and retaining highly qualified teachers and working to meet the needs of students with less resources.

Statement of the Problem

According to the National Assessment of Educational Progress (NAEP), 38% of fourth grade students across the nation demonstrated a ‘below basic’ reading achievement level in 2005. (Provasnik, KewalRamani, Coleman, Gilbertson, Herring, & Xie, 2007). Achievement results for fourth grade students living in remote rural areas show that 39% of students are reading at a below basic level. (Provasnik et al., 2007). The data on student achievement indicates that students in rural schools perform well as measured against students in urban areas; however, they are lagging behind students in sub-urban school districts. (Provasnik et al., 2007).

The purpose of this review was to better understand the process of reading, define and discuss the five critical components of reading, and find current intervention strategies for students labeled at-risk in grades kindergarten through second grade. Understanding the process of reading will help unveil the problems with reading, and how educators solve them. What strategies are most effective in helping young children to read? This study will also examine successful programs and strategies being used in rural areas. Rural schools have many challenges, and we will discuss what those challenges are and how they overcome
these. New programs are constantly being developed and tried in schools to help students succeed in reading and to help them achieve higher scores on achievement tests.

Research question(s)

What are ways of improving reading instruction for at-risk early education students in rural areas? What unique challenges do rural school districts have to overcome in order to help students succeed?
Chapter II – Review of Literature

How We Read

Reading is a very complicated process, but once learned reading becomes almost effortless. A child learns the word “the”, a word that cannot be phonetically sounded out. After the word is stored in memory it is natural for a child to look at the word and know the word. Neurologists have found that the process of reading is done in the left side of the brain, but have discovered that the front area of the brain can compensate for some problem areas within the left side. “At all ages good readers show a consistent pattern: strong activation in the back of the brain with the lesser activation in the front. A struggling reader has a pattern of under activation in the back of the brain” (Shaywitz, 2005, p.81).

The route a reading signal follows through the brain is very precise, and no area can be bypassed. Students who struggle with reading have a break where the impulse doesn’t travel the same route. The brain compensates by rerouting which causes over activation in the front area of the brain called Broca’s region. Most readers’ brains transport the information of reading along a certain track of reading, but in more recent years research has found some readers to have neurological disorganization when attempting to read.

“The brain processes all of the sounds associated with reading even though one may be reading silently. The areas of the brain that process speech sounds are active just like they would be if the subject were listening to somebody speak. The brain is very structured in the way it processes information. Complex tasks such as reading a passage of text are broken down into easier tasks. The easier tasks are distributed to areas of the brain that specialize in those tasks. The
neocortex engages in processing the meaning of the text being read” (Fielding, Kerr, & Rosier, 2007, p.7).

The process of reading involves certain tasks which the brain must perform. The process is a detailed one, and within the process there are five critical areas of reading. Some students find it easy to learn to read, and they can easily master phonemic awareness not even aware they are learning a skill. Other students who struggle with reading must practice and learn this skill along with drills and repetition, consistently practiced with a teacher. Within the landscape of reading there are five critical areas.

**Phonemic Awareness**

Phonemic awareness is the ability to isolate individual sounds (phonemes) in spoken words. If a child does not develop this skill the entire reading process will suffer. Allington reports “evidence indicates that most children (80-85%) already acquire phonemic awareness by the middle of first grade” (Allington, 1997, p.4). Phonemic awareness is the most basic of the abilities related to reading and a skill that the reading process is built upon. Research has shown that success in phonemic awareness is critical to the reading process. “In 2002 a study involving 604 young children was conducted, and found that over 70% of poor readers had a history of phonological awareness or oral language deficits in kindergarten, and persisted through high school” (Cihon, 2008, p.139). Phonemic awareness can be learned with practice. Though a complicated brain process, the task is seen as simple and once learned sounding out words becomes effortless. With most readers the process comes naturally and they are not aware that they are even doing it. Holten gives the example of the word “mat”. The three letters represent three phonemes-“m-a-t”. Next, blend these three sounds together to form a
word. Manipulating phonemes, such as changing the first phonemes from “m” to “c”, changes the word. Exercises such as those mentioned above train a child’s brain to phoneme awareness” (Holton, 2004, p.A1). Phonemic awareness is the most basic of the building blocks of reading. Phonemic awareness is not the same as phonics. Phonemic awareness takes place prior to the skill of reading. The skill of phonemic awareness is learned through listening oral language, and then integrated with written print. “In pure form phonological skills do not involve print” (Schuele, 2008, p.3). Phonological awareness can be improved through instruction and practice. One of the most critical ways to build phonemic awareness in children is to read aloud to them. McKnight (2001) stated that reading aloud encourages children to find pleasure in reading and use literature to aid in learning. This pre-literacy skill must be developed or students will struggle with the other areas of reading later. No expensive programs are needed to increase phonemic awareness. In small rural districts that lack resources teachers and staff can read aloud to students to help develop and strengthen phonemic awareness. “Improvement in phonological awareness leads to improvement in word decoding and the reading process” (Schuele, 2008, p.1).

**Phonics**

Phonics is a second area that reading is built upon. Phonics is a reading strategy that teaches reading through repetition and relationships between letters and sounds. Matson (1996) described phonics as a code-oriented approach. This is a traditional way of teaching that has worked successfully with most students. Phonics has been used in the American education system for many years. The phonics approach to reading was questioned in the 1920’s and again in the 1960’s. Many schools replaced phonics with the whole language approach and word recognition. Some critics of whole language complained that children
never learned the sound of letters, and how to sound out words. Most schools today use a combination of phonics and whole language. Phonics as a component of the reading process is very crucial. It must be practiced in order to be learned and maintained. Phonics skills can be learned through rhyming, reading aloud, buddy-reading, choral reading, and computer programs that practice skills similar to these.

Comprehension

Comprehension is the level of understanding one has of written word or printed text. Comprehension begins early in children. A young child is read a story and at the end of the book if he is questioned about the story, he remembers details. To find a child’s level of comprehension after a reading they should be asked open-ended questions. Questions that begin with the words like, how, what, who, when, why and where can give us information about how much understanding is taking place. Parker and Hurry (2007) describe four reading strategies that improve children's reading comprehension, which are: generating questions about the text, predicting, clarifying, and summarizing. These strategies must be used consistently in the classroom to help students learn how to better comprehend texts or passages. Listening comprehension begins at a very young age and preschool children are able to answer questions about what was read to them. “More preschool children than ever before are receiving early literacy instruction partially in response to content standards and in a context of accountability” (VanDerHeyden, Snyder, Broussard & Ramsdell, 2008, p.232). Comprehension is a pre-literacy skill that can help develop a better reader. A student may be able to read a text, but they do not understand the meaning of the text. Reading comprehension must be practiced early on so students develop the skill of comprehending as they are reading.”Low literacy rates among parents in poor rural communities affect
children’s early language development and educational aspirations. In addition, children living in poverty experience less cognitive stimulation and enrichment than their middle income peers”. (Afterschool Alliance [AA], 2007, p.1). Reading to preschool children develops their comprehension and their ability to read. When a teacher or parent reads aloud fluently a child listens and follows the story in their mind, and at the same time is developing pre-literacy skills.

Many students are very good at listening comprehension, but reading comprehension is a more complicated skill. Some children who have reading problems or disorders like dyslexia are much more successful at listening comprehension because listening eliminates having to struggle with print and read for themselves. If good listening skills are developed early when children are in preschool then it gives them a background to master reading comprehension, but does not necessarily mean they will. Some children with reading disabilities have more severe problems that reading aloud to them alone cannot help them overcome. Some struggling readers have to focus so much on figuring out the word, the meaning of the text gets lost. This area can be enhanced by different reading activities like the following: making a chart and recording the information you know about the text, and then the information you want to learn from it. If a young child who is unable to write yet is doing this activity they may draw pictures, or have a teacher write what they say. This activity is like a learning web. Another activity is the reader stops during the reading to try and answer comprehension questions. If they can answer they move ahead, and if they cannot answer they reread the text. A third activity to build reading comprehension is discussion groups. The children get together in pairs or small groups, and discuss what they have read. With this activity each student should have a question they are responsible for answering, but not
limited to answering. This method is a good way to make sure that all students comprehend the reading thoroughly.

Another way to help students who have problems with reading comprehension is to have them listen to other students read, or at a younger age, have them tell a story from pictures. Students who struggle can benefit greatly from listening to others read, reading in unison with others, or choral reading. When they hear the reading practiced correctly then they can follow along and practice. In rural areas many students live far away from libraries or preschools that can help them develop pre-literacy skills. More opportunities need to be given to rural students so they can be exposed to reading strategies which will help strengthen their skills. “The strategies used to improve reading comprehension must have some essential elements that are focused on like the following: reading text accurately and fluently, background knowledge and vocabulary to make sense of the content in the text, and motivation to understand and learn from the text” (Chenoweth, 2009, p.40). This improves their listening skills, and reading comprehension. In order to improve comprehension students must also develop skills through classroom activities that strengthen them. A teacher should provide activities that a student can do before reading a book, activities that are helpful as the child reads the book, and those activities that help the child to organize thoughts about the reading once they have read the book. Comprehension is a critical area researchers are finding students in the higher grades struggle with. Frequently asking questions when a teacher is giving instructions or when someone is reading a text can help strengthen comprehension.

**Vocabulary**

Vocabulary is how or what a person understands. Vocabulary is how one speaks. Young children usually have a limited vocabulary, but vocabulary grows very rapidly with
each year of life. With normal development a child’s vocabulary will expand each day. Children are always hearing, learning, and understanding new words. A child must be exposed to new vocabulary in order to learn. In order to understand what context a word is used in a child must hear it, understand the word and how it’s being used. Vocabulary is usually developed at a very fast rate. In order to build vocabulary in a case where children are lacking they must be exposed to new words and their meanings each day. Having the student use the new word is important to helping them learn it and store it in long-term memory.

The English language is continually changing. New vocabulary and meanings of words are developing every day. A reader must not only understand the word, but the context in which the word is being used. Understanding the usage of vocabulary is a skill that must be learned in order to be a good reader. Many children who have limited vocabulary are limited in reading comprehension because they do not understand how new words are used or their meaning. A broad vocabulary comes from hearing and memorizing words and their meanings. Children who live in more populated areas and hear a wider vocabulary used by people around them tend to develop a broader vocabulary themselves. Even though the rural population is growing more diverse, most students live in remote areas, and their vocabulary is based on the immediate people surrounding them instead of being expanded by the multicultural population at school. A child learns new words and their meanings at very fast pace during the toddler and preschool years. Once new vocabulary is filed into memory the words can be read and comprehended at a very fast rate. A broad vocabulary not only helps with the skill of reading, but strengthens a readers’ fluency. A student cannot grow as a reader without growing their vocabulary. Young children learn words from school, television, radio, listening or engaging in conversation with adults and peers, and from reading. Children who
live in poor socioeconomic conditions are far less likely to have books around their homes, and some may not even own a television. Young children expand their vocabulary rapidly, but that rate slows as we age unless new words are intentionally learned and practiced. The size of a person’s vocabulary is often an indicator of their social status, and education level. How one speaks, and the words used are one of the factors others judge a person on. In areas that are considered rural like the Southeastern and Southwestern parts of the United States many residents have limited vocabulary.

**Fluency**

Fluency is how easily we speak, how well we speak, and how fluidly we read. A reader who is not fluent may read very choppy. (e.g. “The”—pause—“dog”—pause—“ran”—pause—“across”—pause—“the”—pause—“street”). Choppy reading is typical of beginning readers, but once reading skills are developed fluency skills follow. ESL (English as a second language) students and young readers many times have trouble with fluency. Speaking fluently is easier than reading fluently. Fluent reading requires the reading process to flow smoothly through the brain. Developing fluency requires readers to read aloud and practice. Strategies like paired-reading or small group reading are effective ways for a student to develop their fluency. Reading aloud and listening back to the reading played back is also a good way to develop fluency.

Students generally develop fluency through practice, but with struggling readers fluency is harder to master. One important way of developing this skill is being read aloud to by someone who has mastered reading. Fluency is not only reading smoothly, but also speaking the words smoothly. Fluency has no unpredicted pauses, and the language flows.
Fluency cannot be achieved unless the other four reading components are mastered. Fluency is a building block of reading just as the other four areas.

**Characteristics of Successful Reading Programs**

The key to building successful readers is to find effective and comprehensive programs that work. In what follows, I outline several programs and describe their effectiveness. To start, one important key to a program being successful is having a quality teacher. Reading is one area that must be focused on especially in the earliest years of school. A program can only be as good as the teacher teaching it. A well trained and encouraging teacher is one of the most important keys to a student’s success. A successful program focuses on the critical areas of reading, and allows time for the students to learn these key elements and practice them. Many schools have different programs that are used for identifying at-risk readers and helping them. This effort of identifying is an early intervening system called Recognition & Response according to the FPG Child Development Institute (2007).

“Typically, the evidence base is established retroactively through evaluation of an intervention. We quickly recognized that developing the evidence base for Recognition & Response from the onset would provide a powerful lens through which to develop innovations in the field” she stated (Coleman, 2007, p. 232). It is imperative to recognize at-risk children who need intervention early on. In larger urban districts more resources and staff are available to work on interventions, but in small, rural schools many times the funds or staff are not available. “Data collected from 2002-2005 by the National Centers for Educational Statistics (NCES) show that a third of all public schools are found in rural areas”(Winn, Erwin, Gentry & Cauble, 2009, p.5). Rural schools are usually found where the socioeconomic climate is very poor. In the past rural students were predominantly white, but today the makeup of the
rural student population is changing. There are some stunning statistics with today’s rural schools. “Nearly one-half of all ELL (English Language Learners) students live in rural communities, and the rate of growth of this population is very high” (Johnson, 2007). The most diverse population of rural schools is found in the Southeast and Southwest, and they have many Hispanic and Native Americans. These areas have very high unemployment and poor residents. “The lower the socioeconomic level and the more diverse the student population, the lower the achievement test scores are shown to be. The states with the highest socioeconomic challenges and student diversity show a strong correlation between these factors and low achievement scores” (Johnson, 2007, p.16).

The best way to intervene and keep records of students who are at-risk is through RTI (Response to Intervention). This encompasses several successful programs. The following are some of these successful intervention programs: DIBELS (Dynamic Indicators of Basic Early Literacy Skills), Reading Recovery, Read Naturally, Read 180, and Save the Children. “The key components of RTI (and Recognition & Response) are systematic screening and progress monitoring, the use of multiple tiers of increasingly intense interventions, and a problem-solving process to aid in decision making (Coleman, 2007, p.6). RTI is used in most schools, and the programs it involves are meant to intervene before a student is labeled special needs, or delayed. RTI doesn’t wait for a child to be labeled, but starts the intervention early in school. A three-or-four-year old may receive intervention and be successfully spared being labeled and qualifying for the special education classroom at a later date.

The figure above shows the three-tiered approach that RTI takes in helping students in reading. With early intervention “tier 2” students should avoid being referred to the “tier 3” level of intensive individualized instruction that refers to the resource room or special education services. Response to Intervention programs (RTI) intervene early to get the best chance available to help those students who begin school behind in reading. Some of these RTI programs are described below.

**DIBELS**

DIBELS (Dynamic Indicators of Basic Early Intervention Skills), an RTI program, provides teachers the chance to hear each student in the class read aloud. With this program
teachers can test as often as needed depending on the progress students are making and on a particular problem a student is having. A DIBELS test is a very short oral exam which a teacher, or other professional, administers to a student which gives an accurate reading of the literacy skill level the student is reading at. This is a very effective program. Many schools are choosing to use DIBELS to keep track of student progress in the early grade levels. The program’s popularity is due to its’ efficiency and effectiveness. A DIBELS assessment is usually done at least once or twice a year, but students can be assessed as often as needed. For many teachers this is a very accurate indicator of where a child’s reading level is, and it is a brief assessment.

Reading Recovery

Reading Recovery is a program used with young struggling readers. “Marie Clay, the founder of Reading Recovery, saw the role of RR within a prevention framework. Reading Recovery, as a supplement to good classroom instruction, serves a secondary prevention role by successfully teaching most first graders and identifying those who truly need long-term service.” (Smith-Burke, 2002, p.1). Reading Recovery is an intense reading program where trained staff will work with a student individually for a period of 6-8 weeks. During this period of time ability level books are read and reviewed. With the repetition and continual review the student will be more confident and success in reading should follow. “In order for programs like Reading Recovery to have a positive impact on student achievement the must have the following features: (a) a certified reading specialist supervising the program; (b) there must be ongoing tutor training and tutor evaluation; (c) tutoring sessions are highly structured; (d) tutoring must be intensive and consistent; (e) quality reading materials and tutoring manuals must be used; (f) student assessment must be ongoing; (g) tutoring is
coordinated with classroom instruction; and (h) parent involvement is stressed” (Schacter, 2000, p.40).

*Read 180*

Read 180 is a kindergarten through high school program whose goal is to help struggling readers through the use of computer programs, literature, and direct instruction. “Read 180 is a Scholastic product and was developed by Dr. Ted Hasselbring at Vanderbilt University. The goal of the program is to foster student-teacher interaction through whole-group, small-group, and one-on-one instruction. The software components of the program provide instructional skills in word study, vocabulary, comprehension, and spelling” (Schacter, 2000, p.39). The students read approved books and take comprehension tests after the reading is complete. Read 180 is not meant for average or above readers, but is designed to reach the lowest level readers. Through the specific texts and assessments the struggling reader becomes more successful. This is a popular RTI program that has gained notoriety in the past few years in the schools.

Different intervention programs are used in different areas of the country and many times it depends on the individual school district. Some districts receive grants or assistance to try new reading interventions. Read 180 has been shown to be a successful program. In the early stages of the program the effectiveness of this program were tested. “In 1994-95, a prototype of Read 180 was implemented with over 10,000 students in Orange County, FL public schools. Students in Read 180 gained 33 percentile points in their reading achievement on Degrees of Reading Power test”(Schacter, 2000, p.39). These gains were positive proof the program could be successful.
Save the Children Program

Save the Children is another reading program that begins with early intervention. This program is focused on rural areas. Palmiter, Arcaira, White and Reisner (2009) selected 118 sites in rural communities to implement this reading initiative (p.2). The program focuses on reading and intervention in reading. The participants in the Emergent Reader program were enrolled in kindergarten through second grade. This part of the program was for the younger students, and was directed somewhat differently than the reading program for the older students. The study was directed to intervene with students in rural areas. Save the Children is an ongoing program that helps specifically rural children.

“The SEL (criterion-referenced assessment) was administered in 46 sites during 2008-09. The SEL was administered primarily to students in kindergarten and first grade. Overall, 1,538 children, 55 percent of those participants in the Emergent Reader program completed at least one SEL assessment over the course of the 2008-09 year. Performance on the SEL was reported in three forms. One was a scaled score ranging from 300 to 900 scaled score points, with the higher score indicating greater reading proficiency. A second was a literacy skills classification level, which placed each assessment score into one of four levels. The classification levels are labeled “early emergent” (the lowest level of proficiency), “late emergent”, transitional,” and “probable reader.” Performance was also reported in terms of risk levels. The risk level into which a child was classified was based on the child’s grade level, the time of the year the SEL was administered, in addition to the child’s scaled score. These levels indicate the degree of risk that the child will not gain
reading proficiency. Overall, assessment scores indicated that the children attending Rural Literacy Initiative sites participating in the Emergent Reader program were appropriately selected, based on their level of literacy skills. Seventeen percent scored at the early emergent reading level, and 63 percent at the late emergent level, the level of skills for which the Emergent Readers program is intended. Fourteen percent scored at the transitional reader level and 6 percent at the probable reader level. The study concluded the children who completed the SEL in both the fall and spring who were classified as early emergent readers decreased from 18 percent in the fall to 3 percent in the spring, while the proportion classified as probable readers increased from 3 percent to 21 percent. Eleven percent of the children who completed an SEL in the fall were transitional or probable readers on their initial assessment, and thus able to participate in a beginning reading program. On the spring assessment, this proportion increased to 59 percent” (Palmiter et al., 2009, p.27, 32).

The study has shown significant progress in the area of reading for those who have participated in it over the years. The program is flexible and can be held during the school day, or as an afterschool program. In the rural areas many times it is hard to emphasize the importance of learning to read well and of education because of the lifestyles the people have been living for generations. Today, most of the children will have to move to the city to find employment, and fit into a different way of life. Programs like Save the Children help to accomplish the basic literacy skills these students will need. “Central to Save the Children’s literacy Program is the guided independent reading program (GIRP). It provides regular
opportunities to read “just right” books independently under the guidance of a trained adult” (Palmiter et al., 2009, p.1).

**Time in the Core Reading Program**

Time spent on reading is one of the best indicators of how good of a reader a student will be. Quantity of time is the key element to success in growing into being a successful reader, or in catching-up in reading. The amount of time spent on reading is important because good readers will keep advancing by spending more time, and slower readers will be given the time they need to advance. “Typical intervention programs have been spread over 7 to 12 weeks, with 3-5 sessions per week, 15 to 30 minutes in length” (Schuele, 2008, p.6). Time spent on the core reading program and on early intervention is crucial to developing strong reading skills. Teachers must not only have the students reading, but comprehending what is read. Providing all students with effective and comprehensive reading instruction is one of the most challenging tasks facing the classroom teacher. “Teachers who are most successful are teachers who can manage space, time, and materials to support excellent teaching and learning” (Smith-Burke, 2002, p.16).

The traditional ways of approaching reading does not work with all students. Today we encounter so many reading disorders, delays, and disabilities that it is hard to find the most effective way to teach a non-reader. Several reading programs exist, and are used in our schools. One of the most widely used is the phonics program. Though not all teachers use the commercial form of the program, they do use the same basic principles of letter-sound learning. Though many programs are available not all schools can afford to purchase them, especially the rural districts. Teachers in these districts find themselves having to be very flexible and creative in finding inexpensive programs to work with. “Few teachers preparation
programs are specifically designed to prepare teachers for the unique challenges of rural areas” (Lazarus, 2003, p.1). In the rural schools teachers have to teach with the supplies and programs that are provided. Many times professional development is not as readily available or provided. Time in reading instruction is one important thing that can be utilized that doesn’t cost money.

Rural Schools and Reading Achievement Scores

The term rural school has meant an outlying or country school for most purposes. In 2006, the United States Census Bureau changed the definition of rural and that has changed educational data showing significantly more schools as rural.

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>All locales</th>
<th>Rural under former system</th>
<th>Rural under new system</th>
<th>Unchanged (rural in both systems)</th>
<th>No longer classified as rural</th>
<th>Newly classified as rural</th>
<th>Net increase</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of schools</td>
<td>95,726</td>
<td>29,917</td>
<td>29,977</td>
<td>27,099</td>
<td>2,418</td>
<td>2,878</td>
<td>480</td>
</tr>
<tr>
<td>Percentage of</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>All schools</td>
<td>100.0</td>
<td>30.8</td>
<td>31.3</td>
<td>20.3</td>
<td>2.5</td>
<td>3.0</td>
<td>0.5</td>
</tr>
<tr>
<td>Former rural schools</td>
<td>†</td>
<td>100.0</td>
<td>101.6⁴</td>
<td>91.8</td>
<td>0.2</td>
<td>†</td>
<td>†</td>
</tr>
<tr>
<td>Number of students</td>
<td>48,954</td>
<td>9,971</td>
<td>10,308</td>
<td>8,851</td>
<td>1,120</td>
<td>1,457</td>
<td>337</td>
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<tr>
<td>(in thousands)</td>
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<tr>
<td>Percentage of</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>All students</td>
<td>100.0</td>
<td>20.6</td>
<td>21.3</td>
<td>13.3</td>
<td>2.3</td>
<td>3.0</td>
<td>0.7</td>
</tr>
<tr>
<td>Students formerly</td>
<td>†</td>
<td>100.0</td>
<td>103.4¹</td>
<td>88.8</td>
<td>11.2</td>
<td>†</td>
<td>†</td>
</tr>
<tr>
<td>classified as rural</td>
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</tbody>
</table>

† Not applicable.

This percentage, which represents the number under the new system divided by the number under the former system, is over 100 percent because the new classification system increased the total number classified as rural.


The number of schools classified as rural significantly changed when the government changed the definition of rural, as the table above shows. Rural schools do not have many of the benefits of the larger schools in the suburban and urban areas. Those schools have access
to many more academic and cultural exposure within the urban areas. Examples of these would be museums, plays, libraries, and many other resources. Rural areas tend to have lower socioeconomic levels, and lower tax bases, so schools within these districts are already at a disadvantage compared with urban and suburban schools.

Today our schools and their quality are mainly based on the scores students receive on achievement tests. This has especially become the focus since 2001 when the No Child Left Behind Act was made into law. Reading achievement data from rural schools is not encouraging. Palmiter et al. (2009) “reported key findings from the Save the Children Reading Program that most of the children participating demonstrated reading skills significantly below grade level at the start of the 2008-09 school year, and on average, 84 percent of the participants scored below grade level on the first screening” (p.2).

Many rural school districts are making improvements and doing positive programs with students, but these are not looked at as successful when rating a school. The public and government look at the best data that is available to rate how a school is doing. Unfortunately, that data is standardized test scores. The achievement scores do not always show the climate or lack of success in a school.”Rural schools and the communities they represent do possess strengths that enable them, if given adequate financial resources, to overcome obstacles and challenges. A strong work ethic, a spirit of teamwork, and a broad-based community support are among the many positives rural areas have”. (AA, 2007, p.1).

Challenges for Rural Schools

Rural schools face many challenges some that are the same as urban schools and others that are very different. In most rural schools the student to teacher ratio is less than in an urban school, however, the resources the teacher has to work with are usually far less.
Research has found that rural students have less technology available to them compared with their urban and suburban counterparts. Some of the other challenges rural schools face are budgeting and staffing. Rural schools get less federal funding, and have fewer resources available to them. The tax base is much less in poorer rural areas also. When it comes to staffing, rural schools have a harder time finding highly qualified staff that will want to stay. The schools have a high turnover rate for teachers and staff, and usually cannot offer some of the more competitive wages and other benefits that a financially superior school can offer. In rural schools teachers usually do not have access to popular programs and all of the latest technology. The most competitive teachers usually opt for larger, better paying districts.

Diaz (2008) “found that as smaller and rural school districts struggle with increasing student achievement in the face of seemingly insurmountable hurdles such as poverty, a paucity of fiscal resources, enrollment shifts, dynamic demographic variances among students, constituent expectations, low levels of adult education, and generally lower property tax bases, further research is drastically needed in order to determine how these critical challenges can be mitigated in order to confront the nationwide underperformance within rural education” (p.37).

These numerous challenges are hard to overcome in rural areas, especially with the changing population residing in them. The population is becoming more and more diverse, and unlike their urban counterparts, these rural schools are not equipped with the staff or the resources to handle these changes. Many districts have a high rate of staff turnover and this presents another problem that rural schools must overcome. In 2009 Chenoweth researched two high-poverty, high-minority schools which were succeeding, and found the following:

“Graham Road Elementary in Falls Church, Virginia is a school succeeding
The many challenges they face. One of the lowest performing schools in Fairfax County, Graham Road is now one of the tops schools in the state, Outperforming many much wealthier schools. This even though they are high-poverty and high-minority. Some startling statistics from the district are the following: out of the 359 enrollees, 64% are Hispanic, 16% are Asian, 13% are Black, and 7% are white. Out of the total enrollment 81% of the students qualify for free/reduced lunch” (Chenoweth, 2009, p.38).

Graham Road Elementary is just one example of several schools that have changed their schools for the better, and the student achievement scores show the results. “In 2008 sixth grade students reading achievement scores were as follows: Overall, 70% were advanced, and 30% proficient. Hispanic students’ results were 71% advanced and 29% proficient. Students who qualified as low-income results were 68% were advanced and 31% were proficient”(Chenoweth, 2009, p.38). The obstacles the school district face like poverty and having a highly diverse population of students do not need to dictate the failure of a school. There are several steps that can turn a school around. “Chenoweth (2009) describes that one of the most important ways these schools set themselves up for success is they didn’t operate as a collection of isolated classrooms, but as whole schools with teachers and staff who collaborated and wanted the same outcome: to see students succeed”(p.41).

Early Intervention

As with any delay or disorder, early intervention is the key to future success for a student. Current research shows that the earlier the intervention takes place, the more successful the catching-up for a student will be. The trouble is that in many rural districts the funds and resources are not there to offer programs or staff them to make these early
interventions. The process in identifying children who need intervention is finding the children, properly and effectively screening the children, and diagnosing and evaluating where exactly they need help. “Early intervention is based on the premise that low-performing students can be identified and provided supplemental support after a relatively short exposure to classroom literacy instruction” (Schwartz, 2005, p.257). Early intervention programs are designed to close the gap between at-risk students and their peers before the gap becomes too large. Children who are labeled at-risk need to catch-up early because every year that goes by causes them to fall further behind. Pre-reading instruction begins in preschool and kindergarten. Intervention many times begins at this same level if problems are detected. “Early, intensive intervention can prevent problems from escalating and produce results more quickly and save everyone time, effort and money in the long run” (Filby & Lambert, 1990, p.1).

Early intervention is the greatest advantage a struggling reader can have. “The National Reading Panel (NICHD, 2000) found that 5 to 18 hours of instructional intervention provided substantial benefits”(Schuele, 2008, p.6) In rural districts if the programs and staff are available then many of the children who struggle with literacy problems can be identified early, and successfully be caught up before they fall too far behind. Early intervention can eliminate referrals, testing and eventually qualifying a student for special education. Helping the struggling student early in their academic career gives them a better chance of academically keeping on track with their non-struggling peers. One national program which has given researchers an opportunity to investigate the impact of early intervention is Head Start.
“Head Start was first launched in 1964 under President Lyndon Johnson, within the office of Economic Opportunity, and was intended to provide preschool education to the nation’s low-income children ages 4 and 5 and to offer early educational experiences to low-income children who might otherwise come to school unprepared and unmotivated to learn. The program has become one of the most influential and massive federal social experiments in the history of early childhood education. The researchers following this program have discovered impressive long-term effects of early intervention for environmentally at-risk children. Individuals who participated were evaluated some 15 years later. There were 820 participants compared with a group of children who did not have the Head Start experience, and they found that Head Start participants were less likely to be placed in special education classes, were less likely to be retained and require to repeat a grade, consistently scored higher on intelligence tests, and were more likely to finish high school by the age of 18” (Lerner, 2006, p. 250).

This and other early intervention programs for reading are important in helping the children in rural districts to overcome deficits. Rural children are at a disadvantage when the statistics of poverty and educational opportunity are compared with those of their urban counterparts. A good, effective program does not need to be expensive, and teachers do not require extensive training. As research has established teachers need to be quality and committed to working with their students, and they also must be willing to be consistent and put in the time. Students who need help need to be identified and helped early on. This is their best chance for success.
CHAPTER III – Summary

Researchers have identified the five critical components of reading and have concluded that they are all of equal significance in the process of becoming a successful reader. When students have trouble learning how to read the most important factor is identifying these students early on and intervening. This is their best chance for success. Small rural schools have lower reading scores on achievement tests, and researchers have found that there are reasons why. One strong correlation was that of lower socioeconomic status and the lower achievement scores. The other challenges rural school districts face include finding highly qualified staff and having the resources to provide extra services to help all students succeed. Some programs like Save the Children have focused their work in rural areas, giving much needed instruction and assets to the struggling students.

One way of intervening at an early stage is by using research-based reading programs early on in the general classroom. However, rural areas often do not have the necessary funds available. Many times the training for the programs is not easily accessible either, whereas the school districts in the cities have more availability to resources and training. Despite this, technology is beginning to allow easier access to these learning tools. This especially benefits those rural districts which lack resources and funding.

There are many RTI programs that are effective with similar characteristics. Researchers agree the best way to help struggling readers is to identify and intervene with these students at an early age, and the earlier the better (Coleman, 2007; Smith-Burke, 2002). The quality of teachers and their training is a major factor in providing a comprehensive reading program. Teachers who are trained in the programs they are administering, who keep records and consistently evaluate their students are the most successful at helping catch
students who are behind in reading up to their grade-level peers. Administrators play a very crucial role in the success of teachers and students. “A good administration supports teachers in initial training and ongoing professional development consistently increasing their skills” (Smith-Burke, 2002, p.16). Another factor is time: students must be given ample opportunities throughout the day to practice reading skills, and the age appropriate materials must be available. If the two previously mentioned factors are present, growth of a student in the subject of reading will follow.

Many children in rural areas are growing up in poverty. “Rural America is home to 2.5 million children living in deep and persistent poverty. Our past several decades, child poverty rates have been higher in rural areas than non-rural areas”. (AA, 2007). It is very hard to instill the importance of education in children when their parents and grandparents do not promote the benefits of it. In the past, rural children could learn a vocation such as agriculture or mining and stay in the area in which they grew up. Today however, most of the rural students will have to leave once they graduate and move to urban areas to find employment. Education that involves good literacy skills is more important than ever.

Rural schools face many challenges, often times more than their urban counterparts. Though the challenges are many, the schools must find ways to succeed. In some areas, grants that are available have helped rural schools receive the technology they desperately need. Once the technology is available, rural schools can participate in distance training for their teachers and distance learning for the students. Technology also opens up the benefits of pre-literacy software and reading programs to the children who need these interventions most.

The future is not as bleak as it may appear for rural school districts across the United States. Rural areas also have their share of positive happenings. The increase in technology
and grants available to receive the technology grow each year. Young students in these
districts can utilize the programs available to help them with strengthening their reading
skills. Teachers can also access interventions and materials available on-line. The rural areas
have a very diverse population of students, and the diversity; if embraced; can bring about
positive learning experiences in itself. Teachers and staff in the rural areas just need to be
creative and wise in how they utilize resources.
Chapter IV-Recommendations and conclusions

Recommendations

Students in rural school districts have many challenges to overcome. Due to these challenges the students struggle with reading and in many cases are not getting the help or intervention they need to help them. The schools want to help, but have limited resources and limited trained staff. The socioeconomic problems in these rural areas add to the existing problems the schools already face.

There are several intervention programs that are successful in helping at-risk students learn to read. Some of these programs are expensive and require extensive training, and others are successful and require a minimal amount of supplies and training. The quality of the staff teaching the reading program, and the consistency of the time and practice involved all relate to the success of a program or intervention. The rural schools need to work as a team within the school building and throughout the entire community.

Some strategies teachers can use to strengthen reading skills through phonics are phonics games such as sounding out words, and making up nonsense words. Students can do creative things like rhyme words, and put together poetry. Dr Seuss books, and books like these, are a creative way to strengthen phonics skills. All of these activities can help strengthen students’ phonics skills and help them as readers. In many small rural schools materials can be lacking in the classrooms and libraries. Teachers and staff can find simple and cost-efficient ways to provide the books, and lessons learned from these books that promote phonics growth. Another thing that helps strengthen students’ skills in this area is reading aloud poetry, or any type text that has rhythm.
With the limited resources in many rural school districts, volunteers can help with reading intervention and other school activities. Schacter (2000) describes several core elements for a volunteer program to be successful including a certified reading specialist needs to supervise tutors, tutors need ongoing training and feedback, and tutoring sessions need to be structured and contain basic elements: (a) re-reading familiar texts; (b) word analysis activities; (c) writing activities; and (d) introduction to new stories. Researchers also highly recommend that tutoring be intensive and consistent, and tutoring should happen the same time each week to be the most successful. Researchers have identified several characteristics of an effective reading program which will help at-risk students, and no matter the cost of the program as long as those elements listed above are present the intervention can be successful.

Areas for further research

Research indicates there is a correlation between socioeconomic level and achievement scores. An area researchers may want to study further is on-line learning for rural students, both elementary and secondary, and how it might impact rural achievement scores. Researchers may look at a rural district where this type of learning program is available, and compare it to a rural area that does not have these programs in place. Initially on-line programs were available for adults, then high school students, and today there are even young on-line learners. The students to be studied should be selected by their enrollment in the on-line programs, and should be followed to see the impact of the computer-based, on-line programs.
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