HOW TEACHERS USE THE RESULTS OF AN INFORMAL READING INVENTORY:
A CASE STUDY OF ACTION RESEARCH

DISSERTATION
SUBMITTED TO
College of Education
ASHLAND UNIVERSITY

In Partial Fulfillment of the Requirement for
The Degree
Doctor of Education in Educational Leadership

Elizabeth A. Volchko, B. S., M. Ed.

ASHLAND UNIVERSITY
ASHLAND, OH
2010
A Dissertation

entitled

How Teachers Use The Results Of An
Informal Reading Inventory:
A Case Study of Action
Research

by

Elizabeth A. Volchko

In Partial Fulfillment of the Requirement for

The Degree

Doctor of Education in Educational Leadership

______________________________
Dr. Harold E. Wilson, Committee Chair Date

Dr. James Rycik, Committee Co-Chair Date

______________________________
Dr. Ann C. Shelly, Committee Member Date

______________________________
Dr. Jacalyn Wood-Morton, Committee Member Date

______________________________
Dr. Judy Alston, Director of Doctoral Studies Date

Dr. James Van Keuren, Dean, College of Education Date

Dr. W. Gregory Gerrick, Dean of the Graduate School Date

Ashland University
December, 2010
Using qualitative methodology, this case study of action research investigated how fifteen
elementary teachers used the results of an informal reading inventory, the Developmental
Reading Assessment, second edition (DRA2). First-, second-, and third-grade teachers, in
addition to intervention specialists, took part in this study. Data sources consisted of
interviews, group session recordings, field notes, questionnaires, and typed minutes.
Four research questions guided this study: What similarities and differences do teachers
show in ways they use scores? What consensus do teachers reach about the use of DRA2
scores? How does action research work as a vehicle for professional development? How
do intervention specialists perceive that they can use the DRA2?
Participants met for group discussions throughout the 2008-2009 school year. Teachers
were interviewed twice and completed questionnaires. Findings from data analysis
established that participants showed five main similarities in using DRA2 results.
Teachers used the results to monitor and show student growth, inform parents about their child’s reading, group children according to their strengths and weaknesses, group children according to their reading levels, and guide classroom and small group instruction.
DEDICATION

This dissertation is dedicated to my family. They have allowed me to sacrifice family time to work towards the completion of this degree. My heartfelt appreciation goes to my husband, John; my sons, Tim, Scott, Nick; my daughter-in-law, Arienne; my sister, Mary Jane; my father-in-law, John; my dear friend, Stephanie; and my grandson, Ethan. All have supported me and allowed me to pursue this endeavor.

I would also like to thank my parents for everything they gave me throughout their lives: love, opportunities, education, and so much more. This dedication would not be complete without including my constant companions who spent many hours beside me at the computer, our family dogs, Ivy and Tahoe. Thank you for your support and tolerance, and for giving up playtime and walks.
ACKNOWLEDGEMENTS

When I began the doctoral program in 2006, I was fortunate enough to experience classes with a great collection of people in Cohort 9 and a wonderful group of professors. Their collegiality and professionalism enhanced the progression and added value to the learning process. I wish to thank them.

I was fortunate to be assigned Dr. Harold E. Wilson as my mentor. I am grateful to Dr. Wilson, who guided me through both the mentorship project and my dissertation. He has motivated me and inspired me, giving me the necessary confidence to complete my studies. It is with deep appreciation that I thank Dr. Wilson for his support, wisdom, and constant vigilance.

I would also like to express my appreciation to Dr. James Rycik who has shown great patience as he guided me through the qualitative process. His expertise has been invaluable in my doctoral journey.

To the members of my dissertation committee, Dr. Ann Shelly and Dr. Jacalyn Morton, I appreciate your time and participation. I was fortunate to have you for classes, and you are both dedicated, outstanding educators.

To complete this study, a group of teachers volunteered and persevered for a year-long action research study. Without them, there would be no data. I thank Mary Lou, Mary Pat, Stacy, Jayne, Karen, Jeannine, Paula, Jen, Mary, Karen, Chelsea, Liz, Cheryl, and Amal for their time, their input, and their professionalism. I would especially like to thank Cheryl, our typist and technology person. This study would not have been possible
without the help of my dear friends, Sally, whose extraordinary editing skills kept this work literate and readable, and Yvonne, who possesses incredible technical expertise.
# TABLE OF CONTENTS

## CHAPTER

### I.

Introduction .......................................................... 1
Background .......................................................... 1
Problem Statement .................................................. 2
Professional Significance .......................................... 3
Methodology Overview ........................................... 3
Approval ............................................................. 4
Limitations of the Study .......................................... 5
Possible Implications of the Study ............................ 6
Definitions of Key Terms ........................................ 8
Summary ............................................................. 13

### II.

Introduction .......................................................... 15
Theories .............................................................. 16
Best Practices in the Teaching of Reading ................. 20
Informal Reading Inventories ................................. 27
Assessment for Instruction ...................................... 31
The Connection Between Assessment and Instruction ...... 33
Action Research ..................................................... 35
Action Research for Teachers ................................. 36
<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Peer Leadership and Techniques</td>
<td>38</td>
</tr>
<tr>
<td>Data-Driven Decision Making</td>
<td>38</td>
</tr>
<tr>
<td>Summary</td>
<td>40</td>
</tr>
<tr>
<td>III. Methodology</td>
<td>41</td>
</tr>
<tr>
<td>The Research Perspective</td>
<td>42</td>
</tr>
<tr>
<td>Strengths and Limitations of the Study</td>
<td>46</td>
</tr>
<tr>
<td>Setting and Participants</td>
<td>47</td>
</tr>
<tr>
<td>Participants</td>
<td>49</td>
</tr>
<tr>
<td>Data Collection</td>
<td>52</td>
</tr>
<tr>
<td>Summary</td>
<td>56</td>
</tr>
<tr>
<td>IV. Analysis of the Data</td>
<td>58</td>
</tr>
<tr>
<td>Action Research Session Overview</td>
<td>60</td>
</tr>
<tr>
<td>Summary</td>
<td>72</td>
</tr>
<tr>
<td>Research Questions</td>
<td>73</td>
</tr>
<tr>
<td>Question 1</td>
<td>73</td>
</tr>
<tr>
<td>Summary</td>
<td>82</td>
</tr>
<tr>
<td>Question 2</td>
<td>82</td>
</tr>
<tr>
<td>Summary</td>
<td>103</td>
</tr>
<tr>
<td>Question 3</td>
<td>105</td>
</tr>
<tr>
<td>Summary</td>
<td>117</td>
</tr>
</tbody>
</table>
LIST OF TABLES

Table 1. Data Collection Matrix .............................................. 54
Table 2. Using DRA2 Results (Part 1) ........................................ 60
Table 3. Using DRA2 Results (Part 2) ........................................ 61
CHAPTER I

Introduction

School systems are adopting a standards-based curriculum to correlate with the Ohio Academic Content Standards. Knowing the strengths and weaknesses of individual students enables teachers to more accurately and efficiently teach necessary skills noted by the indicators of the academic standards. Formative assessments that direct teaching allow teachers to narrow their teaching focus to meet the needs of specific students. Assessment before teaching is particularly important for students who do not make adequate progress. Assessment of student performance is critical for developing effective instructional policy and designing programs responsive to individual student needs (Kame’enui, Fuchs, Francis, Good, O’Connor, Simmons, Tindal, & Torgeson, 2006). The teacher can assess and diagnose the child’s weak area, plan the most effective interventions, and teach needed skills. If the child still struggles, the teacher might reteach and reassess. It is the analysis of the different “low-stakes” tests that can shed light on how to best help students (Opitz & Ford, 2006).

Background

During the 2006-2007 school year, Kingston Primary School (a pseudonym) adopted the Developmental Reading Assessment, Second Edition (DRA2) as an informal reading inventory (IRI). It is administered to second-and third-grade students in the fall and spring of each school year. In addition, this IRI is given for a third time in January to at-risk students. During the 2008-2009 school year, first-grade teachers began using the DRA2. School districts at this time are expected to show the adequate yearly progress
(AYP) of students. The DRA2 is a leveled IRI with five levels of assessments for kindergarten, seven levels for first grade, six levels for second grade, and four levels for third grade. Levels of assessments are also available for fourth, fifth, sixth, seventh, and eighth grades. The large number of leveled assessments allows teachers to more accurately determine their students’ independent reading levels.

Problem Statement

Kingston Primary School spent two school years adopting the DRA2. As students improve their reading abilities and are tested at higher levels, teachers file results at online sites and record student progress. The problem is that while teachers gain valuable information about the students’ reading abilities, what is being done with this information? What similarities and differences do teachers show in the ways they use the scores? What consensus do teachers reach about the use of DRA2 scores? How does action research work as a vehicle for professional development? How do intervention specialists perceive that they can use the DRA2? These are issues that the staff at Kingston Primary School face after adopting the DRA2. The expenditure alone for this assessment warrants studying the values and use of the product. By understanding the usefulness of assessment results, staff members will see the value in taking the time to administer the DRA2.

The purpose of this case study of action research was to study how teachers use the results of the DRA2, and to see if consensus can be reached on how to best use these results. The study will also look at whether intervention specialists need to use assessment results differently from regular education teachers.
Professional Significance

The ways in which teachers use the results of an informal reading inventory can direct their teaching within the classroom. These results can also be used to increase academic achievement throughout the school. Methods for improving achievement in one school can be transferred to schools throughout the state and the nation. Points of consensus can be described and refined for further development. Areas of discussion on which no consensus is reached need further investigation to determine why consensus cannot be reached and how important consensus is on such matters.

It is hoped that this study of how teachers use the results of the DRA2 will contribute to an understanding of informal reading inventories and how IRI results can be used to increase academic achievement. While much has been written about informal reading inventories and guided reading, this study will show how one group of teachers uses the results to direct their reading instruction.

Methodology Overview

This study is a case study of action research by teachers using a naturalistic approach. The purpose of the study was to record the understanding of human behavior as teachers use assessment results. Practical interests were served because the participants looked at what each person thought the results were and how the group agreed upon those results. All participants and the researcher were interactively linked throughout the process, as all were faculty members at Kingston Primary School. Kingston Primary School has a student population of over 1,150 and is divided into four learning communities. While one learning community consists of only kindergarten and preschool
classes, the other three communities are made up of first-, second-, and third-grade classes. The participants in the study were four teachers from the East Community, eight teachers from the North Community, and three teachers from the West Community. All of the teachers worked with students in first, second, and third grades. Knowledge of how other teachers use the results of the DRA2 will help build collegiality and understanding among staff members. The results of this study will be shared with all faculty members of Kingston Primary School. Points of consensus can be used as benchmarks for future assessments using the DRA2.

Approval

Approval for this study involved a process that began in the summer of 2008. Included in the process was approval from the administrators at Kingston Schools and the Human Subjects Board of Ashland University. Approval from the Ashland University Human Subjects Board was granted on November 25, 2008 (see Appendix A). Permission to complete the study within Kingston Primary School was then granted by the principal, assistant superintendent, and the superintendent of schools. Prior to granting permission to do this study, the assistant superintendent requested that I explain, in writing, how the DRA2 study pertains to the school system’s Continuous Improvement Plan. Included in my response was how assessment practices align with identified Power Indicators. I also explained that the purpose of my study was to determine how teachers use the results of the DRA2 in their classrooms. By exchanging ideas and reaching consensus on how results can be used, participants in the study will benefit, as well as
other staff members. The outcome of this DRA2 study should be increased student performance.

Participants were asked to volunteer in September of 2008, with the understanding that the study would be a commitment of one school year. Twelve teachers from grades one through three, two intervention specialists, and one special education intervention specialist volunteered and signed consent forms.

Limitations of the Study

The limitations of this study are evident by looking at the number of people involved. Since the research took place in one primary-level school with only fifteen participants, the sample size is significantly small. Although all primary grade levels (grades one-three) were represented in the study, no grade level had more than five participants. While these findings may not be generalized to other schools, or even other reading inventories, conclusions of this study should be considered valuable and informative.

Some of the participants in this study were using the assessments for the first time. They did not have the experience in test administration that other teachers in the study possessed. The DRA2 is graded in a subjective manner, particularly at levels above level 28, where students are required to write their responses to comprehension prompts. As in any subjective assessment, interpretation by the assessor affects the outcome of the measurement. Although the DRA2 comes with a rubric for assessing subjective questions, some individual interpretation is part of the scoring process.
Possible Implications of the Study

Through action research results, teachers may agree on how to interpret the results of the DRA2. With a consensus on grading, these teachers may serve as a catalyst for other staff members to work together to gain a shared understanding of assessment results. When the process of assessment is systematically in place and the interpretation of assessment results are agreed upon, the DRA2 will be an invaluable tool for planning instruction at Kingston Primary School. Other schools can use this model for their own action research, or they can adopt the results of this case study for their own uses.

This research study also illustrates how collegiality can build trust. Kingston Primary School is extremely large, with a student population of over 1,150 children. In order to build community among teachers and students, the school is divided into four small schools within a school. The study was comprised of teachers from three of the four learning communities. The fourth community, comprised of preschool and kindergarten classes, does not use the DRA2. The fifteen teachers who participated in the study do not necessarily work together on a daily basis. In fact, teachers from one community may not even see teachers from another community for days or weeks at a time. Lunch periods are staggered to accommodate the student population in the cafeteria, and teachers do not share a common lunch time. However, this study gave teachers the opportunity to meet at least twice a month and discuss how they use the assessment results. This study also helped teachers to understand and appreciate the importance of collaboration. The time they spent planning and sharing their experiences with the DRA2 will facilitate collaboration in the future. A better understanding of the experiences of colleagues and a
greater appreciation for problems experienced by teachers at various grade levels were also a part of this study.

Sergiovanni (1994) described the gemeinschaft-like school as one that is more community-like in nature. This study helped to make Kingston Primary School a more community-oriented facility. Participation in this study group developed a sense of unity and a common purpose of understanding among the teachers. This permeated the meetings and carried over into the regular school day. Teachers seemed friendlier to one another as a result of participating in the group. “Gemeinschaft of mind” refers to a bonding of people resulting from their binding to a common goal, shared set of values, and shared conception of being. Gemeinschaft is essential for building community in schools (Sergiovanni, 1994). As a result of this action research study, the participants may develop a shared set of values for using the DRA2, a common bond through the sharing of their beliefs and understandings, and a clearer idea of who they are as teachers and assessors.

By working together to learn from each other, teachers benefit both themselves and their students. DuFour and Eaker (1998) stated that “the most promising strategy for sustained, substantive school improvement is developing the ability of school personnel to function as professional learning communities” (p. xi). The professional learning community has six distinct characteristics: the teachers share a vision, a mission, and values; the teachers participate in collective inquiry; they work in collaborative teams; professional learning communities are action-oriented and are willing to experiment; teachers in professional learning communities strive for continuous improvement; and the professional learning community is oriented toward results. They understand that all of
their efforts must be assessed on the results rather than the intention (DuFour & Eaker, 1998).

The group of teachers participating in this study had a mission to discover how fellow teachers use the DRA2 results. The action research was collective inquiry. The participants worked as a collaborative team. The group was very action-oriented and willing to experiment with assessments and try new ideas. The adoption of the DRA2 as an assessment indicates that the staff is working toward continuous improvement. The group worked toward finding consensus, the results of this inquiry.

As a team, the teachers worked together to learn from each other. Guskey and Huberman (1995) described how teachers can learn in their workplace:

One of the most salient conditions is opportunities for individuals to work with and learn from others on an ongoing basis. Learning may be enhanced through exposure to a variety of other individuals, particularly those with different knowledge and from others on an ongoing basis. Learning may be enhanced through exposure to a variety of other individuals, particularly those with different knowledge and experiences. Collective learning experiences may provide individuals a greater variety of sources of information and ideas. They may also provide a greater variety of referents for assessing one’s own ideas, performance, and needs for learning. (p. 103)

Definitions of Key Terms

Developmental Reading Assessment

The Development Reading Assessment (DRA) is a research-based assessment with demonstrated reliability and validity. Teachers assess accuracy, fluency, and
comprehension. The primary goal of the DRA is to identify each student’s independent text level and monitor changes over time. Teachers are able to determine their students’ fluency rates as well as their literal and inferential comprehension responses. The DRA Word Analysis is used with students in kindergarten and first grade to help the teacher to identify their levels of phonological awareness and basic knowledge of phoneme/grapheme relationships. This analysis is also helpful for students through third grade who are reading below grade level or struggling with reading development. This measure can be given annually, semi-annually, or quarterly to observe changes. The DRA2 allows students to respond to their reading and share their thoughts about reading with the teacher. Students being assessed at levels 28 and above read the story booklets, respond to questions, and write about their reading. Teachers use rubrics to evaluate students’ levels of thinking about the stories. The DRA2 allows the teacher to assess the students on vocabulary, literal comprehension, interpretation, summary, prediction, and reflection (personal observation). If the text is non-fiction, the students use informational text features.

The DRA2 is an informal reading inventory which provides the teacher with information about how well students are reading according to their fluency, vocabulary, and comprehension skills. This assessment can tell teachers at what level students are reading and how to use the results for better understanding of the assessment. Teachers can then present mini-lessons to small groups or individuals who did not completely understand the skills when previously taught. This also allows the teacher to effectively plan to help students increase reading achievement.
Unlike the other inventories, the DRA2 is a box filled with leveled reading booklets that range from kindergarten through grade three. The DRA2 box includes a teacher’s guide, a volume of blackline masters, a Word Analysis teacher guide, a blackline masters CD, 45 benchmark assessment books, 30 student assessment folders, an assessment procedures overview card, a DRA2 clipboard, a training DVD, the word analysis student book, the Word Analysis training CD, and 46 hanging file folders.

Teachers have access to an online management system available at www.draoms.com. Student data can be stored and managed at a secure site for easy retrieval. This system allows teachers to enter information about the student assessment. The system automatically groups students according to their needs. Reports showing a student’s strengths and weaknesses can be shared with parents and administrators.

Benchmark assessment books were field-tested to ensure grade-level appropriateness and contain fiction, fantasy, and nonfiction. There is also a DRA2 kit for grades 4-8 available at an additional cost (Beaver, 2006).

**Formative Assessment**

Formative assessment is part of the instructional process. When incorporated into classroom practice, it provides the information needed to adjust teaching and learning while they are happening (Garrison & Ehringhaus, n.d.). When information is used to adapt teaching and learning to meet student needs, assessment then becomes formative. Teachers can use information to make necessary instructional adjustments, such as reteaching, trying alternative approaches, or offering more practice. Feedback from formative assessments helps learners to become aware of the difference between their
current knowledge and their desired learning goals (Boston, 2002). Black and Wiliam (1998) contended that firm evidence shows formative assessment is an essential component of classroom work. An important national priority is raising the standards of learning that are achieved through schooling. The development of formative assessment can help raise standards of achievement.

Formative assessments are brief checks on learning throughout the instructional process to assess students’ progress and to pinpoint any learning difficulties they may be experiencing. The primary purpose of formative assessments is to offer feedback on the students’ learning progress (Guskey & Bailey, 2001).

Guided Reading

Guided reading, when teachers work with small flexible groups of students within the classroom setting, is found to be advantageous in teaching students reading skills. The purpose of guided reading is to meet the various instructional needs of all the students in the class, enabling them to greatly expand their reading powers. The teacher is able to help students move forward in their reading development. Guided reading also gives students the opportunity to read at their instructional levels (Fountas & Pinnell, 2001). Reutzel and Cooter (2003) described Vygotsky’s “zone of proximal development” in guided reading as that point in the students’ development where they can do well with some expert help, but could not succeed on their own. Guided reading is a teaching approach designed to help individual students learn how to process a collection of increasingly difficult texts with understanding and fluency (Fountas & Pinnell, 2001).
Informal reading inventories assist the teacher in determining which students to place in which guided reading groups.

*The Daily Five*

The Daily Five is a series of literacy tasks which students complete while the teacher is working with small groups. While the teacher is working with a group, students may choose to read to themselves, read with a buddy, complete word work, listen to a story on tape, or work on writing (Boushey & Mouser, 2006).

*Action Research*

Arhar, Holly, and Kasten (2001) defined action research by teachers as: research undertaken by individuals or groups which is founded on an active ethical commitment to improve the quality of life of others, is critically reflective in nature and outcome, is collaborative with those to be affected by actions undertaken, and is made public. (p. 47)

Hatch (2002) stated that action research is concerned with activity and change and has a rich practice in education. The researcher is quite prominent in the inquiry with a desire for change.

*DIBELS*

The Dynamic Indicators of Basic Literacy Skills (DIBELS) are a set of measures for assessing the acquirement of early literacy skills from kindergarten through sixth grade. They are designed to be one-minute fluency procedures used to regularly monitor the development of early literacy and early reading skills. There are seven measures used
as indicators: phonemic awareness, alphabetic principle, accuracy and fluency with connected text, reading comprehension, and vocabulary. The purpose is to identify children having difficulty acquiring basic early literacy skills in order to prevent later reading difficulties (Good & Kaminski, 2010).

Informal Reading Inventory

An informal reading inventory is an assessment that gives a teacher the information necessary to help plan instruction for guided reading groups and for whole group lessons. Informal reading inventories help the teacher determine students’ strengths and weaknesses in order to formulate effective and focused lessons that best suit the students’ needs.

Summary

Guided reading allows the teacher to concentrate on skills individual students and small groups of children need to master in order to be fluent readers and to develop their reading comprehension. One way to effectively teach small groups is to know which skills are needed and to group children accordingly. If a student has shown mastery of a particular skill, it serves neither the teacher nor the student to repeatedly teach an already-mastered skill. Rather, the teacher can use time more efficiently by focusing instruction on skills which the student or group of students has not yet mastered.

Teachers working together in a community experience powerful professional development. They learn from each other, develop and share ideas, and move forward with a common vision and goal by synchronizing their goals with the goals of the school district. If teachers agree on a common goal for giving an assessment, then they are
looking for similar results. When teachers discuss how these results may have differed from expectations, they can share ideas for helping students. Their efforts benefit the students, the school, and the teaching community.
CHAPTER II

Introduction

The teaching of reading has been a topic of discussion for centuries. Clark (1898) stated that learning to read is the beginning of a child’s formal education. As the child progresses in school, he must constantly make use of the abilities acquired through those early reading lessons. In 1997, almost one hundred years later, Congress requested that a panel of experts be formed to assess the status of research-based knowledge, including the effectiveness of various approaches to the teaching of reading. The National Reading Panel (NRP) was formed and asked to provide a report containing the conclusions of this research. The NRP held regional meetings at various locations throughout the United States. Seven key themes emerged from these meetings, including the following: the importance of the role of parents and other concerned individuals in providing early language and literacy experiences; early identification of, and intervention for, all children at risk for reading failure; the importance of good literature; phonemic awareness and phonics; the need for clear, objective, and scientifically-based information on different types of reading instruction; and the importance of the role of teachers and professional development (National Reading Panel, 2000).

The No Child Left Behind Act of 2001 (NCLB) was a dramatic reform of the Elementary and Secondary Education Act (ESEA). NCLB requires that all money appropriated for this law must be spent to insure that scientifically-based reading research (SBRR) is used in reading instruction. To help make this possible, states are provided
with funds to implement statewide professional development (International Reading Association, 2002).

Due to the findings of the NRP report, the teaching of reading is divided into five categories: phonemic awareness, phonics, reading fluency, vocabulary development, and comprehension strategies. Each category was studied, and best practices based on scientific research were noted. Phonemic awareness is the ability to focus on and manipulate phonemes in spoken words. Phonemes are the smallest units constituting spoken language. Learning the letter-sound correspondences, how to apply these correspondences, and spelling patterns make up systematic phonics instruction. The NRP stated that Allington referred to fluency as the ability to read a text quickly, accurately, and with proper expression. Vocabulary development is a part of reading comprehension. Vocabulary (word knowledge) and understanding what is read (comprehension) complete these five categories (National Reading Panel, 2000).

Theories

The history of theories dates back to 400 B.C. Present day theories regarding the teaching of reading have their bases in these early theories. The American Heritage Dictionary (as cited in Tracey and Morrow, 2006) defined a theory as a set of statements or principles devised to explain a group of facts or phenomena, especially those that have been repeatedly tested or are widely accepted. In the field of education, the traditional definition of a theory is a well-documented explanation for a phenomenon related to teaching and/or learning. The link between theory and behavior is the main reason that
knowledge of theories is essential for optimal classroom instruction (Tracey & Morrow, 2006).

Four early theories applicable to the teaching of reading are The Mental Discipline Theory, Associationism, The Unfoldment Theory, and Structuralism. The Mental Discipline Theory, which can be traced back to Plato and Socrates, centers on the idea that the mind lies dormant until exercised, and learning strengthens the mind. Associationism, which also dates back to ancient times, examines how learning occurs. Learning that assembles and activates students’ background knowledge reflects Associationism because of the emphasis on using connections as a learning foundation. Building background prior to reading is believed to increase comprehension. These two theories were the most prominent educational theories until the Age of Enlightenment, when The Unfoldment Theory emerged. According to The Unfoldment Theory, children learn through their natural curiosity. Structuralism sought to explain the structure of the mind through perception. Tracey and Morrow (2006) stated that reading was then explained through perception rather than in and of itself, according to Venezky. Literacy centers are examples of The Unfoldment Theory application because they allow for the students’ curiosity to build enjoyment of reading (Tracey & Morrow, 2006).

Marie Clay’s work has long been recognized for its value to teachers of reading. Clay’s work with young learners enabled her to focus on emergent literacy and contributed to theory development and research on literacy development (Cox & Hopkins, 2006). Her work also led to the development of the Reading Recovery program, an early intervention for low-performing first-grade children. This program moves children through a series of leveled readers, each more complex in succession (Allington,
With Reading Recovery, teachers are able to build a theory based on the child’s response to particular materials (Allington & McGill-Frazen, 2004).

Behaviorism was the dominant educational theory for more than fifty years. This theoretical perspective focuses on observable behavior changes. In Behaviorism, the outcome of learning is an observable change. The three major theories of Behaviorism are Classical Conditioning Theory, Connectionism, and Operant Conditioning. Pavlov’s Classical Conditioning Theory resulted from his study of dogs associating their food bowls with dinner. Dogs would salivate at the mere existence of their food bowls because they connected the bowls with food. Pavlov then rang bells at feedings, and the dogs began to salivate when bells were rung even though there was no food. An example of this theory in education is when a child who fears school has positive learning experiences and then becomes a successful achiever. The contrast would be when an excited learner has negative school experiences and his learning changes for the worse (Tracey & Morrow, 2006).

Thorndike’s Theory of Connectionism is divided into four laws. The Law of Effect states that if an act is followed by a satisfying change, the possibility that the act will be repeated increases. However, if the act is followed by a negative change, the likelihood of the act being repeated decreases. The Law of Readiness says that learning is aided when less difficult tasks come before related but more complicated tasks. According to the Law of Identical Elements, there is a greater transfer and easier learning when more elements in one situation are identical to elements in a second situation. The Law of Exercise states that bonds become stronger when more stimulus-response connections are practiced (Tracey & Morrow, 2006).
In the classroom, praise for a “good act” is an example of the Law of Effect. The Law of Readiness is evident in the adjusted structure of lessons. The Law of Identical Elements refers to the better readers in a classroom also being the better writers. The Law of Exercise is apparent in students who read at home compared to students who do not read at home and thus are poorer readers.

Tracey and Morrow (2006) discussed how Skinner called his classroom application Operant Conditioning. This has also been referred to as “programmed learning” or “programmed instruction.” Behavioral objectives can be used to execute this theory. Both reading readiness and direct instruction are linked to Behaviorism. A growing interest in finding answers to children’s reading problems followed the publication of *Why Johnny Can’t Read-And What You Can Do About It* by Rudolf Flesch. Flesch’s book resulted in readers who use phonics-based techniques and controlled vocabulary (Alexander & Fox, 2004). Behaviorism remains influential in reading instruction.

Modern reading theories are founded on three premises: Structuralism, Associationism, and Constructivism. Structuralism is reflected in classes that support students’ increased correctness in print awareness. Associationism is seen in contemporary classes that build and trigger students’ background information. The Schema Theory presently used is embedded in Associationism (Tracey & Morrow, 2006). This theory proposes that “knowledge is organized in the brain in complex, interrelated structures in which everything that is known about a particular topic is connected.” (p. 29) Constructivism emphasizes active construction of knowledge by individuals. Dewey’s Inquiry Learning is one Constructivist theory that considers the
effects of both the problem-based approach and the impact of social collaboration on learning skills. Goodman’s Psycholinguistic Theory relies on language cueing components such as the syntactic system, the semantic system, and graphophonic system (Tracey & Morrow, 2006).

Reading theories evolve as the reading environment changes. The present era is considered the Era of Engaged Learning. We have an impressive body of literature available to readers and a growing hypermedia genre to explore. We also have an extensive understanding of human development, and we are experiencing increased longevity of the population (Alexander & Fox, 2004).

Best Practices in the Teaching of Reading

As mentioned above, the teaching of reading has changed throughout history. Schools have used McGuffey Readers, controlled vocabulary readers, basal readers, whole language instruction, thematic units, and literature-based series. The current trend is using leveled books to teach the child at his or her instructional level. Clark (1898) suggested two “remedies” for teaching a child to read. The first was to direct the attention of the child to the mechanics of vocal expression, such as inflection, force, and movement. The second was to “tell the child to get the thought” (p. 8). Gambrell, Morrow, and Pressley (2007) divided best practices in literacy instruction into four areas: perspectives on best practices, best practices for all students, evidenced-based strategies for literacy learning and teaching, and perspectives on special issues.
Perspectives on Best Practice

Perspectives on best practice can be categorized into evidence-based comprehension strategies, the role of the teacher, the ten best evidence-based practices, and the mindset necessary for the incorporation of best practices. The NRP (2000) determined that reading instruction should be divided into five areas: phonemic awareness, phonics, fluency, vocabulary, and comprehension. Gambrell, Malloy, and Mazzoni (2007) argued that motivation, composition, oral language, and critical thinking should also be considered in best practices. In order to help students improve their reading, the teacher must be a diagnostician, identifying students’ strengths and weaknesses and determining potential reasons for reading difficulties (Rubin & Optiz, 2007). The effectual teacher uses a balanced method and incorporates evidenced-based best practices. She constructs lessons on the awareness students bring to school and acknowledges that reading and writing are reciprocal practices. Comprehension is recognized as the crucial goal, and meaning construction is emphasized through exercises that necessitate critical thinking. The educator also presents differentiated instruction and offers opportunities for students to use literacy strategies (Gambrell, Malloy, & Mazzoni, 2007). In order for teachers to make changes necessary for implementing these evidenced-based theories, they must change their thinking and beliefs. Teachers’ beliefs must be congruent with theoretical assumptions of practice (Richardson, Anders, Tidwell, and Lloyd, 1991). The teacher who understands theory and believes in what she is doing in the classroom will be more likely to make changes to implement best practices.

Gambrell, Malloy, and Mazzoni (2007) listed the ten evidence-based best practices as compiled by Morrow and Tracy:
1. Create a classroom culture that fosters literacy instruction.

2. Teach reading for authentic meaning-making literacy experiences: for pleasure, to be informed, and to perform a task.

3. Provide students with scaffolded instruction in phonemic awareness, phonics, vocabulary, fluency, and comprehension to promote independent reading.

4. Give students plenty of time to read in class.

5. Provide children with high-quality literature across a wide range of genres.

6. Use multiple texts to link and expand vocabulary and concepts.

7. Build a whole-class community that emphasizes important concepts and builds upon prior knowledge.


9. Use technologies to link and expand concepts.

10. Use a variety of assessment techniques to inform instruction. (p. 19)

Teachers need to create a classroom culture that supports students in their reading development and motivates all students to read. Literacy activities should be significant to students and echo real life. Scaffolded experiences should also be meaningful and consistent with constructivist ideas. Students require plenty of time to read within the classroom, and reading choices should include all genres. Teachers should use a variety of texts on familiar subjects to reinforce a notion, build upon previous knowledge, and extend critical thinking skills. The constructivist perspective considers literacy a social act; therefore, discussions about comprehension should be both teacher and student guided. New literacies, such as the Internet, should be included in classroom literacy.
programs as preparation for future technology needs. These new literacies also reinforce classroom skills. A variety of assessments, informal and formal, formative and summative, are suggested to engage the student in the literacy act (Gambrell, Malloy, & Mazzoni, 2007).

**Best Practices for all Students**

The International Reading Association (IRA) published this position statement regarding the beginnings of teaching reading in 1999:

There is no single method or single combination of methods that can successfully teach all children to read. Therefore, teachers must have a strong knowledge of multiple methods for teaching reading and a strong knowledge of the children in their care so they can create the appropriate balance of methods needed for the children they teach (p. 4).

Struggling readers need more guided reading opportunities that result in highly successful independent reading. These readers also benefit from direct instruction that extends classroom lessons and is offered in a more intense and personalized manner. English Language Learners (ELLs) benefit from learning opportunities in an environment that affirms their individual and social identity. They also benefit from explicit and systematic teaching of the language. For comprehension, ELLs need to link phonological representation to syntactic and semantic information. Schools also strive to find effective methods to teach struggling adolescent learners. Mastering a reading and learning process that previews text, activates knowledge, focuses interest, and sets purpose helps students to anticipate literacy. Adolescent learners can build knowledge by constructing meaning
and clarifying ideas. These learners can construct meaning by writing group summaries and keeping dialogue journals (Carlo, 2007).

Evidence-Based Strategies for Literacy Learning and Teaching

Strategies for literacy learning include phonemic awareness, vocabulary, fluency, comprehension, writing, and assessment. All of these areas are vital for successful reading instruction. According to both Ehri and Nunes and the NRP, phonemic awareness is one of the best predictors for learning to read (Cunningham, 2007). Students need to learn tracking skills and letter sounds and names. There are several phonics programs. No one program has been proven superior to another. The goal of all phonics programs is to enable learners to acquire sufficient knowledge and use of the alphabetic code so they can make normal progress in learning to read and comprehend written language (NRP, 2000).

According to Blachowicz & Fisher (2007), five guidelines have been established as best practices in teaching vocabulary:

1. The effective vocabulary teacher builds a word-rich environment in which students are immersed in words for both incidental and intentional learning and the development of “word awareness.”

2. The effective vocabulary teacher helps students develop as independent word learners.

3. The effective vocabulary teacher uses instructional strategies that not only teach vocabulary but also model good word-learning behaviors.

4. The effective vocabulary teacher provides explicit instruction for important content and concept vocabulary, drawing on multiple sources of meaning.
5. The effective vocabulary teacher uses assessment that matches the goal of instruction. (p. 179)

Fluency is an important component of reading. It is the ability to read quickly, accurately, automatically, and with appropriate expression. Fluency is critical to reading comprehension because of the attention factor (Cunningham & Allington, 2007). The concept of automaticity has also been linked to the development of proficient reading. Automaticity refers to the capability of employing and managing a number of complex subskills and strategies with slight cognitive results (Allington, 2001). Kuhn and Rasinski (2007) discussed Rasinski’s four principles to help teachers develop effective fluency instruction:

1.) the teacher or some other fluent reader’s modeling of fluent reading for students
2.) providing oral support for students while they themselves are reading
3.) practicing repeated readings of a given text
4.) focusing attention on reading syntactically appropriate and meaningful phrases. (p. 207)

Reading comprehension is a complex, intellectual process involving a number of abilities. The two major abilities involve word and verbal reasoning (Rubin & Opitz, 2007). Comprehension includes the following processes: understanding the words, interpreting sentences and paragraphs, understanding text well, and shaping and using the knowledge gained (Block & Pressley, 2007). To think while reading, students must be able to identify almost all the words, have sufficient background knowledge to call up and connect new information, be familiar with types of print, and be able to see how the
author organized the ideas. Students should have the mindset that reading is thinking and knowing how to apply your thinking in comprehension strategies (Cunningham & Allington, 2007). Miller (2002) discussed the conventions found in nonfiction reading, and she presented those conventions as a system to help students recognize, remember, and begin to understand the purposes of nonfiction writing.

Bromley (2007) stated that “creating a context for writing includes a physical environment that is rich with words for students to use when they write” (p.249). Cunningham and Allington (2007) discussed Calkins’ writing workshop, where children choose their own topics and then write, revise, edit, and publish their work. The authors stated that the highest gains were made in classrooms in which teachers integrated reading and writing with other subject areas. However, the NRP (2000) did not include writing in its report.

Assessment is an important part of any classroom. According to Afflerbach (2007), “the current context of reading assessment is marked by imbalance” (p. 265). This is due to the attention paid to high-stakes tests and the lack of attention given to assessment that could change teaching and learning to read. Effective reading assessment informs educational decisions. Assessment is not standardized test scores, but rather the collecting and analyzing of data to make decisions about how children are performing and growing (Cunningham & Allington, 2007).

Perspectives on Special Issues

Kucan, Lapp, Flood, & Fisher (2007) stated that “interdisciplinary learning experiences that engage students in investigating themes and topics across content areas
create a rich environment for learning” (p. 286). Students are able to make connections beyond texts and reflect on experiences within the text and outside the classroom. Text-to-self, text-to-text, and text-to-world connections all engage the reader in understanding what is read (Allington, 2001). Differentiated instruction is necessary to meet the needs of all students. Reutzel (2007) stated that “whole-class instruction can be used to effectively teach critical components of the literacy process” (p. 323). Flexible, small groups, wherein students work in mixed ability groups, may also be used (Reutzel, 2007).

As discussed previously, technology should be considered when teaching literacy. Computers can have great motivational value, and they can be of great help when individualizing instruction. Websites are available for both parents and children. Several children’s authors have developed interesting websites (Rubin & Opitz, 2007). Technology supplies readers with tools to conceptualize the knowledge they gain from reading and to chronicle their understanding of reading and writing. The writing process is enhanced by the use of a computer because students can concentrate on organizing their thoughts and ideas rather than the tedious process of writing words on paper (McKenna, Labbo, Reinking, & Zucker, 2007).

Informal Reading Inventories

*Information Teachers Can Gain from Informal Reading Inventories*

The use of informal reading inventories for the assessment of reading can be traced back to the 1920s (Pikulski, 1990). Betts is considered to be the originator of the informal reading inventory (IRI). He thought of the idea of an individual inventory in the 1920s, and was using the concept in his reading clinic by the 1935. In the 1940s, Betts
established three reading levels for the informal reading inventory (IRI): independent, instructional, and frustration. IRIs are designed to assess multiple aspects of children’s reading skills, including the identification of these three reading levels (Johns, 2008). These levels represent materials students can read with and without teacher assistance, levels at which students should not be asked to function, and the levels at which they can comprehend material that is read to them. Teachers can gain both quantitative and qualitative information from informal reading inventories. The quantitative information is expressed in grade-equivalent scores, and the qualitative information concerns a student’s strengths and weaknesses in comprehension and word recognition (Burns & Roe, 2007).

The independent reading level is the level at which a student reads with understanding and ease, with approximately 90% comprehension and 99% word recognition. Materials at this level would be appropriate for homework and recreational reading (Burns & Roe, 2007). Characteristics of the independent level include excellent word recognition, excellent comprehension, few or no repetitions, and generally a very fluent reader. At this level, the student can read materials with near perfection. In a retelling, the student should be able to reflect most of the information in an organized manner (Johns, 2008).

The instructional level is the level at which a student reads with 85 percent or higher word recognition and 75 percent or higher comprehension. Material at this level can be used for teaching strategies where the teacher is available to give necessary support (Burns & Roe, 2007). While Burns and Roe suggest a word recognition rate of 85 percent, Johns suggests 95 percent word recognition. The DRA2 allows for 94 percent word recognition rate, and the Qualitative Reading Inventory, 4th ed. (QRI-4) suggests a
criterion of 95 percent accuracy (Beaver, 2006; Leslie & Caldwell, 2006). Determining a student’s instructional level and comparing this level to a student’s grade placement will enable the teacher to estimate the extent of a reading problem. Leslie and Caldwell (2006) stated that Spache described a problem as severe if a first, second, or third grader is more than one year behind in reading. A fourth, fifth, or sixth grader more than two years behind is considered a severe problem. At the instructional level, a student should have good comprehension, good word recognition, encounter a few unknown words, read with some repetitions but be fairly fluent. Less content will be reflected in a retelling at this level (Johns, 2008).

The frustration level is the level at which the student has weak comprehension and word recognition. While Leslie and Caldwell (2006) and Johns (2008) describe a word recognition rate of 90 percent, Burns and Roe (2007) suggest a word recognition rate of 85 percent. The reader is unable to function adequately at this level because the material is too difficult (Burns & Roe, 2007). There may be many unknown words, the reading rate is slow, and both fluency and expression are lacking. Students are unable to deal effectively with information at this level and retellings may be haphazard (Johns, 2008).

The listening comprehension level is the level at which a student adequately comprehends material read by the teacher. This level can be used to determine the student’s potential for moving ahead. A child who comprehends on a listening level of 6.0, but is reading at a 2.0 level, has an excellent chance to improve his reading (Burns & Roe, 2007). The student should be able to comprehend 70 percent of the information at
this level. Teachers are cautioned that reading comprehension and listening comprehension are not the same at the primary grades (Johns, 2008).

**Information Teachers Can Use from IRIs to Plan Teaching**

IRIs are important for diagnosing a student’s reading difficulties. Early intervention can lead to early remedies. Government mandates state that children should be reading at or above grade level by grade three (No Child Left Behind Act of 2001). This law gives teachers just 720 school days to ensure that every child is reading at a third grade level. Teachers can use the results of IRIs immediately to change their teaching. Instructional grouping, curricular materials, and even peer assistance can be revised to meet student needs. Data from the IRI can be reported at once to parents and administrators in the form of reports, notes, charts, or conferences. Data on oral reading fluency and comprehension are very informative during initial skill development (Paris & Carpenter, 2003). In general, IRIs provide developmentally sensitive assessments when teaching focuses on specific reading skills. Harvey and Goudvis (2000) discussed the importance of assessing comprehension:

> The only way we can confidently assess our students’ comprehension is when they share their thinking with us. Readers reveal their comprehension by responding to text, not by answering a litany of literal questions at the end of the chapter on rocks and minerals. (p. 189)

Effective teaching begins with what is known about learners and their literacy. Assessment, which involves collecting information about a student’s learning, is continuous. A delicate balance exists between assessment and instruction (Fountas &
Pinnell, 2001). One way to collect this information is the use of an IRI. The IRI is probably one of the most valuable diagnostic aids because of the information that can be conveyed to the perceptive teacher (Rubin & Opitz, 2007).

A good IRI offers two forms for pretests and posttests and different passages for oral and silent reading. Comprehension questions should be literal, inferential, and text-dependent. The text should be cohesive to allow the reader to identify the main idea. Word lists should be representative of the grade level, and the readability of passages should be representative of book material. The IRI should have specific directions and, ideally, there should be a separate set of passages to determine the listening level (Rubin & Opitz, 2007).

Administering the IRI generally takes between 30 to 50 minutes, depending on how well a student reads, the number of passages read, and how many parts of the IRI are used. While some experts suggest beginning with word lists, the examiner needs to be aware that some students may recognize words, but not be able to comprehend at the same level (Gillett, Temple, & Crawford, 2004). After completing the IRI, results should be interpreted and planning for the most effective instruction can begin. The teacher continues gathering diagnostic data. Using the instructional level of the informal reading inventory, the teacher determines the stage of reading development for the student (Walker, 2005).

Assessment for Instruction

Individual assessment is costly in terms of time and resources. However, if the goal in assessment is to improve instruction, and not just to make simple comparisons of
Assessment before teaching is particularly important for students who do not make adequate progress. Assessment of student performance is critical for developing effective instructional policy and designing programs responsive to individual student
needs (Kame’enui et al., 2006). The teacher can assess and diagnose the child’s weak area(s), plan the most effective interventions, and teach needed skills. If the child still struggles, the teacher might reteach and reassess. It is the analysis of the different “low-stakes” tests that can shed light on how to best help students (Opitz & Ford, 2006).

The Connection Between Assessment and Instruction

Schools today use both formative and summative assessment. Formative assessments can be used to guide instruction, but summative assessments, such as high-stakes tests, usually do not help the teacher to plan further instruction. Both types of assessment may be used to remediate skills. Rubin and Opitz (2007) defined three types of assessment: alternative, authentic, and performance. Alternative assessments are evaluations, other than standardized tests, used to achieve direct or authentic assessment of student performance. Authentic assessments help teachers to measure students’ strengths and weaknesses. Performance assessments call on the learner to show understanding by completing tasks.

Assessment is today’s means of understanding how to adjust tomorrow’s instruction. Assessment in the differentiated classroom should be continuing and diagnostic. By thoughtfully using assessment data, a teacher can modify content, process, or product. Content is what she wants her students to learn. Process describes the activities designed to make sure students use key skills. Products are vehicles through which students demonstrate and extend what they have learned (Tomlinson, 1999).

Carr, Aldinger, and Patberg (2004) discussed performance-based assessment of reading and writing:
The notion that standardized or classroom tests are sufficient for documenting student learning and achievement has been replaced with an emphasis on the cyclical and dynamic process of diagnosis (assessing, planning, teaching). By systematically and consistently using multiple authentic, performance-based measures of assessment, teachers can construct an accurate picture of their students’ strengths and weaknesses to plan and implement appropriate instruction. (p. 204)

Carr, Aldinger, and Patberg (2004) continued by saying that classroom tests will always be a part of assessment. However, using rubrics, checklists, and observation notes, in addition to classroom tests, provides a well-rounded portrait of student achievement.

One characteristic of the most effective teachers, as noted by Cunningham and Allington (2007), is that they regularly assess how children are progressing toward meeting goals, and then they adjust their instruction based on assessments. Students can assess themselves on how they feel about reading. Giving these assessments back to students midway through the school year is a good way for them to see how they are progressing toward meeting their own reading goals.

Integral parts of daily instruction may be the best situations for assessing or evaluating students’ attitudes, thoughts, and behaviors. The relationship between assessment and instruction suggests the importance of observation. Through observation, teachers can learn about their students as readers and develop insights about instruction. Keeping track of these observations can be challenging. While some teachers use Post-it
notes, others use notebooks or adhesive labels. Checklists and charts also help teachers to keep observations systematic and organized (Rasinski & Padak, 1996).

When assessment becomes evaluation, assessment and instruction go hand-in-hand. Teachers can determine, through daily observation, the best methods of instruction to help their students’ progress. Assessment must promote learning, not just measure it. Purposeful assessment tasks promote high-level thinking, problem solving, and performance. While some meaningful assessment is planned, many assessments happen on the spot. For assessment to become evaluation, teachers need to analyze observations and data and set new teaching directions (Routman, 2000).

According to Morrow and Smith (1990), taking time to observe a student’s performance comprises an act of assessment. This allows teachers to gain perspective on the development of each individual child. This kind of assessment should be a part of teaching activities and should consist of tasks and observations focused on the child’s performance and understanding.

The connection between assessment and instruction is vital for effective classroom instruction. Formative assessment that drives instruction and is an integral part of the classroom is a characteristic of a successful classroom. Management of observations and data is left to the individual teacher. The idea that assessment needs to promote learning, not simply measure it, is generally undisputed (Routman, 2000).

Action Research

Kurt Lewin is often credited with the term “action research” which describes work that does not separate investigation and action needed to solve problems (Patterson,
In action research, the subjects are often seen as respondents, participants, and stakeholders. There must be openness and honesty (Denzin & Lincoln, 1998). The aim of this research is to address an actual problem within an educational setting. Action researchers study practical issues which will immediately benefit education. These researchers are interested in examining their own practices rather than studying someone else’s efforts. Action researchers collaborate with others, engage in a process, identify a plan of action, and report their work immediately to share with others (Creswell, 2008).

Action research is an informal process. It is a self-reflective inquiry practice, regardless of design (Creswell, 2008). A significant part of the inquiry is the talk among teachers about the inquiry (Caufield, 1996). Creswell (2008) stated that the “purpose of action research is to improve the practice of education, with researchers studying their own problems or issues in a school or educational setting” (p. 615).

**Action Research for Teachers**

Action research is a type of applied research that contributes to the generation of principles and theories and is, at the same time, action-oriented. It is also a form of professional development. Action research involves an ethical commitment and ultimately improves lives. The action researcher does not pretend to be objective, but brings to light assumptions, beliefs, and actions (Arhar, Holly, & Kasten, 2001).

Teachers who ask questions about their teaching are action researchers. When teachers conduct action research, they experience growth in three domains. In the domain of cognitive and conceptual complexity, the teacher creates a larger repertoire from
which to draw and develops problem-solving skills, research abilities, and reflective practices. Consciousness and awareness are deepened in the moral, ethical, and social responsibility domains. There is a respect for diversity and an understanding and valuing of others. This domain also promotes collaboration and community. The third domain is the psychological and emotional maturity domain. In this domain, the teacher moves toward higher self-acceptance and self-esteem and toward increasing the capacity and ability to nurture these characteristics in others (Arhar, Holly, & Kasten, 2001).

Teacher-researchers are able to develop theory in settings that reflect authentic language use and learning, rather than with contrived artificial experiments (Patterson, Santa, Short, & Smith, 1993). Teachers may do research to increase their own understanding, solve classroom problems, contribute to the world’s fund of knowledge, further social progress, and promote their own welfare (Thomas, 2005). The teacher is really a researcher every day. If teachers are observing and learning, they are researching.

A transaction occurs when participants come together in a particular context for specific meaning-making purposes. New meanings result from the transaction, and in the process all the participants are somehow changed (Caulfield, 1996). Teachers can come together in a particular context to research a topic and find meaning in that topic. From this research, they find common meaning for common problems.

Research conducted by teachers in their classrooms differs significantly from ethnographical and educational research. Ethnographers remain separate from their research, while teachers are participants. However, when conducting their research, teachers must move away from the participant role in order to observe and examine the role of the participant. The authority role in the classroom is assumed by the teacher.
Teacher-researchers are also concerned with reliability and validity in their research. As researchers progress with their studies, the value usually becomes more apparent. Their insights gain validity through honest and rigorous questioning. Reliability can be a concern if replicability is an issue. Reliability can be addressed through analysis of the work (Mohr & MacLean, 1987).

Peer Leadership and Techniques

Peer leadership involves teachers leading fellow teachers. In action research, a teacher may lead her colleagues through the process of research in order to answer common questions and gain an understanding of common issues. New teaching strategies are often introduced through professional development programs. Research shows that the method used for presenting new materials is not as important as the content. Teachers can gain an understanding of a concept in a traditional workshop or a study group. They then will need to gain a clearer understanding of the concept in order to adjust the practice or concept for their own use (Boardman & Woodruff, 2004).

For some teachers, the leadership position is not a comfortable fit. They do not want to appear pompous to their colleagues. Being a teacher-leader among peers can be uncomfortable, but the teacher-leader does not have to be the boss. A teacher-leader just needs to be a master facilitator. Leaders are brave because they show courage and speak out in ordinary circumstances (Routman, 2000).

Data-Driven Decision Making

Data-driven decision making (DDDM) is a powerful tool for improving schools. DDDM uses data that are gathered on a regular basis to inform planning and decision
making, and for reporting activities (eScholar, 2005). DDDM is a purposeful data collection and analysis using designated resources and strategies for communicating about the process (McREL, n.d.). Schools that use DDDM have access to the current needs of students, parents, staff, and community. These schools can then decide what to change and how to institutionalize those changes, determine if goals are being met, engage in continuous school improvement, and evaluate how well current programs meet student needs (eScholar, 2005).

In its most basic form, DDDM is about collecting and analyzing the appropriate data, getting it into the hands of the people, using the data to improve student achievement, and communicating data-driven decisions to the stakeholders (Messelt, 2004). Although DDDM has been around for years, there is a new emphasis on it due to NCLB. Schools are now being held accountable for student success. Administrators use DDDM to monitor both student and teacher performance (Messelt, 2004).

This demand for accountability is the outcome of a lack of acceptable student accomplishment and, in particular, the achievement gap (Isaacs, 2003). Not all schools use DDDM. Some reasons for this are the school’s culture may not focus on data collection, there may be no one to gather and analyze data, DDDM is not a priority for the school system, computer systems may be outdated, teachers have not been trained in its use, and school personnel may have had a bad experience (eScholar, 2005).

Not all uses of DDDM must be at the district level. Teachers can use data from classroom assessments, IRIs, and other types of assessments to guide their instruction. In this case, teachers are using data and what they know about their students to meet the needs of the students.
Summary

Theories about how best to teach reading and how students learn to read have existed for centuries. Although methods for teaching reading have changed and evolved, the purpose has remained the same. The knowledge that all children do not learn in the same way compels teachers to use multiple methods of instruction to meet the needs of their students. Most experts agree that some type of phonics is important when helping struggling readers learn to read. Fluency is important for building comprehension because the reader is able to focus on meaning, not word pronunciation. Assessment that drives instruction enables educators to teach more effectively. When teachers use formative assessments to drive instruction, their students experience much higher levels of achievement.
CHAPTER III

Methodology

The purpose of this study was to determine how teachers use the results of the Developmental Reading Assessment, Second Edition (DRA2) (Beaver, 2006), an informal reading inventory. The information from this study could be helpful to all elementary school teachers who use informal reading inventories and other formative assessments. In addition, this information can be used to drive instruction and inform parents about the reading ability of their child.

A qualitative approach was taken using a practical action research model because the purpose, according to Schmuck, was to research a specific school situation with a view toward improving practice (Creswell, 2008). The study focused on a specific issue within one school. To collect data, teachers were interviewed and also met as a group to exchange ideas, experiences, and information. “Most action research documents how an educational problem was identified, understood, and solved by practitioners” (Glatthorn & Joyner, 2005, p. 44).

This action research study explored specific research questions:

1. What similarities and differences do teachers show in the ways they use the scores?
2. What consensus do teachers reach about the use of DRA2 scores?
3. How does action research work as a vehicle for professional development?
4. How do intervention specialists perceive that they can use the DRA2?

A review of literature indicated that using the results of informal assessments to drive instruction allows the teacher to teach more effectively. The teacher does not waste
time teaching what students already know and is able to focus on skills that they need to master. This results in better planning by the teacher, more efficient use of classroom time, and increased student involvement and achievement.

The Research Perspective

The qualitative approach was chosen in order to allow me to understand how teachers are using assessment results. Participants will also learn from this experience. According to qualitative characteristics (Merriam, 2002), I will be the primary instrument for data collection. This process will be inductive as the group gathers data to build hypotheses about how to use assessment results. The final characteristic of qualitative research which this study will possess is the rich descriptive language.

Action research is applied research that contributes to principle and theories and is also action-oriented. A problem-solving technique is used to improve conditions and processes of the real world (Arhar, Holly, & Kasten, 2001).

Creswell (2008) lists the major principles of action research as identified by Mills:

- Teacher-researchers have decision-making authority to study an educational practice as part of their own ongoing professional development.
- Teacher-researchers are committed to continued professional development and school improvement, a core assumption for any teacher who decides to engage in action research.
- Teacher-researchers want to reflect on their practices. They reflect so that they can improve their practices. They reflect individually or in school-based teams composed of students, teachers, and administrators.
Teacher-researchers use a systematic approach for reflecting on their practices, meaning that they use identifiable procedures to study their own problems rather than using a random, anything-goes design.

Teacher-researchers will choose an area of focus, determine data-collection techniques, analyze and interpret data, and develop action plans. (p. 600)

Teachers who volunteered to participate in this study made a commitment to their students and to their own professional development. Working together, teachers discussed their mutual experiences and reflected upon their individual experiences. They learned from others, shared their anecdotes, and acquired ideas on ways to improve their administration of the assessment. Through discussion with others, they learned how to improve their approach to giving the DRA2. The teachers also shared ideas that have worked in their own classrooms.

Teachers who participate in action research need to be familiar with its four elements. First, there is an ethical commitment to professional practice and the principles that bind it. Arhar, Holly, and Kasten (2001) discussed Dewey’s statement that “this commitment meant building a democratic learning community, one which values both the general social welfare and the full development of human beings as individuals” (p. 39). The authors stated that in action research, this means moving to a more democratic learning community. Stringer listed guidelines (as cited in Arhar, Holley, and Kasten, 2001) for action research:

- Relationships are equal, not hierarchical. Leadership shifts and depends upon expertise and the challenge at hand, rather than by position.
- Communication is authentic, sincere, and open.
Participation is focused, active, and supportive of group aims and direction.

All participants are involved and function in cooperative and inclusionary ways.

The second element of action research is the cycle of reflective practice. Action research differs from other research because the process is a cycle of acting, observing, and reflecting. This cycle leads participants to new questions upon which they act, observe, and reflect, thus creating the cycle effect (Arhar, Holley, & Kasten, 2001).

The final two elements of action research include public character and collaboration. According to Arhar, Holley, and Kasten (2001), Stenhouse called this “systematic self-critical inquiry made public” (p. 42). Collaboration involves working with fellow teachers and students.

Action research is usually brought about by the wish to address a particular problem within an organization. Action research is never done “to” someone, but is done by, or in collaboration with, people within an organization. The researcher needs to be a facilitator who effectively mobilizes the group to work through the four stages of action research (Rudestam & Newton, 2007).

Action research has a rich tradition in education because it is concerned with activity and change. Its primary purpose is to solve problems experienced by people in their professional or personal lives or their community. Action research fits most neatly within the critical/feminist paradigm. The researcher needs to be aware that the participants are the ultimate gatekeepers. In the end, they decide whether the researcher has access to the desired material (Hatch, 2002).
Throughout this study, I acted as a participant-observer. I was the researcher conducting a case study, and the teachers were conducting action research. Creswell (2008) described the participant-observer as an observational role in which researchers take part in the activities they observe. Arhar, Holly, and Kasten (2001) stated that the participant-observer is engaged to different degrees in the activity. Throughout the discussions, I did participate to some degree. When asked a question or my opinion, I responded to my colleagues. I also selected the topics for discussion for each of the meetings.

When I conducted the data analysis, I relied on participant statements through various data. I used multiple sources to conduct this analysis, cross-referencing interviews with digital voice recordings, typed minutes, and field notes. I also carefully examined questionnaires completed by participants. This process of corroborating different data is known as triangulation (Creswell, 2008). Golafshani (2003) stated that Patton advocated triangulation to strengthen a study. Triangulation is a strategy for improving validity and reliability in qualitative research according to Mathison (Golafshani, 2003).

This case study of action research was a qualitative study. In qualitative research, the researcher strives to understand meaning constructed by people. The inductive process is richly descriptive and allows the researcher to be the primary instrument for data collection (Merriam, 2002). For my research, a qualitative approach allowed me to gather information using assorted resources. I was able to triangulate information and draw from various resources to justify my conclusions and increase the validity. The
qualitative approach allowed me to document the participants’ discussions and interviews with rich narrative.

Creswell (2008) stated that document analysis consisted of taking apart the data to determine individual responses and then summarizing it by putting it back together. In this case study, I analyzed the data from interviews, questionnaires, and discussions. I was then able to draw conclusions and interpret my findings. The interviews were semi-structured. For each session, I chose questions that would allow me to gain insight into the teachers’ perceptions. Some questions were direct and others were open-ended. Hatch (2002) determined that “the strength of interviews is that they allow insight into participant perspectives” (p. 97).

This study allowed me to explore the process of teachers determining how they could use the results of an informal reading inventory through extensive data collection. By analyzing data sources such as discussions, interviews, digital voice recordings, typed minutes, questionnaires, and field notes, I was able to interpret similarities and differences of the participants’ perspectives. Hatch (2002) wrote that generalizations are induced from analysis of data collection, and grounded theory is the typical product of this type of inquiry. Merriam (2002) stated that “one could build grounded theory within a case study” (p. 8).

Strengths and Limitations of the Study

This study takes place in one school in a small city in northeastern Ohio. Fourteen participants joined the researcher to complete this study. Creswell (2008) stated that action research seeks to improve specific local issues. Teachers discussed concerns in
their own schools or classrooms. While this study seems to have a small number of participants, the concerns of these teachers are similar to teachers throughout the country who use the DRA2 as an informal reading inventory (IRI). In fact, teachers using any type of IRI or informal reading assessment will find these results very useful.

Maykut and Morehouse (as cited in Webb, 2008) thought that a qualitative researcher is a participant, observer, and an in-depth interviewer, but also reflects on the information gathered and develops meanings and themes. The integrity of the research and the information gathered are subject to criticism and review based on this limitation. Techniques such as peer review, clarification of biases, and member checking are the means used to counter this limitation.

Setting and Participants

This research study took place at Kingston Primary School, which is located in a small northeastern Ohio city. The economic make-up of the city is a mixture of lower income, lower-middle class, middle class, and a small group of upper-middle class residents. Within the last 25 years, higher-priced homes built in housing developments have rapidly devoured farm land and open fields. The school district has experienced tremendous growth, causing overcrowding and class sizes averaging 25-30 students at all grade levels.

The staff of Kingston Primary School is comprised of 41 classroom teachers who teach grades kindergarten through third grade. There are also three preschool teachers, six intervention specialists, and one itinerant teacher who services children with special needs. The support staff consists of one psychologist, one guidance counselor, three
speech pathologists, 19 paraprofessionals, and five intervention specialists who work as inclusion specialists within the classrooms. One principal and one assistant principal are the two administrators at the building.

Kingston Primary School is actually two schools that were joined together in 1992. In order to make the two buildings into one, several new areas had to be created, including a large cafeteria, a music room, a media center, and an office suite. This resulted in a hallway that connects the two buildings. At the beginning of the 2008-2009 school year, teachers moved their classrooms to reconfigure the school. Prior to this time, hallways had been arranged according to grade level. The new configuration established three learning communities that were made up of first-, second-, and third-grade classes. Preschool and kindergarten classrooms were not involved in the reconfiguration. The school is well-maintained and appears very clean to visitors.

Kingston Primary School is the only building in the school district for primary students. There is one intermediate school for grades 4-5, one middle school for grades 6-8, and one high school for grades 9-12. A new intermediate school is being built in order to accommodate growing student population. The school system is one of a small number of districts that have been consistently rated excellent with distinction, the highest state rating, on state report cards. An effective rating was given in 1999-2000; for every year since, the school district has earned an excellent with distinction rating.

Upon approval to conduct this study, I sent out a letter asking for volunteers. More than twenty teachers responded favorably and indicated that they would like to participate. Several did not follow through, but fifteen agreed to participate in the study. All fifteen teachers were women. Although there are three male classroom teachers and
one male intervention specialist, none of them volunteered to participate in the study. The participants were comprised of five first-grade teachers, three second-grade teachers, four third-grade teachers, one special education intervention specialist, and two reading intervention specialists. The total number of participants was fifteen, including myself, one of the classroom teachers. Four teachers were from the newly-established East Learning Community, eight were from the North Learning Community, and three were from the West Learning Community. All of the teachers had more than five years of teaching experience with the exception of the two intervention specialists, who were both in their second year of teaching. Five teachers had more than 25 years of teaching experience. This study was made up of a convenience sampling since participants volunteered for the study.

Participants

Mrs. Emily Christopher

Mrs. Christopher chose teaching as a second career and joined our staff after student teaching third grade in our building. She has taught first grade for seven years. Her first career was working as a respiratory therapist. She recently received her master’s degree in technology.

Mrs. Jill Scott

Mrs. Scott worked as an intervention specialist for two years before joining our staff as a first-grade teacher. She has a master’s degree in technology and has been on staff for eight years.
Mrs. Denise Daniels

Mrs. Daniels is a 31-year veteran with a background in special education. She is very self-motivated to grow professionally and plans to teach for 35 years. She is currently teaching first grade. Mrs. Daniels is a National Board Certified Teacher.

Dr. Pat Johns

Dr. Johns is a 30-year veteran with a doctoral degree in literacy. She loops with her class to teach both first and second grade. She is currently teaching a first-grade class this year. Dr. Johns is a National Board Certified Teacher.

Mrs. Mary Kate Smith

Mrs. Smith joined the staff six years ago as an intervention specialist. After one year, she moved to first grade. She is currently completing her master’s degree.

Miss Marie Jenson

Miss Jenson joined the staff nine years ago as an intervention specialist. She was hired to teach second grade seven years ago. She has both a reading endorsement and a master’s degree. Miss Jenson’s classroom is in a modular building behind the school.

Mrs. Toni Young

Mrs. Young is a 26-year veteran who has a master’s degree in technology. Mrs. Young has teaching experience in both kindergarten and second grade. Currently, Mrs. Young’s classroom is in a modular building behind the school.

Mrs. Jennie Louis

Mrs. Louis has been on staff nine years. She also worked as an intervention specialist before teaching second grade. She recently completed her master’s degree in curriculum.
Mrs. Bridget Joseph

Mrs. Joseph worked as an intervention specialist part of a year before being hired to replace a third-grade teacher mid-year. She has been on the staff four years.

Mrs. Rikki Gregg

Mrs. Gregg has a great deal of teaching experience outside the state. She has taught at Kingston Primary School for 16 years. Although she has always taught third grade at Kingston, she has many years experience in first grade. She recently completed her master’s degree in curriculum and received tenure.

Mrs. Leah Taylor

Mrs. Taylor joined the staff 18 years ago. Her background is in special education, and she has piloted a program in which she taught the sixteen lowest-achieving students for language arts. She has been the grade level leader for third grade.

Mrs. Zoe Maxwell

Mrs. Maxwell is a single mother who has been a special education intervention specialist for nine years. She is licensed to teach multi-handicapped children, but she sometimes works with learning-disabled students also.

Miss Cindy Lehman

Miss Lehman is an intervention specialist who works as an inclusion teacher in regular education classroom. She also pulls small groups of students to reinforce reading skills. Because of overcrowding, Miss Lehman sometimes works with students in the hallway. She has two years experience but has never had a classroom position.
Miss Rosa Abdul

Miss Abdul is an intervention specialist who works as an inclusion teacher in regular education classrooms. She also pulls small groups of students to reinforce reading skills. Because of overcrowding, Miss Abdul sometimes works with students in the hallway. She has two years experience but has never had a classroom position. Miss Abdul worked exclusively with the West Learning Community. She also completed her student teaching in a second grade classroom at Kingston.

The Researcher

I am a 26-year veteran teacher at Kingston with experience outside the district and the state. I have experience in special education and teaching grades one through three. I am a National Board Certified Teacher, having received certification in 2000.

Data Collection

Data collection took place throughout the school year. In addition to notes that I personally took, I also recorded conversations and interviews. Each participant (with two exceptions) was interviewed two times, once in December and once in May. During group sessions, Mrs. Toni Young acted as a recorder and typed notes on the computer. The participants met six times from September through December. The group then met ten times from January through May. Each session was held in my classroom after school on a Tuesday. Sessions varied in length from one hour to one and a half hours. Between the fall and spring sessions, I interviewed each participant one time. At the end of the spring session, I again interviewed the participants. Intermittently after sessions, participants completed a questionnaire regarding the session. These were used as a type
of formative assessment to guide alternative planning for future sessions. Participants were asked to make a one-year commitment to the study. In January, one participant, Miss Abdul, had to drop out because of an after-school job commitment. All other participants continued with the research project (see Table 1).

When participants arrived in my classroom, I provided snacks each session. We used the interactive white board (Smartboard) to record notes and display outlines of questions for discussion. We also accessed the DRA website for answers to questions that evolved from group discussions. Desk configurations varied depending on how the classroom was situated. My favorite desk configuration was a circle where participants were facing each other and no one’s back was to another person. This seemed to encourage interaction from everyone.

In some action research, the participants break up into small groups for discussions. I suggested that this group breakup into smaller groups by grade level. However, the participants were adamant that they wanted to remain in a large group for all sessions. Their reasoning was that someone might say something that would be of importance to everyone. When this research began, the first-grade teachers had just given the DRA2 for the first time. This was a completely new process for them, and they had received very little training. Although Mrs. Daniels and Dr. Johns were very familiar with the assessment, the other three first-grade teachers were just learning the routine. Mrs. Daniels and Dr. Johns had been instrumental in the adoption of the DRA2 by Kingston Primary School.
<table>
<thead>
<tr>
<th>Information Source</th>
<th>Interview 1</th>
<th>Interview 2</th>
<th>Fall</th>
<th>Spring</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Mrs. Christopher, 1st grade</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>2. Mrs. Scott, 1st grade</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>3. Mrs. Daniels, 1st grade</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>4. Dr. Johns, 1st grade</td>
<td></td>
<td></td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>5. Mrs. Smith, 1st grade</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>6. Miss Jenson, 2nd grade</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>7. Mrs. Young, 2nd grade</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>8. Mrs. Louis, 2nd grade</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>9. Mrs. Joseph, 3rd grade</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>10. Mrs. Gregg, 3rd grade</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>11. Mrs. Taylor, 3rd grade</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>12. Researcher, 3rd grade</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>13. Mrs. Maxwell, sp. Ed</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>14. Miss Lehman, inter. Spec.</td>
<td></td>
<td></td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>15. Miss Abdul, inter. Spec.</td>
<td></td>
<td></td>
<td>x</td>
<td></td>
</tr>
</tbody>
</table>

I chose to honor the request of the participants and deviate from the standard procedure. In addition to working on my research paper, these teachers were developing a bond that would unite them. Honoring their request helped to form that identity as a team. The participants knew that their participation was vital to the success of the project.
Therefore, everyone was given plenty of opportunities to contribute to the dialogue. No questions or comments were considered extraneous and of little consequence.

Argus and Schön (as cited in Guskey and Huberman, 1995) “contend that learning in organizations takes place under conditions of surprise or nonroutine circumstances that require heightened attention, experimentation, and determination of the source of problems” (p. 94). At Kingston Primary School, this learning group was a fairly unusual experience. In recent years, only three other professional groups have been formed to work after school. All groups were voluntary in nature, and all groups studied teaching language arts and literacy in some way.

As a research group, the DRA2 study group had one other unusual circumstance. Participants were able to earn one graduate hour of credit for the fall session and another graduate credit for the spring session. This study was then also guided by university requirements in addition to the research model. This credit was optional, but 13 of the participants chose to earn graduate credit for participation.

We began our meetings by reviewing the information found in the DRA manual. We viewed the information that the publisher stated teachers could learn from administering the DRA2. We discussed each point and agreed or disagreed on the importance of each point and whether or not we felt we would obtain that information through the assessment process.

We then discussed each of my research questions. If I felt some people were not participating enough, I would simply go around the group and ask each person to answer the question. I did not want the less-experienced teachers to be intimidated by the expertise of the veteran teachers. I also wanted each voice to be heard. When the teachers
were interviewed in December, I specifically included the questions that were based on the research questions. Even though these questions had been discussed, I wanted to hear each individual answer. I explained to the participants that I was concerned that some people might be too timid to speak out in the group and would be more comfortable talking just to me. My hypothesis was accurate. Some participants spoke freely to me and admitted they were not comfortable answering in the whole group. These responses justified the time spent in interviews for everyone.

Data collected from the case study was then synthesized. Interviews were typed and filed first according to participant and then by question. Discussion group minutes and digital voice recordings were filed chronologically according to date. Questionnaires and field notes were also filed according to date. I then secured each data source in a notebook for easy access. As I collected information about each question, I cross-referenced these sources to insure validity through triangulation. No one data source was considered by itself.

Summary

This practical action research study was qualitative in nature. Questionnaires, group discussions, and interviews were obtained to answer three research questions regarding how teachers use assessments. Fourteen participants volunteered to work after school for one year. The topic of discussion was how teachers used the results of the DRA2, an informal reading inventory. Three main research questions and one sub-question were discussed. A process similar to Stringer’s Action Research Interacting Spiral was followed (Creswell, 2008). The group worked together to reach consensus on
how best to use the results of the DRA2 to guide their instruction and guided reading groups.
CHAPTER IV

Analysis of The Data

The purpose of this study was to describe how teachers use the results of the Developmental Reading Assessment, Second Edition (DRA2) (Beaver, 2006) an informal reading inventory (IRI). The following research questions provided a framework for the study:

1. What similarities and differences do teachers show in the ways they use the scores?
2. What consensus do teachers reach about the use of DRA2 scores?
3. How does action research work as a vehicle for professional development?
4. How do intervention specialists perceive that they can use the DRA2?

This project was a case study of action research. The researcher studied how teachers participated in action research to use the results of the DRA2 to guide reading instruction. For this study, data was collected from interviews with individual participants (I), digital voice recordings (DVR), written notes (WR) and typed minutes of group meetings (TM). Participants also completed workshop evaluations at the end of work meetings (WSE). Throughout the 2008-2009 school year, participating teachers met as a group after school and discussed how they were using the DRA2 results. The study was divided into two sessions, one in the fall and one in the spring. Participants were asked to make a year-long commitment to the study and were able to earn one graduate credit for each session.
Five workshop evaluation questions were answered at the close of each meeting. These questions were developed from Level Four of Guskey’s (2000) critical levels of professional development evaluation. Participants answered these questions:

1. How are you planning to use the information from this DRA2 study session to plan your classroom instruction?

2. What knowledge from this session do you feel was most important as it pertains to your own teaching?

3. What questions do you have about this session that can be clarified when we meet again?

4. What other comments do you have about this session?

5. After today’s session, what other issues related to the DRA2 would you like to see discussed that are not on the current syllabus?

Teachers participating in this study included five first-grade teachers, three second-grade teachers, and three third-grade teachers. Three intervention specialists also participated in the study. Two of these specialists worked with at-risk reading students, and one worked with students with individualized education plans (IEPs). The researcher was also a third-grade teacher. All teachers, except the intervention specialists, were classroom teachers and were responsible for administering the DRA2 to students.

Chapter four includes a short overview that describes the action research project meeting by meeting, as constructed from the minutes of meetings, digital voice recording transcriptions, and field notes. Then, an analysis of findings for each research question is reported.
Action Research Session Overview

The fall session began with a discussion of the DRA2 as an assessment instrument. In subsequent meetings, the researcher outlined what the DRA2 manual stated regarding what this assessment offered the evaluator, and participants discussed how they could use each component and assessed its value to their reading instruction. Other fall discussion topics included the four research questions (see Table 2).

Table 2  Using DRA2 Results (Part 1)

<table>
<thead>
<tr>
<th>Meeting</th>
<th>Topic of Discussion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Meeting 1-</td>
<td>Organizational meeting; teachers decide on participation</td>
</tr>
<tr>
<td>Meeting 2-</td>
<td>Discussion of DRA2 information as determined by manual</td>
</tr>
<tr>
<td>Meeting 3-</td>
<td>Discussion of DRA2 comprehension components</td>
</tr>
<tr>
<td>Meeting 4-</td>
<td>Discussion of what teachers do with the DRA2 results</td>
</tr>
<tr>
<td>Meeting 5-</td>
<td>Discussion of information gained from the DRA2</td>
</tr>
<tr>
<td>Meeting 6-</td>
<td>Discussion of use of this assessment for learning in individual classrooms</td>
</tr>
</tbody>
</table>

The spring session included nine scheduled group gatherings. The last scheduled group meetings was replaced with individual interviews. The topics discussed at these meetings resulted from discussions at the fall session and participant suggestions. During the first spring meeting, a review of fall classes and discussion of midyear DRA2 testing was held. The Word Analysis, an additional component of the DRA2, was discussed. Other topics included how teachers were using the midyear results and what interventions teachers were using as a result of the DRA2 (see Table 3).
The first fall meeting was held on October 14, 2008. Teachers involved in the study looked at Power Point slides outlining the three components of the DRA2: reading engagement, oral reading, and comprehension. A discussion was held regarding the importance of each of these components as they pertained to the teaching of reading at the first-, second-, and third-grade levels at Kingston Primary School.

Table 3  Using the DRA2 Results (part 2)

<table>
<thead>
<tr>
<th>Meeting</th>
<th>Topic of Discussion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Meeting 1</td>
<td>Review fall class, discuss January testing</td>
</tr>
<tr>
<td>Meeting 2</td>
<td>January testing; Word Analysis</td>
</tr>
<tr>
<td>Meeting 3</td>
<td>January testing; Word Analysis continued</td>
</tr>
<tr>
<td>Meeting 4</td>
<td>DRA2 results</td>
</tr>
<tr>
<td>Meeting 5</td>
<td>How teachers are using the DRA2 results</td>
</tr>
<tr>
<td>Meeting 6</td>
<td>How DRA2 results compare to OAT results (grade 3)</td>
</tr>
<tr>
<td>Meeting 7</td>
<td>Intervention resulting from DRA2 assessment</td>
</tr>
<tr>
<td>Meeting 8</td>
<td>Intervention resulting from DRA2 assessment (cont.)</td>
</tr>
<tr>
<td>Meeting 9</td>
<td>Intervention resulting from DRA2 assessment (cont.)</td>
</tr>
</tbody>
</table>

Reading engagement was the first component discussed. In the reading engagement section of the assessment, students respond to questions about what they are reading independently. At Levels 28 and below, students respond to oral questions asked by the teacher. At the higher levels, students complete a written reading survey. The purpose of these questions is to help teachers become aware of students’ preferences and
alert teachers to students who are somewhat passive about reading. The DRA2 states that the reading engagement section also allows the teacher to note the level of support needed by students during guided and independent reading. The student’s ability to read increases as he spends time reading at his independent level (Beaver, 2006).

While discussing this component, teachers talked about reading engagement at their respective grade levels. At the first-grade level, teachers reported that students were given three points for reading to more than one person at home. Teachers questioned whether this was fair to single-parent families. There was some implication that non-English-speaking families also received fewer points for reading engagement. Two concerns were raised: Would the child who preferred reading alone be penalized? Would the students give the answers that they felt teachers would like to hear? The statement that the student’s ability to read increases as he spends time reading at his independent level raised two questions among participants: Was this a correlation or causation? Were students who frequently engaged in reading better readers than those children who simply did not read as often? Although teachers discussed this question, no conclusion was reached.

In the area of oral reading, teachers are able to note the student’s phrasing, intonation, and attention to punctuation. The DRA2 states that reading fluently in longer, meaningful phrases supports comprehension and ease in reading longer, more complex texts. The oral reading component allows the teachers to calculate reading rates and record student miscues in order to determine accuracy. Teachers are also able to note a student’s reading behaviors as evidence of the use of reading strategies. Two of these strategies are self-correction of miscues and decoding words. Study participants stated
that they were concerned that when students read aloud, they did not pay attention to punctuation in oral reading. Teachers wondered if this was a carryover from DIBELS testing, a previously-used reading assessment. Participants also noted that oral reading and reading comprehension don’t always correlate with each other. Two questions were raised during this discussion: Is there research that correlates retelling ability to comprehension? The retelling ability was a concern among teachers at lower grade levels. Is comprehension better if the story is of interest to the child?

The discussion regarding the comprehension part of the DRA2 carried over to other meetings. At levels below Level 28, students are asked to retell the story orally to the assessor. The assessor then underlines the portions of the story on the teacher’s form that the student includes in the retelling. Above Level 28, students are asked to retell the story in writing with prompts such as “at the beginning,” “next,” “then,” and “in the end.” At Levels 28 and above, the students’ abilities to write becomes a critical component in their successful completion of the assessment.

The comprehension portion of the assessment offers students the opportunity to look back in the text to respond to literal questions, support their opinions, and justify any responses. Students are able to make connections from the text they read to themselves, to the world, and to other stories that they have read. This part of the assessment helps the students to predict, interpret, compare, contrast, and evaluate the assessment story they read (Beaver, 2006). The DRA manual states that the ability to justify one’s response is an important skill for all readers. The final component of the comprehension portion allows the student to identify what he thinks is the most important part of the story and
tell why. At the higher reading levels, students are asked to choose a metacognitive strategy to use during their reading.

Participants in this study were concerned about the various stories in the assessment. Previous training from Pearson Learning Group included instructions not to test the child above his grade level. Instead, teachers were instructed to test both fiction and nonfiction at the benchmark levels. Benchmark levels are the levels at the end of each grade level which includes levels 18, 28, and 38. The purpose of the assessment determines how the teacher administers the assessment. Teachers were concerned that students might score differently on fiction and nonfiction assessments. Would they then be comparing “apples to oranges” or using two mismatched assessments? There was additional concern that the stories did not always have enough information to support the questions asked of the reader. The general feeling among participants was that the students were asked to make connections with the stories and what they knew from their life experiences. Not all teachers felt that first- and second-grade students were developmentally ready to make connections. Sometimes, interpretations required readers to possess higher level thinking skills. Teachers also felt that interest level played an important part in the quality of the answers a child gave in response to the comprehension portion of the assessment.

One of the main topics for discussion during the fall sessions was how participants were using the results of the DRA2. Five main uses emerged from these discussions. One use of these results was for grouping students according to their reading levels. Participants were using leveled books according to the DRA2 scores. Students were grouped according to their reading levels.
The second use of results suggested grouping children by their needs. The DRA2 has a component for teachers to check specific skill deficits as they assess a student. When the teacher enters all of the scores on the online-management system, she is able to print off a list of groups of students with similar skill needs. Other teachers suggested a third use of the results. This third use would be to use the DRA2 results to divide the class up for using The Daily Five.

Teachers also discussed that the DRA2 results enabled them to find “Just Right” books for their students (Rogers, 2008). Teachers are referring to books that are at the appropriate independent reading level for the students. These levels could be used to inform parents what books would be best for their children to read independently. Teachers would then be able to suggest a list of books at the child’s appropriate reading level. The report forms available from the DRA web site could also be used to explain a student’s reading needs to the parents. The combination of the reports, the list of books, and how the parents could help their children find appropriate books was believed to be a powerful communication tool for teachers and parents.

Further discussion concerned whether or not a teacher should test a student on both fiction and nonfiction books at the benchmark levels. Some teachers discussed a disconnection between fiction and nonfiction if the aim was to show growth. Their belief was that the assessor would be comparing “apples to oranges.”

DRA2 scores could also be used to determine which students needed to receive the Word Analysis portion of the DRA2. The Word Analysis segment consists of 23 tasks which the teacher administers one-on-one with the students. Not all tasks need to be completed. The assessor can choose the tasks which she feels are most appropriate for the
student. The purpose of this analysis is to give the teacher a more in-depth picture of the
student’s ability to recognize words in his reading. Teachers decided that this portion of
the assessment would be particularly helpful at the first- and second-grade levels.
Intervention specialists could also use this analysis to determine which interventions
would best meet the student’s needs.

Participants used these three questions to frame discussion regarding the
independent reading level:

1. Why should we focus on the independent level?
2. What should we do with the independent level?
3. How can we use the independent level in the classroom?

Several teachers in the group, in addition to other teachers in the school that were
not involved in the action research study, were using The Daily Five. These teachers felt
that knowing the independent reading level would guide them in their use of this program
in their classrooms. Students could be assigned books on their reading level to insure that
they would better understand their reading.

To better understand the independent reading level, participants looked at
excerpts from the administration manual of another reading inventory, the Informal
Reading Inventory (Burns & Roe, 2007). This inventory offered clear definitions of each
of the reading levels: the independent, instructional, frustration, and listening levels.
Conversation followed on whether or not students should be tested to determine their
instructional level. Some participants felt that at the instructional level, students would
make more errors, giving the assessor more information to guide instruction. This led to
more inquiries about why students were not allowed to look back in the test books at the
first-grade levels when they were retelling stories. Participants questioned whether the student’s memory or the student’s understanding of the story was being tested.

The importance of pictures in reading inventories and reading text at the first grade level was also discussed. Some participants felt that pictures were an important part of reading strategies, even an important pre-reading skill. Other participants felt that pictures could be a drawback because students can become dependent on pictures and not learn words. It was mentioned that if a child replaced “rabbit” with the word “bunny,” it was good information for the assessor. The child was substituting a word with a similar meaning.

Participants focused some discussion on the frustration and listening levels. They also looked at word lists as determiners. Participants questioned the importance of each of these levels and how they would affect teaching. All students new to the school were tested with the DRA2. This meant that the teacher needed to quickly determine at what level the child should be tested. Other informal reading inventories use word lists as a means to choose the appropriate level for assessment. The DRA2 does not include word lists. Participants discussed whether using word lists would make finding the student’s appropriate testing level a simpler task. Some teachers stated that they used the benchmark levels of the A-Z books (Reading A-Z, 2010) to help pick the DRA2 level. One suggestion was to use the Fountas and Pinnell (2001) leveling system to establish benchmarks for DRA2 testing. Fountas and Pinnell created a text gradient for organizing texts from easier to harder from kindergarten to eighth grade. The goal of this system is to find the books for instruction and independent reading levels.
The use of word lists was discussed. Some word lists from other reading inventories were viewed and discussed. While the second-grade teachers had adopted a list that they all used, neither the first- or third-grade teams had made such a decision. Even among the participants, no decision could be reached about the importance and necessity of using word lists as determiners for reading assessment.

At the final December session, participants discussed what they had gained from participation in the fall sessions. The participants discussed what they felt was really important and helpful from discussions. The concern for testing both fiction and nonfiction was mentioned. The need to teach higher-level thinking skills in order for students to write more in-depth and inferential answers was included. Teachers agreed that they could use the DRA2 to better plan instruction in reading groups. The question was also raised as to what the teacher should do when the student’s comprehension and fluency do not match. Many of the participants’ suggestions were then noted for further discussion in the spring session.

At this point in the study, participants were interviewed individually and asked the same study questions that had been discussed during the group sessions. Those teachers who were more reluctant to speak out were given the opportunity to voice their opinions and concerns.

Mid-January, the group met to review the fall topics and look at an overview of the remaining sessions. Participants had been asked to write down topics they would like to discuss as part of the action research. A schedule for the remaining sessions was then established (see Table 3).
As a part of the school’s professional development, teachers had been looking at the Ohio Department of Education standards for teaching language arts. In grade-level groups, they had been working to determine which standards they thought were the power standards. The question was asked how the DRA2 aligned with the power standards.

While some teachers reported growth after the January testing of the DRA2, others found lack of growth disheartening. For students who had not progressed, the DRA2 may not have enough books in the assessment box. The question was raised about what to do for students who had already read all books at a given level and were still not progressing. Suggestions were made that a different program such as the Basic Reading Inventory (Johns, 2008), Fountas and Pinnell Benchmark Assessment System (Fountas & Pinnell, 2008), DIBELS, (University of Oregon, 2010) or Reading A-Z (Reading A-Z., 2010) might be used.

Another discussion took place regarding the use of the text during retelling of the story. When teaching comprehension, students are encouraged to look back in the text. When given the Ohio Achievement tests, students are again encouraged to look back in their reading when answering questions. Yet, when testing the DRA2, teacher prompts and looking back counted against the student. It was suggested that if the entire staff agreed on what constitutes validity in the test, then valid information would be received for our purpose. No decision on whether students should look back in the text was ever reached by the group.

Teachers also discussed finding the correct testing level. The question was raised how to stop testing and explain to the student that this was not the best level for them.
Also, some students believed they were reading well but had multiple errors. Teachers discussed whether they immediately retested the child or waited until the next day to retest in order to avoid confusion over the stories being read.

Several other topics emerged for discussion during group sessions. The Word Analysis, a component of the DRA2 meant to determine the exact word decoding errors, was discussed. Teachers were also concerned about moving students up for higher DRA2 levels. The participants talked about where growth was being seen. Each grade level reported what their midyear results were and what they were seeing in the results.

Two other major issues were discussed during spring sessions. First, participants discussed grouping children according to reading fluency needs. The second major issue discussed was a topic that surfaced over and over during the study. Teachers were concerned about what they should do when a student’s comprehension did not match his reading fluency. They were finding that many students were able to read fluently, but did not comprehend their reading at the same level.

Teachers were naturally curious about the correlation of the two major assessments to which students were exposed to in third grade. Not only were they being assessed on the DRA2, but they were also assessed twice a year with the Ohio Achievement Test (OAT). The four third-grade teachers participating in the study brought their scores, and correlations were created to see if students who scored high on the OAT were also reading at higher DRA2 levels. While some students’ scores did correlate, others did not. Discussion then followed as to which assessment was a better determinant of the student’s reading ability.
In the concluding sessions, several topics were revisited. The Word Analysis portion was discussed again. The group also discussed how DRA2 information could be best used to choose children to receive intervention. Teachers were concerned about the best practices for moving students up to higher DRA2 levels for testing. Participants also wanted to know about the testing of fiction and non-fiction levels. The DRA manual suggests that the assessor allow the student to choose the book on which to be tested. Teachers discussed whether it was important if the student chose the book.

The question also was brought up to the group whether or not a universal word list could be adopted to determine a starting point for testing, particularly for students new to the school. Teachers reported that first-grade teachers were using the kindergarten sight list at the beginning of the year. The second grade had adopted a word list, but the third-grade teachers were not using a common list.

The concern for how to deal with a student whose fluency levels and comprehension levels did not match was again discussed. One suggestion was to look at the two skills separately and teach to the deficits of both skills. Teachers seemed to support the concept that comprehension was more important than fluency. They were concerned that a student should understand what he has read. The researcher presented a magazine article written on this topic (Applegate, Applegate, & Modla, 2009). The group read and discussed the article as it pertained to their needs.

Interviews were held midway through the study and again in May. The midyear interview questions focused on the research questions. At the May interviews, the researcher asked open-ended questions regarding the action research and the research process. These interviews were held during April and May of 2009. All participants, with
the exception of one, participated in the interviews held in the researcher’s classroom at Kingston Primary School.

Summary

This study was a case study of action research. For the study, framed on four research questions, a one-year commitment was requested of all participants. The study was divided into two sessions for which participants were able to earn graduate credit. Data for the study was collected through digital voice recordings, field notes, and typed minutes of discussion sessions, interviews, and workshop evaluations. Workshop evaluation questions were developed from Guskey’s level four of the critical levels of professional development (Guskey, 2000).

Fall discussions were based on the four research questions. The researcher began the study by first discussing the components of the DRA2 assessment and the information that Pearson Learning claimed the evaluator could learn by administering the DRA2. Participants discussed the four reading levels: independent, instructional, frustration, and listening. It was determined that participants would like to know all four reading levels for their students. Each level was defined and discussion on how to determine these levels was held. The components of various IRIs were discussed as they related to information gained from administration of IRIs.

Spring sessions continued the discussion concerning the research questions in addition to questions and topics resulting from fall sessions. Progress made on January tests and the testing of fiction versus non-fiction were two topics. Teachers also discussed the best way to find an accurate testing level. The Word Analysis, an additional
component of the DRA, was discussed as a means to learn further information about a student’s strengths and weaknesses in reading.

One topic emerged again and again throughout the study. Participants were concerned what they should do when a student’s fluency levels and comprehension levels did not match. Teachers also wanted to know the best practices for moving students up to the next higher DRA2 levels.

Another topic that surfaced multiple times was the need for a universal word list to assist the teacher in determining the best place to begin testing. The choice of one word list for all grade levels was discussed. Teachers never agreed on the adoption of word lists to help determine where to begin testing. Participants were interviewed after the fall session and again after the spring session. All participants, except one, participated in at least one interview.

RESEARCH QUESTIONS

Question 1

What similarities and differences do teachers show in the way they use the scores?

Findings about what similarities and differences teachers show in the way they use the scores are reported by comparing data sources. First, a report of interviews is presented followed by findings from written transcriptions, workshop evaluations, field notes, and typed minutes (other data sources).
Interviews

The first research question used to frame this study asked, “What similarities and differences do teachers show in the way they use the scores?” The similarities emerged through both interviews and group discussions. Teachers reported benefiting from hearing how their colleagues utilized the assessment results. Differences in the use of the results were more subtle and varied among the participants. Some differences were evident in interviews, but not in group discussions.

There were five main similarities in how teachers used the assessment results.

The first similarity was to monitor and show student growth. This was repeated over and over in the interviews. The teachers knew the students’ reading levels when they came to their classes in the fall because the previous teacher had tested the students in May of the preceding year. In the fall, soon after the school year began, teachers administered the DRA2. This gave them the opportunity to see if students made any growth over the summer and at what level each child was currently reading. Mary Kate and Zoe stated that they used the DRA2 results to monitor student growth. Mary Kate said, “I monitor student growth. It also helps me identify those learning goals, especially comprehension goals.” Jennie commented, “The DRA2 results told me where the students were when they came to me, where they were midyear, and where they were when they exited my class.”

The second use of assessment results was to inform parents about their child’s reading. Several teachers stated that, at conferences, they showed parents their child’s reading level results in a chart and discussed the child’s weaknesses. They also used the charts at Open House to explain to parents the exact skills being monitoring. Emily, Mary
Kate, and Marie all said that they used DRA2 results at conferences to inform parents about their child’s reading. Emily stated, “I use the results to inform parents. It gives a good visual and can be used at Open House to explain to parents.”

The third way teachers used the DRA2 results was to group children according to their reading levels. Eight participants responded that assessment results were very helpful when placing students in leveled groups. Cindy, an intervention specialist, mentioned, “I use it with my teachers to group students in inclusion settings whether it’s comprehension or fluency.” At the first-grade level, both Mary Kate and Emily agreed that they used the results to group children. Both Toni and Marie used the results for grouping at the second-grade level. At the third-grade level, Bridget and Leah remarked that they used the results to group students by level.

The fourth similarity in the way teachers used the DRA2 results was for grouping students according to need. The results revealed the exact needs each child had and teachers then formed groups to teach according to each student’s needs. Mary Kate shared that the results helped her identify learning goals, especially in the area of comprehension. Leah stated, “I’m using [the results] to document progress, group students for instruction, and analyze the children’s strengths and weaknesses.”

The fifth similarity was that participants used the results to guide instruction. As an intervention specialist, Cindy used assessment results to plan with classroom teachers. She said they could plan for a leveled group or a group based on a skill, such as retelling. Mary Kate felt that the DRA2 results helped her with comprehension learning goals. She realized that when the children were doing a retelling, they were actually retelling the pictures in the books and not the story. Emily shared that she used the results to plan
guided reading groups. Marie said that she used the DRA2 results to screen groups by skills. Leah mentioned that she filled out the Focus for Instruction sheets on which assessors could check-mark skills that each child needs to master. Leah also commented she was finding that some students needed all the skill groups she established. She noted, “Some of the kids need the skill of summary, but they are all at different levels.”

The similarities showed how teachers are using the DRA2 results. The differences emerged because while several of the teachers were using the results for grouping, not all the teachers were using them in that way. That was true for each similarity. There was not one way that all the teachers included in their responses. They may indeed use the results all the same way; they did not include that answer in their replies. When asked about how they used the results, seven participants responded by saying, “grouping.” Four included showing progress in their answers. Three participants specifically stated that they used the results to inform parents about the child’s reading level. Emily said, “I use the results to inform parents. It gives them a good visual.” Some teachers used the results strictly for forming reading groups, while others also used the results for spelling groups. Many, but not all, of the teachers used the results to help the students find reading books at their independent reading levels.

Transcribed notes contained discussions regarding how teachers used the results in their classrooms. Leah commented that the DRA2 on-line Focus for Instruction allows the teacher to place students according to need. When the teacher checks the skills that a student needs to improve, the computer will automatically group that student with other students who have similar needs. Rikki discussed how she used this Focus for Instruction to construct one decoding group, consisting of a group of children who needed to work
on improving their decoding skills. Pat said that these reports help the teacher to identify students’ strengths and weaknesses. Jennie thought the Word Analysis component would be helpful for students with decoding problems. Jennie also mentioned that she used the DRA2 results to help her find the appropriate levels for her students when doing The Daily Five.

Written Transcriptions

Pat shared what she personally gained from the DRA2. She stated that it gave her a broader view of each child. By looking at this big picture, she was able to determine if the child could reflect on what he had read and if he could comprehend at a higher level. The DRA2 also gave her an indication of what she must teach in order for the child to advance to where he needed to be in reading. Pat added that many of her first graders could word call, but they could not organize their thoughts about what they had read. When she watched how her students’ reading developed over time, she saw changes.

Jennie stated that the DRA2 targeted higher-level thinking skills beyond the literal level. She went on to say that the DRA2 also targeted higher level comprehension skills and she was able to use those targets to determine student needs.

At midyear, teachers discussed the results of the January assessments. Much consideration was given to the appropriate level for testing a child. Participants wondered if they should test the children at higher levels. They also discussed how their students performed on the assessments. Marie asked what she should do with a student who had been retained and thus had been tested on every book at Levels 12 and 14. Pat suggested testing her on A-Z books at different levels to find an accurate placement, and Jennie
suggested pushing the student up to Level 18 to see if growth was evident at that level. Teachers concluded that moving the children up was the best way to show growth if they could successfully read and comprehend at the higher level.

Denise offered the suggestion that teachers could use the DRA2 results to collect data on what the students knew. She continued by saying, “Instead of taking it at face value, maybe you need to take it as a symptom. If a child can’t blend, maybe it’s an auditory attention issue or something else.” Rosa concurred, “We sent sounds home to work on with her mom. She said these are things she can do. That was one particular skill. It depends on that one particular skill.” The teachers agreed that using the DRA2 results gave them areas to focus on in order to help students overcome deficits.

At one of the last meetings, the teachers discussed whether the DRA2 results could be used to predict success on the Ohio Achievement Test (OAT). According to the DRA2 scores, some of Rikki’s students should not have done well on the OAT. Yet, they scored in the advanced range. Zoe commented, “If you looked at those scores, then there’s almost no reason to give the DRA2.” Denise replied that there was more research behind the DRA2 than the OAT. Mary Kate asked if the OAT correlated to anything. Leah defended the DRA2 by stating that a teacher could see a student’s growth by monitoring DRA2 results throughout the school year. However, the OAT scores were sometimes inconsistent. A student might score higher in the fall than in the spring. Teachers seemed to agree that DRA2 results would not be used as a predictor of success on the OAT.

The question was raised if participants thought the results of the DRA2 could be used to determine which students should receive reading intervention. Marie felt that
using parts of the DRA2, but not necessarily all of the assessments, might be helpful. Denise thought that when students had a big discrepancy between what they could read and what they could retell, it might be an indication that intervention was needed.

Workshop Evaluations

At the end of the meetings, participants completed five evaluation questions about how they could use the information discussed. Included in these evaluations were ideas on how they would use the DRA2 results. Rosa felt she could use the information on the two components, fluency and comprehension, when planning her guided reading groups. Mary Kate wrote, “The Focus for Instruction would help me with flexible grouping and instruction.” Cindy shared that she was better able to analyze DRA2 results and understand how other teachers viewed the assessment as a tool. Toni said she used the Focus for Instruction report for small group instruction. Emily stated that she was planning to use the information she gained to improve her classroom instruction. Pat wrote that she would focus her instruction on making connections, since third-grade teachers felt this was a weak area.

Other teachers had similar ideas. Rikki felt she could meet her students’ comprehension needs, deal with fluency and decoding issues, and be more aware of student interest levels by using the DRA2 results. Bridget stated, “I want to print out the graphs available on-line to show progress for conferences.” Rosa, Toni, and Jennie said they could use the scores to determine who would benefit from the Word Analysis portion. Mary Kate and Emily felt that they would be better able to group students not only by level, but also by need. Cindy thought the results would help her better decide
what skills to work on during intervention. Denise realized how important it was to enter items on the Focus for Instruction page. Bridget mentioned that she would be using more nonfiction in small groups to prepare for the next assessment. Rikki wrote that she would be using the results to group students according to fluency and interest. She also said she would be aware of different levels of questioning. Marie indicated that she would be using the results to group students for the Daily Five and to find books at their levels. Zoe wanted to find new ways to improve her instruction. In addition to grouping students by skills as opposed to reading levels, Leah also wanted to use the results to monitor progress.

Teachers had specific ideas about how they could use the results of the DRA2 to plan classroom instruction. Mary Kate decided she could use words lists from other informal reading inventories to place students at appropriate DRA levels. Bridget felt the results would enable her to form guided reading groups and intervention groups. Cindy stated she would use the results to guide her intervention and find the correct reading levels for her students. Pat planned to compare the word lists from the Basic Reading Inventory (Johns, 2008) with lists from the A-Z Books. Marie wanted to begin to use the Word Analysis portion with her students. Jennie expressed concern about the questions in the DRA2. At Levels 4-16, students were asked to tell their favorite part of the story. Beginning at Level 18, higher-level questions, including the main idea, were included. There seemed to be a big jump in the level of questions that caused her concern about how she could best use the results accurately.
Other Data Sources

Field notes and typed minutes revealed statements that concurred with results already mentioned. The teachers had a variety of ideas regarding how they could use the results from this informal reading inventory. Participants discussed how they could use the results from the fall assessments in particular. Consensus was reached that the DRA2 results could be used to find “Just Right” books (Rogers, 2008) and books for independent reading during The Daily Five. Some teachers said they also used the Five Finger Rule to help students find their own independent reading books (Rogers, 2008). The Five Finger Rule involves a student opening a book to the middle and beginning to read. Each time the child comes to a word he does not know, he holds up one finger. If all the fingers on one hand are raised before the child reaches the bottom of the page, the book is considered too difficult. If the child has no fingers raised, the book may be too easy. Just as Goldilocks looked for porridge, chairs, and beds that were “just right,” students are encouraged to find books that are “just right” for them (Routman, 2003). That is, they understand the story very well without much effort, they understand almost every word, and they can read it smoothly and fluently without much practice.

Another feature that the participants discussed was the Oral Reading Analysis. The group agreed that this portion of the assessment, which allowed the teacher to record how students use word recognition skills, was of great importance, especially at the lower reading levels. The assessor recorded the types of miscues, the oral reading rate, and how the student solved the word recognition problems.
Summary

The first research question asked what similarities and differences teachers showed in the way they use the scores. Five main similarities were identified. First, teachers used the DRA2 results to monitor and show student growth. Second, teachers used the results to inform parents about their child’s reading. The third way teachers used the DRA2 results was to group children according to reading level. The fourth way that teachers used the results was to group children by skill need. The last similar way that participants used the DRA2 results was to guide instruction.

Differences were evident because not all participants used any one of the above similarities. While most teachers used the results to guide instruction, not all participants stated this use. Not all of the teachers used the results to help students find independent reading books. Most of the teachers were able to use the results to show student growth. Similarities and differences were revealed in the group discussions.

Question 2

**What consensus do teachers reach about the use of the DRA2 scores?**

Findings about what consensus teachers reach about the use of the DRA2 scores are reported by comparing data sources. First, a report of interviews is presented followed by findings from written transcriptions, workshop evaluations, field notes, and typed minutes (other data sources).

The second research question asked, “What consensus do teachers reach about the use of the DRA2 scores?” To find this answer, teachers were asked several questions at
both interviews. Those interview answers were compared to find commonalities for consensus.

**Use of Results**

Teachers were asked how they were using DRA2 results. Cindy, an intervention specialist, worked with classroom teachers and grouped students using the DRA2 scores. She remarked, “I use it with my teachers in grouping part time. We don’t keep our kids grouped just on the DRA results, but it helps at the beginning of the year, especially when you don’t know them.” She also used the scores to group students according to need, whether that need was comprehension or fluency. Zoe, a special education teacher, said that although she liked to use the scores to show growth, she was not seeing a lot of growth that particular year.

Three first-grade teachers answered this question. Mary Kate reported that she used the scores the same way the rest of the teachers did. That is, she used the scores to monitor student growth, report to parents, and group children. She felt that the scores also helped identify learning goals for her students, particularly in the area of comprehension. Emily stated that she, too, used the results to inform parents and to group students. Jill commented that the DRA2 scores gave her a handle on where her kids were when they arrived in the fall, where they were midyear, and where they were when they exited first grade. She said, “I particularly liked the comprehension piece. It has more depth than previous assessment tools.”

There were three second-grade teachers who were interviewed. Toni mentioned that she used the DRA2 scores to group students early in the year. She retested all
students who were not reading at grade level in the middle of the year. Marie said, “I used the scores to form guided reading groups and inform parents at conferences where their child was reading.” Jennie shared that the scores gave her a “handle.” She knew where the students were when they came to her, where they were midyear, and where they were when they left second grade. She felt the DRA2 had more depth than previous assessment tools.

Three third-grade teachers answered the interview question. Bridget responded, “I used the DRA results to group students in reading and track progress over time.” Leah agreed, “I’m using the results to document progress, group students for instruction, and to analyze strengths and weaknesses.” Rikki reported, “I am able to use scores for grouping in spelling, fluency, and comprehension. I use the scores for guided reading, too.”

Usefulness of Results in Planning

Teachers were also asked how the DRA2 results were helpful in planning instruction. Cindy felt it helped her to plan with the classroom teachers with whom she worked. However, Zoe did not see a change in her planning as a result of the DRA2. Her students were all on Individual Education Plans (IEPs) and she already had so much information from the multi-factored evaluation required for students to qualify for special educations services that the DRA2 did not offer her any additional information.

At the first-grade level, Mary Kate felt that the DRA2 results helped her with comprehensive goals. She explained, “With that first round of testing, the books were really basic. The kids were telling about each picture but they weren’t telling a story.” She was surprised that the children did not retell the stories. Emily indicated that the
DRA2 results were very helpful when planning her instruction, “I use it to plan guided reading groups and pick leveled books.” Jill stated, “I do not use the results very often unless they have trouble with comprehension.”

Second-grade teachers did not use the results as much as other teachers did. Although Toni found the results helpful, she did not feel they were the “be-all and end-all” solution for planning. Jennie said, “The results have given me a microscopic view as opposed to an over-arching view.” Marie used the results to screen groups by skills.

Third-grade teachers planned differently with DRA2 results. Rikki found the results very helpful, “From spelling to modifying where I need to go with comprehension skills, I use these results. I say I rely heavily on these skills in September, October, and November.” Bridget stated that the results helped her plan how to work with miscues in reading recognition and to plan lessons regarding the writing of answers for comprehension questions. Leah stated that she filled out the Focus for Instruction sheet that was part of the online management part of the DRA2. She continued, “It checkmarks which kids need that skill. Some kids need every group. The other difficult thing that I am finding is that some kids need the skill of summary that are at different levels. That’s how I’m gauging my guided reading groups.”

Using Results to Plan Guided Reading

When asked how DRA2 results were helpful in planning for guided reading groups, many of the answers were the same or similar to how teachers used the results to plan instruction. Cindy responded that while the DRA2 results gave a foundation for the teachers to start grouping, their flexible groups changed continually according to the
skills their students needed to work on. Zoe stated that since she only had five students, they became their own group and she really did not have the same issues as other teachers did when grouping students.

Mary Kate restated that she used the results to identify learning goals, and Emily said that she used the results to pick books for group reading. Jill remarked that she used the results to group her students according to their basic reading skills.

At the second grade level, Toni indicated that she completed the Focus for Instruction page on the online management program. She then grouped according to student need, whether it was fluency or comprehension. Marie commented that she used the results to level her students for independent reading. Jennie said, “I find the results very helpful. I can find the word callers, the fluent readers, those students with no comprehension, etc. It tells me which students have low fluency, and what types of miscues the child makes.”

The three third-grade teachers also used the results for grouping. Rikki shared that she used the results for grouping and planning similarly. At the beginning of the year, she used the results a great deal for spelling, fluency, comprehension, and guided reading groups. She explained that, by the middle of the school year, she no longer relied on the results. Bridget said, “I continually mix up groups so the results are not always that helpful in planning. The results are more helpful when planning for comprehension skills.” Leah admitted that she was likely to group heterogeneously, although she also grouped by needs and skills.
Using the DRA2 to Group Children

Since teachers used DRA2 results for grouping children, the researcher asked them what the different ways were that they grouped children for small group instruction. For intervention, Cindy responded that she worked with classroom teachers to form leveled groups and group for skills, including comprehension and fluency. Zoe stated that in years when she had larger classes, she had both high and low reading groups. She also grouped students to meet their various needs on different days.

The first-grade teachers used different ways to group their students. Mary Kate indicated that she really just grouped by level most of the time. Emily agreed, “I group by level, although I sometimes mix the groups.” Jill said, “I have two high groups where we work on increased fluency, comprehension skills, and details and retelling. I have low groups that work on fluency and phonics skills.”

Second-grade teachers answered similarly. Toni mentioned that she had just pulled her students in groups for sequencing. Marie described how she pulled groups for predicting, higher-level questioning, inferring, and summarizing. Jennie stated that she grouped the students for fluency needs and also for comprehension. She also remarked that she sometimes worked with students reading at higher levels. These students were challenged above their independent levels.

The third-grade teachers also talked about ways they tried to meet the needs of their students through reading groups. Rikki said that she grouped regularly for fluency, comprehension, spelling, and writing. Bridget commented that she grouped for comprehension, inferring, and students making similar errors in oral reading. Leah responded that she also grouped for comprehension, basic reading skills, and fluency.
Teachers stated that they were using DRA2 results to find “Just Right” books at their students’ independent reading levels (Rogers, 2008). When they said that they used the results, they were referring to the chart that correlates grade levels, the Fountas and Pinnell leveled book chart, Reading Recovery levels, DRA levels, and the Reading A-Z chart (Reading A-Z, 2010). Both Marie and Jill used the Reading A-Z books (www.readinga-z.com/correlation-chart.php, 2010). Toni and Jennie responded that they used the Five Finger test. Rikki commented that she used the results and always had students keep three reading books in their desks to read independently. Leah indicated that she used both the Reading A-Z books and Scholastic books, while Emily used only the Scholastic leveled books. Bridget shared that she used the correlation charts, but she moved the students up one level for independent reading. Although Zoe did not use the DRA2 results herself, she felt that they gave parents a realistic picture of their child’s reading level and helped them to find appropriate books for their child. Cindy stated that she continually used the charts and levels to correlate her lessons, but Mary Kate was not using the results for this purpose at all.

Using IRIs to Direct Instruction

All the teachers had a great deal to report when asked to what extent instruction can be directed by IRIs. Cindy responded, “You can group better and you can differentiate your groups better. I had groups based on skills from the results of the DRA. I found it helpful just being able to regroup students.” Zoe said, “It [DRA2] can get you started with reading groups and when you don’t know the kids that well you can hit the
ground running and when you get to know the kids better, you can form groups that are appropriate.” When the teacher knows her students, she can form appropriate groups.

Four first-grade teachers responded to this question. Emily remarked:

When I know what level the student is at, I can group the students and give correct instruction to them. I can move students around in groups according to their needs and pull that group aside and help them with fluency. If a group needs comprehension, then I pull them and try to give them skills for that. Good fluency doesn’t mean that they can comprehend. Poor fluency doesn’t mean that they can comprehend. What I found is that I am always mixing up my groups— not that I did in years past. I focus on what they need. That helps because kids are not being labeled when they are mixed up.

She also said she moved her students up from group to group when focusing on specific skills. Jill commented that she used the IRI results to almost completely direct her reading instruction rather than using running records. Mary Kate felt data from the DRA2 along with teacher judgment or knowledge can direct and inform teacher instruction. When asked to what extent, she replied that she probably relied on 60% data from the DRA2 and 40% experience with the child. Denise thought she could answer the questions two ways, “First, I might do some type of group analysis so you could look at trends in general, so you can look at shared reading. The other way is to look at the individuals where you can look at an individual student’s strengths and weaknesses, and you can monitor these over time.”

At the second-grade level, Marie said, “I use it to show growth from the beginning of the year to midyear and to the end of the year. I also use it to separate
students by skills or reading levels for small group reading instruction.” Toni felt the results were a good baseline that gave valuable information when creating flexible groups and grouping for fluency. Jennie stated that the results allowed her to personalize instruction for each child with a result of almost diagnostic teaching.

Third-grade teachers also discussed ways to use the results to direct their reading instruction. Leah said:

I think you can very much guide your instruction because it pinpoints your strengths and weaknesses in kids which you might not necessarily pick up on. DRA separates literal comprehension from higher level comprehension. And then once you get to the higher levels, it talks about strategies to use when they are reading. You target what strategies the kids are using, plus it makes the kids focus on what strategies they are using.

With the help of the DRA2, Rikki remarked that she was better able to direct her teaching as a result of using it. She also felt DRA2 results gave her a much better idea about how to group, teach comprehension and fluency, and work on word recognition skills. Bridget reported, “I start by organizing groups according to level. Then, as I get to know the students, I did break it down and grouped them according to miscues.” She used some of the students with higher DRA scores to model for other students in the groups.

Using Results to Meet Academic Standards

Participants were also asked to what extent the DRA2 results helped students to meet academic standards. Cindy stated that the types of questions asked in the DRA2
helped students meet the academic standards. The comprehension questions, skills assessed, and ideas were all covered in the content standards. By assessing with the DRA2, teachers can actually find student deficiencies and reteach skills. As an intervention specialist working one-on-one with students, she was able to gain a great deal of information from just one assessment. On the other hand, Zoe did not think the DRA2 was helpful. She said, “I guess it shows you that the kid is making growth, but you are not teaching it. It’s not a teaching tool. I wouldn’t say that you can use it that way.”

First-grade teachers did not completely agree that the DRA2 results could help students meet academic content standards. Mary Kate commented, “The results help teachers analyze students’ reading skills, identify weaknesses, and plan instruction accordingly, so ideally, this would help each child meet the standards.” Emily said that when she tested students one-on-one, it was really clear who met the standards. Looking at DRA2 results helped her to decide if they were at a beginning, developing, or secure level on each of the standards. Although Jill did not think the results helped the students, she did remark, “The results helped me to direct reading so the students could meet those standards.” Denise suggested, “As long as it’s being used as a diagnostic tool and not a benchmarking tool, I think it can help them meet standards.” She cautioned that the DRA2 would not help much if it was used as a summative assessment.

The three second-grade teachers were in agreement when answering this question. Jennie stated that she could only speak about the standards she was most familiar with, those at the second-grade level. She discussed how the fluency, retelling, and comprehension pieces of this assessment were also components of the standards. She emphasized that there were correlations and parallels, but not mirror images. Toni
thought the DRA2 gave the teacher a good place to begin and to know where to go next and on what areas to focus her teaching. Marie said, “It helps show growth. The test asks for main idea, details, connections, and higher-level thinking skills. All of these skills are appropriate at second grade.”

Third-grade teachers felt that the DRA2 could be used as an instructional guide. Rikki remarked, “It helped guide us to where they approximately were.” Leah felt that with literal comprehension and summarizing, the teacher knew where to direct her teaching; however, regarding other areas of the standards, she needed to teach additional skills just for the students to move ahead on the DRA2. Bridget replied, “I think with the DRA2 to help focus for planning of reading groups, it also helped focus on academic content standards.” She felt that the assessment gave good baseline data and by looking at the students’ miscues on the DRA2, she was able to help them meet the academic content standards. With poor knowledge of sight words, miscues were interfering with student comprehension. She had students reading on Level 8 (first grade) in the third grade.

*Relating Content Standards to Needs*

The researcher asked teachers how administering the DRA2 helped them relate the academic content standards to children’s needs. Cindy stated, “It helped me to figure out the individual child’s needs so that I can better differentiate my instruction and change my grouping.” She added, “I just think it pinpoints what the kids need, and it helps not only the students, but also the teacher, with what needs to be taught.” Zoe said that if you know a child’s weakness is comprehension, you know it is a weakness you need to target. Knowing the weaknesses helps the teacher to “red flag” a child.
First-grade teachers had a number of answers to this question. Jill indicated that at the first-grade level, students used context to figure out unknown words. If they self-corrected, they often missed the context. Emily restated that she created a lot of different small groups. This enabled her to switch students around based on what they needed. Before administering the DRA2, she admitted that she rarely switched her students around. Mary Kate felt that, for her, it illustrated the need to develop previewing and retelling skills in the majority of her students. Denise admitted:

I had to review our map for the time so that when I administered the DRA, I was on target with what I needed to expect from the kids. If I was looking at the kids reading above grade level, I wanted them to continue along that path. If they are below expected levels, I needed to be aware of what the benchmark was for that time of year so I could assess where I need to go with them and what differences might be there.

The teachers at the second-grade level all felt this related to small group instruction. Toni adapted the DRA2 for different children. She explained what she was looking for in the testing and had students look at her expectations before and after they answered her questions. Marie felt she was able to group her students and teach to their specific needs at their appropriate reading levels. Jennie also felt she was able to address the differing needs of her students at the appropriate levels. She said that her students reading at Level 20 experienced just as much success as the students reading at Level 28 because she was able to point out how much they had progressed.

Third-grade teachers stressed how important DRA2 results were at the beginning of the year. Rikki pointed out how important it was to get students started on learning the
skills they needed and also to identify the skills that the students had already mastered. Leah reinforced this thought by saying that the DRA2 assessment given at the beginning of the year provided information about where the students were in their reading and what specific needs they had. This enabled her to plan lessons around these specific needs. Instead of teaching all the content standards, she just needed to teach skills the students had not yet mastered. Bridget said, “Through the DRA2, I know how they [my students] process. I have to read for them and tailor directions so they can understand them. Directions have to be cut and dried. Everything has to be literal, nothing inferred.”

Assessment and Instruction Connection

All study participants were asked how they could make a connection between assessment and instruction. As an intervention specialist, Cindy affirmed, “We use assessments to form our instruction. The teacher, after giving the assessment, can then tailor their instruction around the results of the assessment. It helps you figure out what you are lacking or what you want to reteach some of the students.” Zoe stated, “I think the assessment should guide instruction. If you assess kids and they have a weakness, that tells you who you need to work with on certain things.” Since the DRA2 is only required to be given twice a year, Zoe said she needed to give other assessments. She thought the DRA2 should be one of several assessments administered by the teacher.

Four first-grade teachers responded to this question. Mary Kate said, “Assessment allows you to identify students’ strengths and weaknesses and plan your instruction or intervention to address those strengths and weaknesses.” Emily commented, “Once a small group has been taught, I reassess and regroup the students if needed.” She shared
that she used a written assessment in addition to the DRA2. Her rationalization was that if she was not teaching the students how to take a test, she was doing them a disservice. This weekly written assessment was what she used to keep track of her small groups. The assessment was comprised of phonics, vocabulary, and comprehension questions. Jill stated, “We assessed and figured out where the students were. Then we formed groups to meet the students’ needs.” Denise felt that if the DRA2 assessment was viewed as a diagnostic tool, then instruction should feed off of that tool. The teacher needed to look at the assessment and analyze the results in order to feed future instruction.

The second-grade teachers agreed that assessment guided their instruction. Toni said that when assessing, she told her students exactly what they were doing in class and why they were doing it. Marie stated that the assessment guided how and what she used to instruct her students, depending on their needs. Jennie indicated that because of assessment, she could call individual students back to her and help them with their specific needs. She stated that the complexion of her reading groups changed because of the assessment. Her reading groups were fluid, and her instruction was changed as a result of assessment. It allowed her to make a connection with her students’ needs.

Third-grade teachers had differing ideas on this question. Leah remarked, “By using the assessment, it gives you information about where the kids are and what specific needs they have. Therefore, I was planning lessons around the kids’ specific needs.” She said that rather than teaching each content standard, she only taught the information to the children who needed it. Rikki’s response was concerned mostly with the fact that her students’ assessment scores did not match their achievement test scores. The achievement test scores from the fall Ohio Reading Achievement Test were higher than the assessment
scores from the DRA2. In this case, she was not sure if she should use the DRA2 assessment scores to guide her instruction. Bridget thought she was getting better at making a connection between assessment and instruction.

Written Transcriptions

During our discussions, the participants reached consensus many times regarding the use of DRA2 results. In both their conversations and their interviews, they discussed the assessment and how they could best use the results to guide their reading instruction. When discussing about the importance of the independent reading level, Marie and Rosa agreed that, during The Daily Five, they wanted their students to read books they could understand during their “read-to-self” time. Rosa and Jennie agreed that students could also be taught at levels slightly higher than their instructional reading level. Jill mentioned that she relied on running records, and Jennie added that there are other tools available to determine reading levels. Zoe pointed out that there were always going to be “quirky” kids who could not read well but were able to understand and comprehend what they read.

When asked why we should focus on the independent level, participants had several comments. Denise stated that we used the assessment to show student growth. Pat said that if we only used the DRA2 to show growth, that was a weakness. The assessment gave so much more information, but she felt it had a weakness because it did not give a student’s instructional level. Emily said that she liked using the assessment to find books for her students to read at their independent levels.
The discussion then turned to the use of pictures in reading assessments. Some informal reading inventories have no pictures and some, such as the DRA2, do have pictures. The participants discussed whether the pictures were a hindrance or a good correlation to the books students read at their own levels. Further discussion was held on the use of pictures and how it affected the student’s understanding. Pat commented that she could understand the use of no pictures at the high school level, but not at the elementary level. Emily agreed that at our level, pictures were developmental. Rosa wondered if pictures could be a drawback at the lower levels. If a child saw a rabbit in a picture and read the word “rabbit” as bunny, the teacher would not know if the child knew the story or the picture. Denise said she felt a child substituting the word “bunny” for “rabbit” was really good information. The child recognized the animal, but he did not know the word.

While discussing the instructional level, Pat explained her rationalization. She stated that when the independent reading level is determined, the assessor only has one or two word recognition errors. That may not be enough to determine the child’s word recognition errors. She said that an example would be if the child made two “sh” sound errors. The assessor would know that problem, but might not be aware of the other decoding issues the child may have.

Teachers also discussed students self-correcting as they read. In an informal reading inventory, a self-correction was counted against the reader. Bridget stated that students were told to go back and reread if they did not understand what they read. She added that if we saw a student going back and self-correcting, we at least knew the student comprehended enough to recognize an error. Rosa agreed that self-correcting was
a good skill. Denise said she was bothered by students having to close their books for a retelling. They were not allowed to go back and look at the pictures. We taught children to go back and look for errors in their work, yet we did not assess them in a similar manor.

Students looking back at stories, when retelling, was a topic of another meeting. Conversation began when the researcher suggested that students needed to look information up in the text regularly in order to develop and use that skill when responding to a teacher-directed prompt. A discussion followed about why students were encouraged to look back in the text to answer written questions at Level 28 and above, yet they were not allowed to look back at the lower levels. Since teachers allowed students to look back in their books, consensus was reached that allowing students to look back in the test booklet was not an issue.

Written transcriptions revealed that teachers agreed they used the DRA2 results for grouping students, focusing instruction, informing parents, and determining reading levels to help students find independent reading books. Teachers noted specific ways they used the results and how these results were valuable when planning their reading instruction.

As teachers discussed the various types of reading levels, consensus was reached on the need to know all four reading levels for each student. Zoe thought that knowing a special education student’s listening comprehension level would be very helpful because she could better match books to her students. Marie wanted to know if a student’s frustration level corresponded to fluency or comprehension. When the researcher stated that the listening comprehension level was the level at which a student comprehends 75%
of the material, Jill agreed with the idea that students might be able to read at this level if there were no limiting factors such as physical and emotional disabilities, lack of motivation, or inadequate instruction.

Teachers reached agreement about grouping students according to needs. Bridget and Rosa felt that when grouping students, it was imperative to group them according to skill as opposed to by level.

One area on which teachers could not reach consensus was whether a common word list was a good starting place to decide at which level to begin testing a student. Rosa mentioned that after seeing the DRA online, she was able to make better judgments when planning for reading groups. She then suggested that the teachers adopt a universal word list at each of the grade levels. These lists could be used to determine a student’s fluency level, especially if his fluency level and comprehension level did not match. Cindy stated that fluency versus comprehension was definitely an issue. When a student’s fluency and comprehension did not match, how could the teacher find an appropriate level between the two areas? Opinions about fluency versus comprehension and word lists continually crept into conversations at several of the group meetings.

The researcher asked the teachers what their feelings were regarding common word lists that would used by the entire staff. Pat thought that for comparing students, a common list would be useful, but she did not feel it would be worthwhile if the purpose was to use it for guided reading groups. Toni asked if it would not be easier to just use the same list all the time. Jill said that if anyone had a great list, she would like to use it. Pat commented that second-grade teachers had adopted the Jerry Johns revised word list (Johns, 2005), although it had nothing to do with the latest adopted reading anthology.
Jill replied that not all first-grade teachers used the anthology. Mary Kate stated that she was using the word list that came with the A-Z book site (Reading A-Z, 2010). Rosa mentioned the “no excuse” word list. This list was used by a third-grade teacher who was not participating in the research project. The word list had that name because there was no excuse for getting any of the words wrong. Marie reported that she used sight words in her students’ word work. Jennie’s students had their own personal lists to learn. Rikki stated that she used a list of 100 words that a former teacher had shared with her. She used four words each week. Jennie indicated that she felt students needed word families. Bridget agreed and stated that children who did not know word families did not know sight words.

Discussion continually returned to the discrepancy between fluency and comprehension. Teachers seemed to think it would be best to use the lower of the two scores to best meet a student’s needs. Zoe said that comprehension should be more important than fluency. Denise remarked that one of her first-grade students had just asked her in a rather dumbfounded voice, “Do you mean the pictures match the words?”

*Workshop Evaluations*

Teachers felt free to write comments on their evaluations that they might not have been comfortable stating out loud to the group. Cindy discussed the need for common language and more training. Emily felt that we needed to discuss skills grouping and the areas in which students needed help. Both Cindy and Denise mentioned the need to discuss assessment using fiction versus non-fiction. Jennie, Leah, and Rikki wanted more clarification on the testing of fiction and non-fiction. The fiction versus non-fiction quandary recurred as a major discussion topic throughout the sessions.
Another topic that consistently appeared on evaluations was the use of word lists. Both Cindy and Bridget mentioned the value of discussing words lists. They felt that using a word list to find a starting point for determining a student’s reading level would be helpful. Jennie found this discussion helpful and planned to re-evaluate her lists.

Other Data Sources

Both the field notes and typed minutes supported the interviews and written transcriptions. Teachers decided they needed a purpose for giving the DRA2. The reasoning was that a common purpose should be decided upon in order to effectively administer and score the DRA2 at all levels. The Word Analysis portion was discussed, and teachers agreed that this portion of the assessment need only be given to students who displayed at-risk reading behaviors. Teachers talked about issues with children retelling stories. At lower levels, students were not allowed to look back on the DRA2 in order to stimulate their memories. At the upper levels, they no longer tried to look back to include important details. Some teachers felt that retelling had a direct correlation to their comprehension. If the reading selection was of interest to the student, his comprehension and retelling was better.

The debate about testing fiction versus nonfiction was of great interest to all participants. In the lower-level assessments, the DRA2 does not offer a choice of nonfiction; these choices are specifically included at benchmark levels where students are expected to be reading at the end of each grade. Representatives from Pearson Learning, the company that markets the DRA2, instructed teachers that students should be tested on both fiction and non-fiction when both texts were available. The question came up
whether teachers had the time to test each student. The DRA2 takes a minimum of 10-20 minutes per student. The purpose of using the DRA2 is important in order to determine how much time should be spent in assessment administration.

Participants also questioned the purpose of some of the assessment questions that required higher-level thinking. Some teachers wondered if all third-grade students were ready for this type of thinking. For some questions, students were asked to make a connection. Teachers were not sure if the assessment was testing the students’ reading or their background knowledge.

A great deal of time was spent during group meetings trying to reach agreement regarding using the DRA2 results. The discussion about reading fluency versus reading comprehension levels recurred throughout the project. When a discrepancy occurred, teachers were unsure which level was a better indicator of a child’s true reading ability. The teachers questioned if they should use the lower of the two scores to determine their students’ reading levels. They also wondered if they should look at fluency and comprehension separately when the two scores did not match.

The subject of the effect of student interest on the results was another topic of discussion. The DRA2 suggests that students pick their stories. The participants questioned if comprehension is better if the student chooses the story. Does student interest level positively affect comprehension? Teachers seemed to agree that the appropriate level of texts was not enough, and that texts still need to be of interest to students.

Participants also discussed the four reading levels and which levels were most important to them for planning instruction. The DRA2 identifies a student’s independent
reading level. While some teachers wanted to know all four levels for each of their students, others did not feel that knowing all four levels was necessary. They did think the listening level would be of importance for students with Individual Education Plans (IEPs) as they got older. Teachers would be able to choose higher-level books that students might be able to comprehend if the books were read to them.

Discussion evolved about how to determine which level a teacher should begin testing the students. Several of the teachers wanted to use word lists to determine the starting point. Since the DRA2 does not include word lists, the Informal Reading Inventory (Burns & Roe, 2007) and the Basic Reading Inventory (Johns, 2008) were examined. The use of benchmark books from the Reading A-Z Books (reading a-z.com, 2010) was also discussed. No consensus was reached about using word lists.

Summary

Teachers discussed at great length how they were using DRA2 results. Most teachers reported that they used the results similarly. All data sources contained the same general information. Teachers at all grade levels were using the DRA2 to group students by both reading level and specific needs. Teachers agreed that using the results to inform parents was helpful. They also monitored and tracked student progress. The DRA2 afforded teachers the opportunity to analyze students’ strengths and weaknesses. DRA2 results were also used to help find students’ independent reading levels. Consensus was reached that the DRA2 results were useful in planning guided reading and whole group instruction.
Five main similarities became apparent in the way the teachers used the assessment results. The first similarity was that teachers used the results to monitor and show student growth. The second similarity was using the results to inform parents about their child’s reading. The third way was to group children according to their reading levels, while the fourth way was to group children according to their strengths and weaknesses. The last way that teachers used the results was to guide their classroom and small group instruction. Teachers had different ideas for using the results, but all found ways to plan their classroom instruction based on the DRA2 results.

Teachers did not reach consensus as to what extent DRA2 results helped students to meet academic content standards. Participants had various ideas on this subject. Most stated that the DRA2 aided teachers in focusing their instruction which, in turn, helped children meet the content standards. Teachers also had a variety of answers about whether administering the DRA2 helped them to relate the content standards to their students’ needs. In general, teachers felt that the DRA2 results guided their planning for small group instruction. By knowing exactly what needs to work on during small group instruction, teachers were able to relate the academic standards to their students’ needs.

Agreement was reached that a strong connection existed between assessment and instruction. Most teachers agreed that assessment allowed them to direct instruction to the specific needs of their students. This could be achieved by small group or whole group instruction. For some teachers, teaching the specific skills needed eliminated wasted time spent on teaching skills students had already mastered.

A brief discussion concerned the use of pictures in assessments. While some IRIs contained pictures, others did not. Teachers agreed that pictures were part of reading
development. This segued into a discussion about the independent, instructional, frustration, and listening reading levels. Most teachers thought it would be helpful to know all reading levels, and they agreed that additional miscues gave important information about a student’s word recognition skills.

One topic on which teachers never reached consensus was the need for a common word list. Younger teachers were in favor of a common list that could be used to find the level at which to begin testing. Older teachers did not see the need for such a list.

Lengthy and recurring discussions took place concerning fluency versus comprehension. All teachers reported they had students who could read fluently but did not understand what they had read. Teachers were unsure if the fluency level or comprehension level was the accurate indicator of a child’s true reading level. Participants also questioned if they should view the two scores separately when there was a discrepancy.

Question 3

**How does action research work as a vehicle for professional development?**

Findings about research as a vehicle for professional development are reported by comparing data sources. First, a report of interviews is presented, followed by findings from written transcriptions, workshop evaluations, field notes, and typed minutes (other data sources).

*Interviews*

The third research question asked, “How does action research work as a vehicle for professional development?” The teachers discussed how they were assessing students
and what they were doing with the results. Three of the four first-grade teachers were
administering the DRA2 for the first time, and they had received very little training prior
to giving the assessment. Teachers at the second- and third-grade levels received slightly
more training and had more experience with the assessment. None of the participants had
ever taken part in organized action research. In interviews, teachers were asked three
questions regarding the process of action research. The first question was asked at the
midyear interviews, and the other two questions were asked during the end-of-year
interviews.

Helpfulness of Group

At the midyear interviews, participants were asked midyear how their
participation in the group helped them to use the results more effectively. Ten teachers
affirmed that they enjoyed hearing how other teachers were using the DRA2. The other
participant said talking about all the issues and all the benefits was helpful. Cindy stated
that she enjoyed the different perspectives and sharing what other teachers experienced
during the administration and scoring of the assessments. Zoe said that she enjoyed
hearing what teachers did with the DRA2 results.

The first-grade teachers found the experience of others especially helpful. Jill
admitted that since she did not read the manual, the discussion was quite helpful. She
learned from other participants. Mary Kate replied, “Just hearing how the other teachers
were giving the assessment- the kind of training we had- I couldn’t get my head around
it. . . . I can get a broader sense of what the DRA assessment is.” For her, matching the
DRA2 levels and results with the Fountas & Pinnell correlation chart (Fountas & Pinnell,
2001) was very helpful. Emily asserted that hearing from experienced teachers added to her confidence in administering the DRA2.

Three second-grade teachers responded to the question. While Toni commented that it was nice to hear how other teachers used the DRA2, Marie said she enjoyed hearing discussions about the assessment and how others administered it. Jennie claimed that the action research work gave her three solid foundations. First, she was able to collaborate with other teachers. Second, while there was no perfect assessment, administering the DRA2 made her a better teacher. Third, she believed her students were learning more, and she was able to apply what she learned in the group the very next day in her classroom.

The third-grade teachers responded similarly. Rikki affirmed:

The conversation in the group helps me to see the difference in teaching styles from the lower grades. In first and second grade, I know there was not writing on the DRA assessments. When I give the test in the fall, this may have been their first writing experience.

Bridget felt that talking about all of the issues and benefits associated with the assessment was helpful. She stated she was able to use the results more effectively than she did before. She added that she could use the results to show parents exactly how their child was progressing. She also thought she had good information to pass on to other teachers. Leah conveyed that using the DRA2 made her a better evaluator. Before using the assessment, she randomly picked books for her students. After using the DRA2, she was careful to pick both fiction and nonfiction. She felt she did a better job of grouping her students, rather than just using curriculum maps.
Action Research as a Process

When interviewed in May, each participant was asked what she thought of the process they had been involved in during the past school year. How did they view this action research process? All participants responded favorably for various reasons. Cindy said that she enjoyed the process:

I found it to be worthwhile because during our busy school day, we don’t often get time to talk to our peers about how something works for them and learn how they are doing it, things you wouldn’t ordinarily be able to do during the school day.

Zoe stated:

I like it because it’s putting people’s heads together, finding common ground, and discussing what has worked for people and what hasn’t worked so you don’t feel like you’re alone. It translates directly to what you are doing in the classroom.

All four first-grade teachers replied that they were learning a great deal since they were new to the assessment. Mary Kate admitted that she felt a little lost at first, but the whole process helped her to become more familiar with the DRA and how she should use it. Emily said:

It was great to hear all the other teachers’ thoughts on what they are doing with the results. I can learn from what they did and take it into my classroom. It helped me to remember the process better and to make changes in my [reading] groups. I never grouped differently before. . . . I really liked the process because
this was my first year and other people were coming up with the same question.

Jill stated that she thought the action research process was the best way to learn. She was able to take information from others and form her own opinions. Denise found the process, in general, to be quite powerful. She felt that the action research our group did was especially successful because of the teachers involved. They were interested in being there and did more than just spend time in the meetings. The participants felt the way the researcher directed the group made the process very pertinent.

Second-grade teachers also found the action research process to be valuable. Toni mentioned that she liked the process because it was helpful. She thought it was nice to hear other teachers’ points of view on the different aspects of testing and using the results. Marie replied she really enjoyed discussing how everyone used the DRA2 at different levels, not just in second grade. She learned from the struggles other people had and how they found answers to their problems. Jennie acknowledged, “When I first started doing the DRA2, I viewed it as a means to an end. Now I view it as a process.” For her, the action research caused a paradigm shift that made her realize the entire assessment process was important and not just the end result.

The process was also worthwhile for the third-grade teachers. Leah found the process to be awesome. She said, “When we sat down, we got to hear what other teachers were doing and what questions they have. It reaffirmed in my head that I am doing it right. It provided for great teacher interaction.” Rikki especially liked the process because she learned about the younger students. She never realized how much time was spent with them on certain areas. She learned what was taught and expected before they came
to third grade. She also learned that different things were important to different teachers. Bridget, too, thought the process of action research was valuable. She liked when the group compared DRA results to OAT scores. She also felt discussing the weaker parts of the DRA was helpful. As a process, she determined that the Word Analysis portion was probably something she would not use, except for her really low-achieving students. She learned that maybe she needed to use other programs for information she was unable to get from the DRA2.

**Understanding the DRA2**

During the May interviews, teachers were asked what they understood about the DRA2, after participating in the study, that they had not understood prior to beginning the action research. Cindy said she learned the way in which the DRA2 was administered could alter the outcome of the assessment. She said the assessor can evaluate how she is administering it. Zoe shared that the most interesting thing she learned was how some students are phenomenal readers, yet poor at comprehension. She said that after talking to her peers, she realized that everyone had a handful of those children. She also liked reading the article discussed in the session regarding poor comprehension (Applegate, Applegate, & Modla, 2009). She admitted she previously thought that fluent readers with poor comprehension were particular to special education. She concluded that perhaps some of that was just developmental.

Vertical articulation among the teachers was important to the first-grade teachers. They felt they benefited from the interaction with teachers at the second- and third-grade levels. Denise stated that the discussion among teachers at different grade levels was a
learning experience. She said, “It gave me the chance to see what was expected in second grade and where third grade was going.” She continued by saying that the curriculum mapping and unwrapping of standards teachers were doing was only at their own grade level. This study gave her the opportunity to learn about other grade levels. Jill thought that she probably would not use the Word Analysis after the discussions. She felt she needed to concentrate on retelling skills with her students. She said, “I found it interesting what second- and third-grade teachers thought.” Mary Kate remarked that after participating in the study, she finally understood how the DRA allowed for teacher judgment. As an example, on the DRA website, even though there were warnings printed in red that a student’s progress was not at the expected level, the assessor could still continue to document the child’s scores. This allowed the teacher to exercise her professional judgment. After discussing fluency, she remarked that she was not at a point where she could understand the problem. If she saw a red warning and she knew that a child was just a pokey reader, it was her prerogative to continue on even when the website said to reassess at a lower level. Although fluency is important, she knew, with a couple of her students, that they really could read effectively and comprehend at this level. The group had agreed that comprehension was more important than fluency.

The three second-grade teachers all gained different information from the study. Toni expressed that when she first started giving the DRA2, she understood that the goal was to move the students through the levels. Then an in-service was held and teachers were instructed to be sure that a student was secure before moving him up to the next level. After the action research study, she understood the importance of retelling and understanding the sequence of stories. She felt she was better able to help her students
make progress. Marie stated that the study helped her to understand the balance between fiction and nonfiction books in the assessment. She remarked that she had a better understanding of how fluency and comprehension fit together, and that sometimes it was necessary for the teacher to make an independent call when the scores did not correlate. She also felt she was better able to choose between fluency and comprehension scores when deciding which skill to reinforce. Jennie said she had a much better understanding of the Word Analysis piece. She looked more carefully at miscues now than before the study.

Two of the three third-grade teachers discussed the written portion of the DRA2. Rikki stated that she now realized that first and second graders did not write out their comprehension answers. She felt there was a big gap between the levels, especially Levels 38 and 40. She also commented that she had a much better understanding of the Word Analysis portion. Bridget discussed the writing at higher levels. She felt, “They [students] might be able to comprehend [the story] but not be able to write [about their comprehension].” Bridget also mentioned the metacognitive strategies that students were expected to describe at Level 40. She said the action research study helped her give her students examples of metacognitive strategies. She felt the study group helped her to better explain that portion of the assessment to her students. Leah disclosed that she had a better understanding of the DRA as an assessment. Before taking part in the study, she thought the DRA was this great new tool. Through participation in group discussions, she realized that the DRA has strengths and weaknesses, particularly the lack of nonfiction stories at every level.
The teachers all gained information from the study, and they all felt the time they spent in the meetings was worthwhile. They seemed pleased to have access to information that they could take back to their classrooms and use immediately with their students. Participation in the study seemed to result in a collegiality among participants that did not previously exist. In a large building where teachers do not see all the other teachers daily, they at least had contact with each other at regularly scheduled meetings. They discussed an assessment tool they all used, and they were able to learn from each other.

Written Transcriptions

Study participants spoke openly and directly about the needs in their reading classes and how they used the DRA2 results. They also discussed their frustrations with the lack of training in administering the DRA2 and the needs of students in their classes. Denise stated that through group conversations, we knew that everyone was doing really “cool” stuff in their classrooms. However, outside the group, in the rest of the building, there seemed to be a breakdown when discussing student needs. Mary Kate said by understanding what is expected on the DRA2, study group teachers could focus their instruction to enable students to become deeper thinkers. Jill thought the study group discussions helped everyone feel more comfortable with the assessment. Pat felt that by working as a group, we were able to work out some of the kinks. Jennie replied that this group helped her to adopt an in-depth attitude toward the DRA2. She believed that she was now doing a much better job of using the DRA2 to its maximum advantage.
Other teachers had similar ideas. Rikki announced that her participation in the
group helped her to learn the overall purpose of the assessment. Cindy said she was
learning from how other teachers used the DRA2, and she felt it was helpful to hear from
teachers who had more experience giving the assessment. Zoe stated that she found the
group discussions exciting because she now looked at the DRA2 differently. The
discussions helped her to see ways to use the DRA2 beyond simple progress monitoring.
Mary Kate shared that the class had been very beneficial for her because she was one of
the first-grade teachers who received very little training. Denise said she loved the
discussions. She commented that the discussions led her to ask if we could better identify
which students would benefit from small group instruction as opposed to special
education classes. If students could benefit enough from small group instruction, as
indicated by the DRA2 results, could we avoid labeling them in a special education
program?

The participants had many questions about the scoring and administration of the
DRA2. The group discussed these questions and tried to come to some consensus on how
to handle problems. Pat believed that, if we were to decide what was valid and administer
the tests accordingly as a group, we would have valid information. The example used was
giving the student prompts when he was doing a retelling of the story. At the lower
levels, students were not supposed to look back in the story. At the upper levels, prompts
given by teachers resulted in lower scores. One suggestion was to administer the DRA2
according to the directions and then give the student the opportunity to add additional
information by looking back in the text. The teachers felt that this extra time would give
them a great deal of additional information and still maintain the integrity of the test.
The discussions of both the assessment and how teachers used the results to guide their reading instruction were the main reasons why the study was so important. The teachers felt that they could leave the meetings and take ideas for working with the DRA2 results back to their classrooms. They also learned ways to improve their teaching.

Workshop Evaluations

Teachers openly expressed their feelings about the action research study in their evaluations. The group discussions were especially important to teachers using the DRA2 for the first time. Mary Kate stated that the discussions helped her gain a broader understanding of the DRA2 assessment. Emily noted that her participation in the group helped her use the results to improve her instruction. Denise felt the group discussions helped her understand the DRA2 and its use at the second- and third-grade levels. She thought the ideas generated by the discussions were quite valuable. Rikki noted that it was helpful to hear the concerns at the first- and second-grade levels. Bridget found the discussions about the weaknesses of the DRA2 helpful. Cindy wrote that they helped her to better analyze her students’ answers and DRA scores. Marie indicated that the discussions regarding the life experiences of some students were enlightening.

Rosa thought that finding similarities in how everyone used the DRA2 results was valuable. Mary Kate felt that being a study group member helped her to become familiar the DRA website. Cindy mentioned that being able to discuss miscues was a great help. Denise wrote that the forum for discussion was quite enjoyable.

During the meetings, Toni sat at the computer taking notes. When a question was asked regarding the DRA website, Toni would go to the site and find the topic in
question. The use of the Smart Board made the site easily visible to all participants. Emily wrote that using the website to facilitate discussion was quite helpful. Jennie noted that the group’s brainstorming sessions helped her to understand that other teachers had questions similar to hers. Pat thought the sharing of ideas and issues was excellent. Zoe wondered if all the teachers needed to be in total agreement how to use the DRA2 results. Leah agreed that the ideas shared were extremely helpful to her.

Both Jennie and Jill felt the group meetings were extremely helpful for professional development. Jennie said she had benefited from discussions about the word lists. Jill felt that she was still very much a novice, and anything she could use was helpful.

Other Data Sources

Again, both the field notes and typed minutes supported data collected in interviews, workshop evaluations, and written transcriptions. Teachers were able to discuss the DRA2 and compare it to other previously used assessments, such as DIBELS. Denise and Pat, who had the most experience with the DRA2, felt this action research study could determine how the entire school used the assessment.

Leah said members of the group could explain how teachers used instruction to bring students to the level of questioning included at the uppers levels of the DRA2. Rosa felt the study group helped everyone to score assessments using the rubric in the teachers’ manual. She also felt that the group discussions helped everyone make better judgments when forming reading groups. The discussions helped all the teachers to understand what
teachers at each grade level are both looking for and seeing in their students. Teachers discussed the need for more training.

Denise said her participation in the group helped her to comprehend how other teachers viewed and used assessment. She added that she was more aware of how teachers were assessing rote versus application, formative versus summative, and how the purpose of the DRA2 drives instruction. The group study led her to think about how the school could develop a systematic method of collecting data on student learning. The teachers all stated ways the group discussions helped them to understand how to best use the assessment.

Summary

The teachers who participated in this study found action research to be an outstanding opportunity to learn from their colleagues and take information they could use immediately back to their classrooms. Participants stated that action research helped them to better understand the DRA2 and how assessments could guide their instruction. Teachers remarked that learning how others used the DRA2 results was extremely helpful. Vertical articulation regarding the differences in the various DRA2 levels was important to the participants. Study group members reflected on the discussions regarding fluency, comprehension, retelling, and the written portions of the DRA2. The collegiality developed during this study helped everyone to better understand different teaching styles and how the DRA2 could direct their instruction.
Question 4

**How do intervention specialists perceive that they can use the scores?**

Findings about how intervention specialists perceive they can use the scores are reported by comparing data sources. First, a report of interviews is presented, followed by findings from written transcriptions, workshop evaluations, field notes, and typed minutes (other data sources).

The fourth research question asked, “How do intervention specialists perceive that they can use the scores?” When the study began, three intervention specialists agreed to take part in the research. Two of those specialists worked in either inclusion settings or with small groups of students that they pulled out of the regular classroom for small group instruction. Both were young, had no classroom teaching experience, and worked with a number of classroom teachers. Rosa worked with eleven classroom teachers in Learning Community West. She met with students at the first-, second-, and third-grade levels. Cindy met with second grade students from regular education classrooms who needed extra reading instruction. These students were from Learning Community North and Learning Community East. The third intervention specialist, Zoe, worked with students who had Individual Education Plans (IEPs). During the year of the study, most of her students qualified for special education as learning-disabled students. In past years, she worked with students with more severe learning issues who were identified as multiple-handicapped children. Rosa had to withdraw from the study after the first session due to an after-school job. Due to timing issues, the researcher was unable to interview her. Four other participants in the study, Pat, Leah, Denise, and the researcher,
had experience teaching special education. They worked as regular classroom teachers at the time of the study.

Interviews

*How Intervention Specialists Use the DRA2 Results*

When asked how they used the DRA2 results, Cindy and Zoe reported that they utilized them differently. Cindy said, “I use the results with my teachers in grouping part time. We don’t keep our kids grouped just on the DRA2 results, but it helps at the beginning of the year, especially when you don’t know them.” She also stated that she used the results when forming her skills groups, including groups for comprehension and fluency. Cindy commented that the DRA2 results helped her to determine which skills she needed to remediate with her children. Zoe felt that most teachers used the results to help obtain intervention for their students; her students were already identified. She said she wished she could say that she was using the results to show student growth, but she was not seeing much growth from her group of students at that point in the year.

The intervention specialists were asked if they found the DRA2 results to be accurate and to correlate with the other assessments they were using. Cindy thought that, for the most part, the results were accurate. She said if she was aware that a student was not a fluent reader but could comprehend, she knew what to expect when she gave the assessment. Zoe agreed, “Yes, it’s not like I’m ever surprised. They are poor readers, and they get lower scores.”
Other Assessments

Both participants were questioned about their use of other informal assessments. Cindy responded, “I do Read Naturally for fluency.” Read Naturally is a reading program that combines teacher modeling, repeated reading, and progress monitoring to enable a student to gain reading fluency. Components of the program include phonemic awareness, phonics, fluency, vocabulary, and comprehension (Read Naturally, 2010). She also stated that she created graphs to help track their fluency. Her students used sight word cards and received a sticker each time they read the card correctly. She kept track of the more difficult words on which students got stuck. Zoe mentioned that she used running records, DIBELS, and several comprehension checks. She also used the comprehension checks that were part of Reading A-Z. Story maps were another tool Zoe used to see if students could tell her the beginning, middle, and ending of stories.

Using the DRA2 Results to Plan

The question was asked if the DRA2 results were helpful when planning instruction. Cindy stated that she used the results to plan with classroom teachers and to determine what types of skill groups to create. Zoe felt the results did not really change anything she did. She remarked, “In order for a kid to qualify for an IEP, we have so much information that the DRA isn’t really telling me anything I don’t already know.” She went on to say that one of her students was cognitively delayed. Although she was a good reader, she was unable to retell a story. Zoe felt this would always be a problem because the student could not even retell what she had done over the weekend.
When asked if the DRA2 results were helpful in planning guided reading groups, Cindy remarked that the teachers she worked with put their students in groups according to skills that needed improvement. These groups were very fluid, and she did not work with the same students all the time. Zoe said the DRA2 results were not really much of a help to her. She only had five students and they made up one reading group. She admitted that she could see how the DRA2 results would be helpful to classroom teachers.

Neither intervention specialist used the Word Analysis portion of the DRA2. Zoe stated that she was still using DIBELS for word analysis diagnosis. She mostly utilized the parts on nonsense words and phonemic segmentation.

Both specialists were asked how they grouped their students for small group instruction. They were also asked for which specific needs they grouped their students. Cindy replied that she grouped for skill groups, leveled groups, comprehension groups, and fluency groups. Zoe stated that in the years when she had more students, she usually grouped according to levels. She often had both a high and a low group. Fluency and comprehension were two of her students’ specific needs, and she formed groups for both those skills. She also grouped her students by different needs on different days.

Asked how they used the DRA2 results to find “Just Right” books, two specialists answered quite differently (Rogers, 2008). Cindy reported that she looked at the charts and levels side by side, and this helped her to quickly find the appropriate books for her students. Zoe said she used the results to tell parents which books their child should be reading. She felt this was especially helpful to parents of students who were word callers. These students’ fluent reading often led their parents to believe their independent reading
level was much higher than it actually was. DRA2 results provided the parents with a much more realistic level and possible book choices.

Both specialists were asked how the action research group helped them to use the results more effectively. Cindy answered, “I enjoy a different perspective and things you run into, other people are seeing it, too, especially the scoring.” She realized that teachers graded differently and this helped her in her scoring. Zoe thought that what other teachers did with their results could help her use her students’ results more effectively.

In May, the intervention specialists were asked to what extent they used IRIs to direct their instruction. Cindy responded that she formed her reading groups based on skill needs revealed by the DRA2 results. She found it especially helpful to be able to effectively group and regroup her students. Zoe said, “It can get you started with reading groups and when you don’t know the kids that well, you can hit the ground running and when you get to know the kids better, you can form groups that are appropriate. You can switch them around, but it’s a good starting place.”

**DRA2 and Content Standards**

The intervention specialists did not agree on whether the DRA2 results helped students meet academic content standards. Cindy stated that the DRA2 assessment covered skills and comprehension questions contained in the academic content standards. DRA2 results enabled the teachers to help students develop the skills necessary to meet these standards. Teachers were able to address student deficiencies and reteach necessary skills. Cindy felt that, as an intervention specialist who sometimes just worked with one student at a time, she received a great deal of information from just one assessment.
While Zoe admitted the assessment could be used to show student growth, she really did not think it helped her in that area. She also commented that since it was not really a teaching tool, and since she was not teaching the DRA2, she did not think it helped her students meet academic content standards.

Both intervention specialists were also asked if they felt administering the DRA2 helped them relate the academic content standards to their students’ needs. Cindy felt that the DRA2 helped her more than the assessment she had used previously. She said, “It helps me figure out the individual student’s needs so I can better differentiate my instruction and change my grouping.” She added that the DRA2 made grouping her students easier and helped her to pinpoint their individual needs. She thought the DRA2 was helpful to both the teacher and the student when determining weaknesses, such as fluency and comprehension. Zoe claimed that if the teacher knew a student had a weakness in comprehension, then the teacher knew that is where to concentrate instruction.

The two specialists were questioned about how they made the connection between assessment and instruction. Cindy answered that she used assessment to form instruction. After administering the assessment, she tailored her instruction according to the DRA2 results. She believed the DRA2 helped her improve her instruction and determine which skills she wanted to reinforce. Zoe stated, “I think assessment should guide instruction. If you assess kids and they have a weakness, that tells you who needs to work on certain things.” She also said that since she only administered the DRA2 twice a year, she gave other assessments throughout the school year. She added that for a couple of her students,
the DRA2 scores did not truly show what they could do. As a result, she felt the DRA2 could be used only as a piece of her assessment process.

Both intervention specialists were asked what the research study helped them to understand about the DRA2. Cindy replied that it helped her understand rubrics for assessing the DRA2. She also said she had a better understanding of what students should include in a retelling. She added that after a teacher does several DRA2 assessments, she developed an understanding of the expectations. Zoe admitted that she previously used the DRA2 as a “before and after” progress monitoring tool as opposed to an assessment. She thought it would be valuable to use four times a year, but she did not think there were enough books to administer the assessment that often.

After participating in the study, the intervention specialists were asked if their teaching changed as a result of using the DRA2. Cindy acknowledged, “It has helped me to be more focused and in-depth with using the standards.” Using the DRA2 also helped her find a focus for teaching strategies. The assessment results gave her data for differentiating her instruction, and she felt her teaching was more geared to meeting student needs. Zoe admitted she had changed her teaching, but she did not credit the use of the DRA2. She wondered how a test that is given only two times a year could change teaching. She re-emphasized that in special education, teachers needed more progress-monitoring assessments. She felt that special education students could benefit from a multi-sensory program such as the Wilson Reading Program. The Wilson Reading Program is a highly-structured remedial program based on the Orton-Gillingham principles (Wilson Language Training, 2010).
Written Transcriptions

Because there were only three intervention specialists in the study group, their responses were considered to be the most important. When asked if they felt they needed to use the DRA2 results in a different way than regular classroom teachers did, Rosa replied, “I used the DRA2 to find [the] leveled books I got. I tried the Word Analysis, but I wasn’t a big fan of it.” She said when she was working with a guided reading group, her goal was to concentrate on the skills that her students would need in the future. She explained that when she was working with a Level 16 group, she wanted to prepare those students for the next reading level. At Levels 4-16, children were asked to preview, retell, and tell about their favorite parts of a story. At Level 18, they were asked what the author’s message was. Rosa realized that she needed to have students reading at lower levels succeed when they reached the higher levels; she prepared them for higher-level questioning.

Zoe admitted that prior to working with the study group, she had used the DRA2 solely for progress monitoring. She was excited to look at the assessment differently and hoped to incorporate The Daily Five into her teaching. She thought she could provide parents with appropriately-leveled books for their child. Zoe also felt the available printouts would be useful for giving parents an accurate view of their child’s ability, needs, and progress. She also felt that the DRA2 could be used to direct intervention for the entire school.

Cindy felt she could use a program that would supplement fluency. She worked with second graders, and thought they could benefit from such a program. She also stated that the students she worked with did not seem to be able to problem solve.
Zoe worked with students who generally read at much lower reading levels. She stated that finding high-interest books at lower reading levels was a problem. Zoe wanted the school system to adopt a special reading series or package of materials just for the special education program. She felt such a program, such as Wilson Reading or Fundations, would greatly benefit special education students and students who were struggling readers. Wilson Fundations is a highly-structured, multi-sensory approach to the reading and spelling curriculum for grades kindergarten-three (Wilson Language Training, 2010).

**Workshop Evaluations**

The workshop evaluations reiterated information similar to what was revealed through other data sources. In general, the intervention specialists decided they used the information from the DRA2 in the same way as regular classroom teachers. Rosa stated that she always kept both the fluency and comprehension components in mind when she planned her guided reading groups. One student might need help with comprehension, and another student might need help with fluency. She realized the need to understand the DRA2 results and to remember that she could have two students at the same DRA level who needed different types of intervention. Rosa added that she thought the group discussions made it very clear that sometimes a child’s ability was greater than the DRA2 results showed.

Rosa said that she looked at the DRA2 scores to decide which children needed the Word Analysis portion. She felt that administering the Word Analysis gave her a clearer picture of specific interventions that would benefit students. During discussions of
assessment, Rosa thought she would use the same type of text throughout the year to show more consistent student growth. If she used a fiction text to assess at the beginning of the year, she would use fiction throughout the year. She also commented that there seemed to be many similarities between the way she used the DRA2 results and the way classroom teachers were used them.

Cindy stated that she used the DRA2 scores to analyze her students’ abilities, including their strengths and weaknesses. She found the discussion valuable for her own understanding of the elements of the DRA2. Cindy added that she used the DRA2 results to decide which students needed intervention and then what skills to work on during intervention. She believed there needed to be a common language among teachers and intervention specialists regarding miscues, administration, and scoring. Cindy also commented that, as an intervention specialist, she utilized the results of the DRA2 to help guide her specific interventions and to determine the exact independent reading levels of her students.

Zoe affirmed that she used the results of the DRA2 to improve her instruction. She said she could use the ideas of other teachers to guide her instruction. Of course, she needed to adjust what classroom teachers were doing to fit the needs of her students with IEPs.

The three intervention specialists had very specific plans for using the DRA2 results. Since they worked with small groups all the time, they were able to carefully fine-tune their lessons to individual students. Rosa and Cindy conferred with classroom teachers to coordinate plans, but Zoe did not work with other teachers. Although Cindy
and Rosa worked with several groups of children throughout the day, Zoe worked with one small group of the same children all day.

Other Data Sources

The field notes and typed minutes revealed that intervention specialists needed to use the DRA2 results in much the same way as classroom teachers used them. The specialists wanted to know both the independent reading levels and the instructional levels of their students when planning their guided reading instruction.

Through discussions, the intervention specialists shared their ideas on using the DRA2 results. Cindy said she used the results to help meet her students’ individual needs when she worked one-on-one. She felt the results would be helpful as she worked to improve her second graders’ reading fluency. Rosa stated that she needed a better way to determine a starting point for testing incoming students and first graders. She thought if she had word lists to help determine a starting level, her assessments would be more effective. Zoe enjoyed hearing how other teachers used the DRA2 results to plan their instruction, and she hoped to use the results similarly. The three intervention specialists agreed that they could benefit from the DRA2.

Summary

All the intervention specialists worked with students in small group settings, and they were using the DRA2 at the time of the study; however, they did not utilize the results in the same way. Cindy used them mostly for grouping, planning instruction, and interpreting student needs. Rosa felt she needed to look at fluency and comprehension scores separately. Zoe used the assessment to guide her instruction but did she not find it
as helpful as Cindy did. The three intervention specialists worked with different student populations. Their students were all identified as needing extra intervention in order to achieve success in reading. Perhaps Zoe’s experience and use of other assessments affected her utilization of the DRA2 results. The way Cindy and Rosa used the results may have been determined somewhat by the classroom teachers with whom they worked. When teachers used the DRA2 results, Cindy and Rosa had more exposure to how those results were used to guide reading instruction. Although these specialists used the results differently, they all found the results helpful.

Chapter Summary

This study was a case study of action research framed on four research questions. A one-year commitment was requested of all participants. The study was divided into two sessions for which participants were able to earn graduate credit. Data for the study were collected through digital voice recordings, field notes, typed minutes of meetings, interviews, and workshop evaluations. Workshop evaluation questions were developed from Guskey’s Level Four of the critical levels of professional development (Guskey, 2000).

The researcher began the study by discussing the components of the DRA2 assessment. Participants then reviewed the information that Pearson Learning claimed the evaluator would gain by administering the DRA2.

Both the fall and the spring sessions were devoted mainly to discussing the four research questions. The first question asked what similarities and differences teachers showed in the way they used the DRA2 scores. Five main similarities were apparent in
the way teachers used assessment results. The first was that results were used to monitor and show student growth. Study participants at the second- and third-grade levels tested all their students in the fall and in the spring. In January, most teachers tested only those students who exhibited at-risk characteristics and low reading scores; there were some teachers who tested every student at that time. The first grade teachers administered the DRA2 to all their students in January as well as in the fall and in the spring.

The second similar way teachers used assessment results was too inform parents about their child’s reading. Charts from the DRA online management site were printed out and discussed with parents at conferences. These charts were also used at the fall Open House to explain to parents the exact skills being monitored.

Grouping their students was the third way teachers used DRA2 results. Assessment results allowed teachers to group children according to their reading levels.

The fourth similar way teachers used DRA2 results was to group students based on their strengths and weaknesses in reading. Groups were established for word attack skills, fluency, and comprehension.

Finally, participants used assessment results to guide their classroom and small group instruction. Teachers had different ideas for using the results, but they all planned their classroom instruction based on the DRA2 results. Some teachers used the results to help students find appropriate independent reading books at their reading levels. Teachers felt that DRA2 results were helpful in choosing books at all levels.

The second research question asked what consensus teachers reached about the use of the DRA2 scores. Teachers agreed that a strong connection existed between assessment and instruction. All participants also agreed that the results could be used to
group students by individual needs, to find independent reading levels, to inform parents, to track student progress, and to plan both classroom and small group instruction.

Lengthy discussions were held concerning what DRA2 results showed about a student’s fluency versus his comprehension. Teachers wondered which of the two skills was a more accurate indicator of the child’s true reading level. Teachers did not agree on whether or not DRA2 results helped students meet academic content standards.

The third research question asked participants how action research worked as a vehicle for professional development. Study participants unanimously agreed that action research was a powerful form of professional development. Teacher interaction in the group was considered an invaluable learning tool. Participants enjoyed collaborating with peers to find common ground. They learned from their colleagues and took information and ideas back to their classrooms for immediate use. Discussions about the various DRA2 levels afforded the group members the opportunity to learn how students were tested at different grade levels. Participants concluded that this case study of action research was successful and valuable.

Research question four concerned how intervention specialists perceived they could use DRA2 results. Intervention specialists who participated in the study perceived they could use the results similarly to classroom teachers. They grouped students by level and need, informed parents about their child’s reading, planned group instruction, and monitored student progress. One intervention specialist determined that additional assessments are necessary for students on IEPs. All three intervention specialists agreed that DRA2 results provided them with pertinent information about their students’ reading abilities. The two specialists who worked with classroom teachers found the results very
helpful. The specialist who did not collaborate with other teachers and worked with students who had IEPs did not consider the results to be helpful.

In addition to the four research questions, participants covered numerous topics and ideas during both the fall and the spring sessions. The four reading levels--independent, instructional, frustration, and listening--were defined, and discussions on how to determine each level were held. Teachers wanted to know all four reading levels of their students. The components of various IRIs as they related to information gained from administering them were also discussed.

Participants shared their opinions on the best way to find the proper level at which to initially test students. The need for a universal word list to assist teachers in determining the best place to begin testing was talked about at great length. The adoption of one word list for each grade level was considered; however, no decision was made regarding this idea.

One frequent topic of discussion was what teachers should do when a student’s fluency level and comprehension level did not match. Participants also wanted to know the best practices for moving their students up to the next DRA2 level.

The use of the Word Analysis portion of the DRA2 was looked at as a means of learning more about a student’s strengths and weaknesses in reading. Also talked about was the testing of fiction versus nonfiction and student progress shown by the results of the DRA2 administered in January.

Both the fall and the spring sessions involved vigorous and interesting discussions on a variety of topics. Participants enjoyed sharing ideas and, in turn, gained valuable information and ideas to help their students become successful readers.
Several issues were discussed during this study. The first issue discussed was whether students were being tested on their abilities to remember the story or their understanding of the story. Students closed the books before retelling the story. Since children are encouraged to find information in the story, teachers were concerned that they were unable to look back in the book during assessment. Another issue was the difference in how children comprehend fiction opposed to nonfiction. If students were supposed to be tested on both fiction and non-fiction, would their abilities to comprehend the two genres be equal or would that be comparing two completely different types of comprehension?

The third issue that concerned teachers was comprehension versus fluency. Some students were fluent readers but did not understand what they read. Teachers were concerned with the discrepancy. The last issue was the administration of the DRA2 assessment. Even with a rubric, subjective decisions were made when analyzing the assessment results. The participants were concerned about the reliability of analysis among assessors.
CHAPTER V

Discussion and Implications

This study was conducted in order to learn how teachers used the results of the DRA2 and to see if consensus could be reached on how to best use the results. The study also looked at whether intervention specialists needed to use Developmental Reading Assessment, Second Edition (DRA2) results differently than classroom teachers did. As part of the study, action research was viewed as a means of professional development.

Findings from this study should be helpful to teachers, schools, and districts using informal reading inventories in elementary classrooms. These findings also provide insight into the value of action research as a vehicle for professional development.

Statement of the Problem

Kingston Primary School has spent two years adopting the DRA2. During this process, teachers filed their assessment results online and noted student progress. The problem was that while teachers are gaining valuable information about their students’ reading abilities, what was being done with this information? Were teachers using the results similarly? If so, how were the results being used? If not, why not? What consensus did teachers reach about using the scores? Did intervention specialists need to use the scores differently? How did action research act as a vehicle for professional development?
Review of the Methodology

This was a case study of action research designed to look at the DRA2, an informal reading inventory adopted by Kingston Primary School. Participants met during the 2008-2009 school year for group discussions and were interviewed midyear and in the spring. Written transcriptions, typed minutes, written evaluations, interviews, and field notes were forms of data collection for this study.

Open-ended interview questions allowed participants to freely express their thoughts. The purpose of these questions was to encourage teachers to share as much information about their personal experiences as possible. Written evaluations offered participants the opportunity to respond to discussions promptly and spontaneously. These evaluations were also an important part of the teachers’ professional development.

Findings

The following conclusions regarding this case study of action research relate to each of the research questions. Conclusions are based on findings, and a review of these study findings, along with a brief discussion, are presented for each research question.

Teachers’ Use of DRA2 Results

The first research question asked what similarities and differences teachers showed in the ways they used the DRA2 scores. Five similarities were identified: monitoring and showing student growth, informing parents about their child’s reading, grouping children according to reading levels, grouping children by skill needs, and guiding instruction.
Nilsson (2008) stated that perhaps the greatest value of the informal reading inventory (IRI) is linked to the important role it plays in helping educators diagnose gaps in the abilities of struggling readers. IRIs typically assess students’ word recognition, oral reading, strengths, weaknesses, fluency, and comprehension (Flippo, Holland, McCarthy, & Swinning, 2009). Diagnosing children’s reading difficulties allows for extra instruction focused on skills that are weak or lacking. Early detection can lead to early remedial help with a variety of skills. IRIs can also document reading growth (Paris & Carpenter, 2003). Paris (2002) stated, “Teacher-administered assessments empower teachers to understand and use the assessment information diagnostically for individual children” (p. 170).

Differences were evident because not all teachers used any one similarity. None of the similarities was used unanimously by all participants.

Use of DRA2 Scores

The second research question that framed this study asked what consensus teachers could reach about the use of DRA2 scores. Most teachers used the results to group students by reading levels and needs, to inform parents about their child’s reading, and to monitor and track student progress. Participants agreed that DRA2 results afforded them the opportunity to analyze students’ strengths and weaknesses and to determine independent reading levels. Teachers also reached consensus that the DRA2 results were useful in planning both guided reading and whole group instruction.
Participants agreed that a strong correlation existed between assessment and instruction. Most of the teachers also agreed that assessment allowed them to focus instruction on their students’ individual needs.

Teachers discussed the use of pictures in reading assessments and agreed that they are an important part of reading development. This discussion led to a conversation about the four reading levels. Most teachers concurred that knowing the independent, instructional, frustration, and listening levels of their students would be helpful when determining specific reading needs.

Lengthy conversations were held regarding fluency and comprehension and what should be done when the two levels do not match. Consensus was never reached on whether DRA2 results helped students meet academic content standards. Teachers had a variety of ideas on whether administering the DRA2 helped relate content standards to student needs. The use of a common word list to determine a beginning testing level was another topic on which teachers were not able to reach consensus.

Research supports the use of assessment to plan instruction, form reading groups, and analyze students’ strengths and weaknesses. The International Reading Association (IRA) (2008) stated that the greatest value of an IRI is linked to its important role in helping educators diagnose gaps in the abilities of struggling readers. Information is gained about students’ reading stages and knowledge sources; teachers can analyze oral reading error types and how students use cueing systems. Due to various student abilities in a classroom, literacy instruction must be designed to meet each student’s needs. Information gained from appropriate assessment allows teachers to improve student
access to curriculum, identify and teach skills that need review, monitor progress, and make informed decisions about appropriate instruction (Access Center, n.d.).

Hosp and Ardoin (2008) agreed with the importance of using assessment for instructional planning. They wrote that valuable instruction time is lost if instruction does not address student needs. The authors also stated that assessments can be useful for instructional grouping. These assessments assist in deciding what and how to teach.

Paris (2002) stated that although IRIs are regarded as authentic assessments, the various levels involve comparing several different types of passages and texts. He also said that questions may be peculiar and rubrics can be difficult to use; administering IRIs empower teachers to understand and use information diagnostically.

Action Research as a Professional Development Vehicle

Research question number three asked how action research worked as a vehicle for professional development. Participants in this study found action research to be an exceptional form of professional development. Teachers remarked that action research helped them to better understand DRA2 results and how assessments could guide their instruction. Participants learned from their colleagues and developed an understanding of teaching styles and the various DRA2 levels. Group discussions enabled teachers to reflect on their students’ fluency, comprehension, retelling, and written responses. Involvement in the study helped everyone to understand how DRA2 results could direct language arts instruction.

Brockerville (n.d.) stated, “Professional development (PD) is a dynamic process of learning that leads to a new level of understanding and heightened awareness of the
context in which teachers work that may compel them to examine accepted policies and routines” (p.1). Brockerville also stated that teachers need to regularly reflect on “who we are, what we value, what we teach, how we teach, and why we teach what we do” (p. 1).

In action research, teachers engage in practical inquiry about their own teaching. Through action research, teachers study what is happening and decide how to make it better. Action research is a tool for teachers to shape and refine their practice (Brockerville, n.d.). Teachers in this study group refined their teaching by administering and discussing DRA2 results.

One key component of action research is sharing what is learned. Sharing allows for further action by teachers and the broader educational community (Parsons, n.d.). Patterson (1996) said, “Through discourse, we become communities of learners, and by studying our discourse, we can learn even more about the complexities of teaching and learning” (p. 9). Action research enables participants to receive support from their colleagues, resulting in professional growth. Teachers can clarify their own thinking and see different perspectives and interpretations of experiences (Murcia, n.d.). Teachers conduct action research to increase their own understanding and solve classroom problems (Thomas, 2005). Participants in this study commented on how much they learned from other teachers’ experiences with the DRA2. Due to their participation in this action research, teachers felt they could administer the DRA2 more efficiently and use the results more effectively.

Paris (2002) believed that professional development activities should focus on helping teachers to administer reading assessments appropriately and to use the results diagnostically. Study participants agreed that discussions of how to use DRA2 results
helped them when administering assessments. First grade teachers were especially appreciative of the knowledge gained from participation in this action research.

**Use of DRA2 by Intervention Specialists**

The fourth and final research question asked how intervention specialists perceived that they could use the DRA2 scores. Three intervention specialists participated in the study, but one dropped out midyear due to another commitment. Those specialists working with classroom teachers perceived that they could use the results to group students, plan with classroom teachers, and interpret student needs. The intervention specialist who worked with students with IEPs used assessment results to guide her instruction to some extent. All three intervention specialists found DRA2 results helpful in guiding their reading instruction.

Intervention specialists work with struggling readers. Students may be identified with special needs or may just need additional reading support. Allington (2001) stated that “effective instruction is characterized by adaptation of the standard form of instruction in ways that better meet the needs of individual students” (p. 117). The intervention specialists in this study said that they used the results the same way classroom teachers did. Duffy-Hester (1999) stated, “Reading instruction should be informed by and based on meaningful reading assessment” (p. 129). Effective teachers of struggling readers offer the support and direction that students need for a wide range of purposes. Teachers need to determine the appropriateness of goals through their ongoing assessment (Dudley-Marling & Paugh, 2004). Intervention specialists reported that DRA2 results helped them direct and plan their instruction.
Valencia and Riddle Buly (2004) declared that teachers need to conduct diagnostic assessments to help them identify students’ needs. The authors continued:

The data here demonstrate clearly that, without in-depth and individual student assessment, distinctive and instructionally important patterns of students’ abilities are masked. We believe that informal reading inventories, oral reading records, and other individually tailored assessments provide useful information about all students. The three intervention specialists in the study agreed that they gained valuable information from DRA2 results. (p. 143)

Conclusions and Recommendations

This study showed that teachers used the DRA2 results in many ways. Participants revealed that the results helped them group students for reading, monitor student progress, inform parents, and guide instruction. Assessment provides teachers with information about skills students have or have not mastered. By studying assessment results, teachers can determine their students’ skills levels and monitor progress.

Assessments can guide and demonstrate the effectiveness of instruction (Access Center, n.d.). Tomlinson (1999) wrote, “Assessment is today’s means of understanding how to modify tomorrow’s instruction. . . . By thoughtfully using assessment data, teachers can modify content, process, or product” (p. 11). The teacher can adjust what she wants the students to learn, the activities used to teach, and how her students demonstrate understanding of a concept.
The participants in this study group agreed that they used DRA2 results to monitor student progress, group students, and plan instruction. Tyner and Green (2005) said:

Assessing student performance is critical for many reasons, including tracking student progress, assigning students to flexible groups based on individual need, and assisting in planning appropriate instruction. (p. 98)

The authors also stated that an informal reading inventory is the most effective tool for gauging a student’s reading level.

This study showed that action research is an excellent form of professional development. Thoughts on administering the DRA2 and assessing results were shared through collegiality of teachers working together. Teachers could then move forward with the implementation of the DRA2 assessment knowing that they were using the results similarly to fellow staff members. Both personal and professional benefits are gained from participation in action research. The personal motivation to improve teaching practice combines with the professional benefits of staff development (Dobson-Lewis, 2008). This type of staff development can be offered in any school and would benefit both teachers and students.

This project was a case study of action research. The researcher and the participants experienced valuable professional development through this process. Hubbard and Power (1993) described the case study as “an inquiry that studies a phenomenon within its real-life context. This unit of study, or case, may be a single individual, a small number of individuals, or a particular classroom or community” (p. 153). Participants in this study became a community of learners who gained knowledge
from the experiences of other group members. Patterson, Santa, Short and Smith (1993) stated that when teachers engage in research, they build theory about their circumstances through reflection, action, and inquiry. They are then able to adjust their practices based of their conclusions.

Yin (as cited in Merriam and Associates, 2002) stated that “case studies provide researchers with an understanding of complex social phenomena while preserving the holistic and meaningful characteristics of everyday events” (p. 205). The choice of the case study depends on what the researcher wants to learn and the implication that the knowledge may have on improving practice or extending theory (Merriam & Associates, 2002). For teachers involved in this study, the desire to improve the use of assessment results was significant.

Mohr and MacLean (1987) maintained that “it is our experience that teacher-researchers engage in something important and exciting during their work, that they do look at themselves differently in their classrooms, and that many of them change the ways that they teach” (p. 65). Teachers often remarked that participating in this case study enabled them to view the DRA2 results and the use of those results differently. The researcher was able to reflect upon ideas of the group throughout the construction of her narrative.

Data analysis, the systematic search for meaning, is a way to process qualitative information in order to communicate what has been learned to others. Hatch (2002) stated that the organization of the data allowed the researcher to “see patterns, identify themes, discover relationships, develop explanations, make interpretations, mount critiques, or generate theories. It often involves synthesis, evaluation, interpretation, categorization,
hypothesizing, comparison, and pattern finding” (p. 148). The organization of the data prior to construction of the narrative provided the opportunity for professional growth for the researcher. The researcher categorized ideas and clarified conversations for a clearer understanding of the results.

The concept of establishing a purpose for administering the DRA2 was proposed by this group. A common purpose would unite staff members as they mastered the use of the DRA2. Establishing the purpose of an assessment prior to its use would aid teachers in understanding their task. Learning about the assessment prior to implementation would also very useful to staff members. The informal reading inventory is considered the most effective tool to gauge students’ instructional reading level (Tyner & Green, 2005).

While this study was small in size, its conclusions can be used not only by the participants, but also by the entire staff. Teachers in other districts who use the DRA2, along with other informal reading inventories, can also benefit from this study. The conclusions of the intervention specialists who participated in this study may need to be considered carefully, since only two specialists completed the study and were interviewed. Another study with more intervention specialists would offer more validity. A larger study involving a greater number of participants might reveal additional significant findings. Conclusions may be informative for a much bigger audience. The uses of informal reading inventory results and the importance of teacher participation in action research offer suggestions for teachers in other school systems who wish to improve their reading instruction.
Implications for Research

Study participants repeatedly discussed the connection between fluency and comprehension. One teacher thought the group should look at the two components separately. Other participants questioned which score was more accurate when determining a child’s independent reading level.

Research seems to favor a close connection between fluency and comprehension. Pepper (n.d.) stated, “Fluency is the ability to read aloud expressively and automatically with understanding” (p. 1). Fluency has also been defined by the National Reading Panel (2000) as the “ability to read a text quickly, accurately, and with proper expression” (p. 3-5). Pikulski and Chard (2005) said that “while fluency in and of itself is not sufficient to ensure high levels of reading achievement, fluency is absolutely necessary for that achievement because it depends upon and typically reflects comprehension” (p. 517).

Pepper (n.d.) stated that fluency plays an important role in becoming a good reader. While reading fluency is one defining characteristic of a good reader, a lack of fluency is one common characteristic of a poor reader (Hudson, Lane, & Pullen, 2005). Fluency is comprised of three interdependent elements: accuracy, rate, and prosody. Success in all three areas is necessary for good comprehension (Lambert, 2008).

The study group noted that some students appeared to comprehend, but they were not fluent readers. Hasbrouck and Tindal (2006) cautioned the following regarding the emphasis on fluency:
Although this skill has recently become an increased focus in classroom reading instruction, and the awareness of the link between fluency and comprehension has grown, there appears to be a tendency among some educators to believe that raising a student’s fluency score is “the” main goal of reading instruction. As important as fluency is, and as valuable as the information obtained from fluency-based assessments can be for instructional decision-making, we caution teachers and administrators to keep fluency and fluency-based assessment scores in perspective. . . Fluency is only one of the essential skills involved in reading.

(p. 642)

Allington (2001) noted that some children can read with a high degree of accuracy but still do not read fluently- with phrasing and intonation. Rasinski (2004) related his concern about emphasis on speed in reading. He cautioned that daily emphasis on speed over meaning is a corruption of reading fluency. Furthermore, research indicated that variance in fluency may have accounted for performance on high-stakes tests at the high school level. The importance of fluency may be far-reaching for students.

Emphasis on reading speed may also affect struggling readers. Some poor readers are able to compensate for a lack of reading skills and improve their comprehension. Students expected to read under pressure for speed were less likely to use comprehension strategies (Zugel, 2009). Reading rate may not be a good indicator of a student’s ability to analyze sophisticated literature or complex expository texts. There is some indication that the relation of fluency and comprehension is stronger in the early years when students are developing decoding skills and acquiring automaticity (Valencia, Smith, Reece, Li, Wixson, & Newman, 2010).
McLaughlin and Fisher (2005) defined comprehension as “the construction of meaning of a written or spoken communication through a reciprocal, holistic interchange of ideas between the interpreter and the message in a particular communicative context” (p. 137). Presley and Brock (as cited in Carr, Aldinger, & Patburg, 2004) wrote that students need to be taught strategies to construct meaning from text. These strategies are explicit learned procedures that can foster self-regulated reading. Learning these strategies will enable students to eventually use them independently in many ways.

One study participant thought that fluency and comprehension should be viewed separately as distinct components of reading. While some research connects these components, other research results reveal the possibility that students can comprehend even if they are not fluent readers. A great deal of research has been conducted about reading, fluency, comprehension, and assessments. Future researchers may want to look more closely at readers who can comprehend but are not fluent readers.

Two issues discussed by participants may also warrant further research. Teachers were concerned about students’ comprehension of fiction compared to their comprehension of nonfiction. The student’s ability to retell a story compared to their comprehension and understanding of a story was also discussed. Both of these issues may offer future topics for research.

One other follow-up study might be the use of IRI data in parent conferences. Teachers in this group felt data from the DRA2 gave them concrete evidence to explain students’ reading strengths and weaknesses. When parents understand specifically how to help children, students can achieve more.
This study was viewed as outstanding professional development by the participants. Guskey and Huberman (1995) stated that professional development is dynamic and highly personal. The ultimate value of professional development for teachers is the essential function it plays in the improvement of student learning (Cook, 1997). Cook also cautioned that while professional development programs are designed to affect the participants and students, they typically have an impact on stakeholders such as administrators, counselors, and other staff. One of the most effective learning experiences that promotes such professional development is classroom action research (Fine, 1997). Fine then stated that teachers are able to construct their own actual, tangible, procedural knowledge instead of hoping for them to value declarative information from lectures. Teachers can search for ways to improve their effectiveness through classroom action research.

McNiff (2002) stated that “action research is a practical way to look at your own work through self-reflection” (p.6). According the Association for Supervision and Curriculum Development (n.d.), action research promises progress in professionalism for teachers, principals, and district office personnel. Action researchers go through three stages: planning, implementation, and analysis and reflection. This third stage offers professional growth as teachers learn from their experiences.

The teachers who participated in this research study became action researchers. Further research into action research as professional development may be considered.

Stake (as cited in Creswell, 1998) asserted that a case study requires extensive verification and emphasizes the importance of validity in a qualitative study. In this case study, I looked at various data sources to report findings. Verifying interpretations across
data sources affirmed topics of discussion and points of consensus. I was able to reflect upon ideas of the group throughout the construction of her narrative. Clarification of ideas and reflection on meaning afforded the researcher invaluable opportunities to understand the work of her colleagues. Both the group sessions and the compilation of data presented the researcher with exceptional professional development opportunities. Further research on case studies as professional development may be warranted.
REFERENCES

Retrieved July 14, 2010, from
http://www.k8accesscenter.org/training_resources/earlyreadingtools.asp


Alexander, P. A. & Fox, E. (2004). A historical perspective on reading research and
practice. In R. B. Ruddell, & N. J. Unrau (Eds.), Theoretical models and
processes of reading (5th ed.)(pp. 33-68). Newark, DE: International Reading
Association.

Addison-Wesley Educational Publishers.

conversation about teaching reading in the 21st Century. In R. B. Ruddell, & N.
J. Unrau (Eds.), Theoretical models and processes of reading (5th ed.) (pp.5-32).
Newark, DE: International Reading Association.

Applegate, M.D., Applegate, A. J., & Modla, V. B. (2009). She’s my best reader; She
just can’t comprehend: Studying the relationship between fluency and
comprehension. The Reading Teacher, 62, 512-521.


Merriam, S. B. (2002). Introduction to qualitative research. In S. B. Merriam & Associates (Eds.), *Qualitative research in practice: Examples for discussion and analysis (pp.3-17).* San Francisco: Jossey-Bass.


University of Oregon (2010). DIBELS data system: Using data to make decisions for students, each and all [Site contains DIBELS products to be downloaded and online management system]. Retrieved August 16, 2010, https://dibels.uoregon.edu/


APPENDIX
APPENDIX A

HUMAN SUBJECTS APPROVAL
TO: Elizabeth A. Volchko
FROM: Randy Gearhart, Chair
DATE: November 25, 2008
RE: Human Subjects Review Board Approval

The Human Subjects Review Board has approved the research proposal you submitted. You may proceed with the project.

The primary function of the HSRB is to ensure protection of human research subjects. As a result of this mandate, we ask that you pay close attention to the fundamental ethical principles of autonomy, justice, and beneficence when establishing your research proposal. These ethical principles pertain specifically to the issues of informed consent, fair selection of subjects, and risk/benefit considerations.

If you have any questions, please contact me.

Sincerely,

Randy Gearhart
Phone: 419-207-6198
Fax: 419-289-5460
E-mail: rgearhar@ashland.edu