ADMINISTRATORS’ AND TEACHERS’ PERCEPTIONS OF THE FORMATIVE ASSESSMENT PROCESS USED TO EVALUATE STUDENTS’ LEVEL OF PROFICIENCY AND ONGOING INSTRUCTION IN READING

by

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As I reflect on the journey and completion of my doctoral degree, I dedicate this work to my family. First, this degree is dedicated to my parents, Wil and Nancy Boren, who have always inspired me to pursue my purposeful dreams. I am grateful that you led and guided me to recognize that I have the mind, the drive, and the grit to anything! Thank you for your endless encouragement, unconditional love, and tremendous support, especially when this required my mom to proofread papers late at night and early in the morning. Words cannot even begin to express the gratitude I have for the time and effort you devoted to me and supporting my goals.

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### TABLE OF CONTENTS

1. INTRODUCTION ...........................................................................................................1
   - Introduction .....................................................................................................................1
   - Perceptions of the Formative Assessment Process .........................................................3
   - Problem Statement ........................................................................................................5
   - Analysis of Universal Screening Results .......................................................................7
   - Purpose Statement .........................................................................................................8
   - Research Questions .........................................................................................................9
     - Conceptual Framework ..............................................................................................10
     - Limitations ...............................................................................................................14
     - Delimitations .............................................................................................................14
     - Definition of Terms .................................................................................................15
     - Significance of the Study ...........................................................................................17
     - Summary .....................................................................................................................19

2. REVIEW OF LITERATURE ........................................................................................21
   - Introduction ...................................................................................................................21
   - Summative and Formative Reading Assessment ..........................................................21
   - Professional Learning Communities .............................................................................24
   - High-Impact Transformational and Instructional Leadership .........................................25
   - Response to Intervention .............................................................................................26
   - Universal Screening and Progress Monitoring ............................................................28
   - Curriculum-Based Measurement ..................................................................................30
   - Feedback .......................................................................................................................31
   - Running Records and Informal Reading Inventories ....................................................33
   - Basal Reading Series .....................................................................................................34
   - Multiple Measures .........................................................................................................34
   - Summary .......................................................................................................................35

3. METHODS ....................................................................................................................37
   - Introduction ...................................................................................................................37
     - Research Questions ....................................................................................................37
   - Research Design .........................................................................................................38
     - Participants ................................................................................................................39
     - Instruments and Data Collection .................................................................................40
     - Procedures ..................................................................................................................42
     - Data Analysis ............................................................................................................44
     - Positionality ...............................................................................................................46
   - Summary .......................................................................................................................47
<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>4. RESULTS</td>
<td>49</td>
</tr>
<tr>
<td>Introduction</td>
<td>49</td>
</tr>
<tr>
<td>Research Questions</td>
<td>49</td>
</tr>
<tr>
<td>Participants</td>
<td>50</td>
</tr>
<tr>
<td>Case Descriptions</td>
<td>52</td>
</tr>
<tr>
<td>Data Collection</td>
<td>56</td>
</tr>
<tr>
<td>Analysis of Quantitative Data and Qualitative Data</td>
<td>58</td>
</tr>
<tr>
<td>Quantitative Data Analysis</td>
<td>58</td>
</tr>
<tr>
<td>Qualitative Data Analysis</td>
<td>59</td>
</tr>
<tr>
<td>Quantitative Results</td>
<td>61</td>
</tr>
<tr>
<td>Research Question 1</td>
<td>62</td>
</tr>
<tr>
<td>Research Question 2</td>
<td>70</td>
</tr>
<tr>
<td>Research Question 3</td>
<td>76</td>
</tr>
<tr>
<td>Qualitative Results</td>
<td>80</td>
</tr>
<tr>
<td>Interpretation of Emergent Themes</td>
<td>88</td>
</tr>
<tr>
<td>Theme 1: It is Essential to Identify and Work Within Students’ Zone of Proximal Development to Develop a Platform for Guiding Wise Instructional Direction</td>
<td>90</td>
</tr>
<tr>
<td>Theme 2: Reciprocal feedback is an Essential Component of The Formative Assessment Process as it Intentionally Moves Student Instruction Forward</td>
<td>91</td>
</tr>
<tr>
<td>Theme 3: Universal Screening/Benchmark Assessment</td>
<td>95</td>
</tr>
<tr>
<td>Theme 4: Teacher Reflection on Current Assessment Data is Essential to Providing Direction for Intentional Teaching</td>
<td>96</td>
</tr>
<tr>
<td>Theme 5: The Use of Multiple Assessments Provides Data that Creates a Clearer Picture of Students’ Strengths and Weaknesses Inside and Outside of a Reading Curriculum</td>
<td>97</td>
</tr>
<tr>
<td>Summary of Qualitative Results</td>
<td>99</td>
</tr>
<tr>
<td>Quantitative and Qualitative Comparisons</td>
<td>100</td>
</tr>
<tr>
<td>Summary</td>
<td>104</td>
</tr>
</tbody>
</table>
TABLE OF CONTENTS – CONTINUED

5. DISCUSSION ..........................................................................................................................106
   Introduction ..........................................................................................................................106
   Major Findings ....................................................................................................................108
   Instruction Targeting the Zone of Proximal Development .............................................108
   Reciprocal Feedback ...........................................................................................................109
   Universal Screening and Progress Monitoring .................................................................110
   Teacher Reflection .............................................................................................................112
   How Teachers and Administrators Define Formative Assessment ................................113
   Implications for Practice .....................................................................................................116
   Recommendations for Further Research ..........................................................................119
   Conclusions .........................................................................................................................120

REFERENCES CITED ..............................................................................................................122

APPENDICES ..........................................................................................................................131

   APPENDIX A: Assessment Definitions ..............................................................................132
   APPENDIX B: Interview Protocol ....................................................................................134
   APPENDIX C: Administrator and Teacher Survey ..........................................................138
   APPENDIX D: First Email to Administrators .................................................................150
   APPENDIX E: Email to School Team ..........................................................................152
   APPENDIX F: Second Email to Administrators .............................................................154
   APPENDIX G: Third Email to Administrators .................................................................156
# LIST OF TABLES

<table>
<thead>
<tr>
<th>Table</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Table of Specification</td>
<td>42</td>
</tr>
<tr>
<td>2. Educators’ Size of School District</td>
<td>50</td>
</tr>
<tr>
<td>3. School Enrollment Classifications</td>
<td>51</td>
</tr>
<tr>
<td>4. Educators’ Years of Experience</td>
<td>51</td>
</tr>
<tr>
<td>5. Educators’ Role</td>
<td>52</td>
</tr>
<tr>
<td>6. Educators’ School Size, Role, and Years of Experience</td>
<td>55</td>
</tr>
<tr>
<td>7. Which of the following describes your experience with Reading assessment?</td>
<td>61</td>
</tr>
<tr>
<td>8. Student data from formative reading assessments are used to develop reading instruction</td>
<td>63</td>
</tr>
<tr>
<td>9. To adjust and modify ongoing instruction, teachers can gather formative reading assessment data/evidence from students’ comments and their facial expressions</td>
<td>63</td>
</tr>
<tr>
<td>10. Formative assessment in reading supports students in learning to read</td>
<td>64</td>
</tr>
<tr>
<td>11. When students make mistakes during reading instruction, it helps them learn to read</td>
<td>64</td>
</tr>
<tr>
<td>12. Teacher and Administrator Comparisons for Questions Assessing Formative Assessment’s Role in Ongoing instruction</td>
<td>66</td>
</tr>
<tr>
<td>13. Rank the following assessments in the order that you perceive as the most effective to determine a student’s ongoing instruction, with 1 being the most effective</td>
<td>67</td>
</tr>
<tr>
<td>14. Multiple Measures: Top Three Assessments Recommended by Teachers and Administrators to Determine a Student’s ongoing reading instruction</td>
<td>69</td>
</tr>
</tbody>
</table>
# LIST OF TABLES – CONTINUED

<table>
<thead>
<tr>
<th>Table</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>15. Universal Screening/Benchmark reading assessment data is essential for monitoring the progress of students’ reading achievement</td>
<td>71</td>
</tr>
<tr>
<td>16. Students should know the goal of an assessment</td>
<td>71</td>
</tr>
<tr>
<td>17. Teacher and Administrator Comparisons for Questions Assessing Formative Assessment’s Role in Evaluating Proficiency with Standards</td>
<td>72</td>
</tr>
<tr>
<td>18. Rank the following assessments in the order that you perceive as the most effective to determine a student’s proficiency level with Montana English Language Arts Reading Standards, with 1 being the most effective</td>
<td>72</td>
</tr>
<tr>
<td>19. Multiple Measures: Top Three Assessments Recommended by Teachers and Administrators to Determine a Student’s Proficiency with Grade level Reading Standards</td>
<td>74</td>
</tr>
<tr>
<td>20. The purpose of formative assessment is to increase learning</td>
<td>76</td>
</tr>
<tr>
<td>21. Student data from formative reading assessments are to be collegially share with teachers</td>
<td>77</td>
</tr>
<tr>
<td>22. Student data from formative reading assessments are to be collegially share with administrators</td>
<td>77</td>
</tr>
<tr>
<td>23. Teacher and Administrator Comparisons On Items Assessing Perceptions of Formative Assessment Definitions</td>
<td>78</td>
</tr>
<tr>
<td>24. How do you perceive the use of the following assessments?</td>
<td>79</td>
</tr>
<tr>
<td>25. Themes and Codes Emerged from the Qualitative Data and Where They Align with the Research questions</td>
<td>89</td>
</tr>
</tbody>
</table>
# LIST OF FIGURES

<table>
<thead>
<tr>
<th>Figure Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Conceptual Framework</td>
<td>14</td>
</tr>
</tbody>
</table>
Administrators commonly lead the implementation of one universal reading screening assessment three times per year to formatively compare student progress. Frequently, this same screening tool is facilitated by principals and implemented by teachers one time per month to monitor students’ progress. With the increased attention on testing, educators report that they are fearful they are not using all of the data wisely that they are collecting (Peverini, 2009). Furthermore, it is not enough to know whether students are performing proficiently or below grade level standard; it is important to diagnose the type of learning difficulty that is standing in the way of mastery so that teachers can appropriately plan ongoing instruction (Chappuis, 2014). The motivation for this study is the notion that principals who lead in transformational and collaborative ways that focus on high-impact instructional methods experience grade level proficiency that is three to four times greater than when limiting instructional leadership to that of promoting only a focus on the implementation of the school’s mission and vision (Buffum et al., 2012; Robinson, Lloyd, & Rowe, 2008).

The purpose of this quantitative and qualitative multimethods study was to identify administrators’ and teachers’ perceptions of the overall formative assessment process in reading and to determine their perceptions of effective formative assessment practices commonly used to indicate students’ level of proficiency with reading standards and to plan ongoing instruction. Overall, teachers and administrators shared similar perceptions of the formative assessment process and its use. Teachers and administrators agreed that classwork and observations are essential for identifying a student’s zone of proximal development, essential for planning ongoing instruction, and effective evidence of student progress toward standard mastery. Moreover, during reading instruction, teachers and administrators indicated that encouraging and corrective feedback should be provided for students against clear learning goals. To lead the formative assessment process in reading effectively, it is critical for administrators to be high-impact transformational and instructional leaders.
CHAPTER ONE - INTRODUCTION

Introduction

Montana Elementary principals serve an important role in leading and providing continuous professional development of the Common Core State Standards (CCSS) for teachers within their schools. Mastery of the standards ensures students graduate prepared for college and the workforce as they reflect the knowledge and skills our students need to be successful in the 21st century. Furthermore, the standards provide clear goals that outline a grade-by-grade pathway that gives students the opportunity for high quality instruction (Montana Office of Public Instruction, 2015). To determine effective methods for assessing students’ progress towards meeting the CCSS, the Federal Race to the Top (RTTT) Assessment Program was prompted to fund and develop two state consortia assessment systems: the Smarter Balanced (SBAC) and the Partnership for Assessment of Readiness for College and Careers (PARCC) large scale assessments. These assessments have been designed to measure students’ proficiency of skills against the CCSS (Heritage, 2010).

Both consortia systems developed a newly designed online assessment format that is much different than educators have used previously. The collective implementation of the CCSS and the new assessment systems have prompted educators to reflect on the effectiveness of current assessment practices in the area of reading, questioning which common reading assessments provide enough information about students to be authentic indicators of their level of proficiency according to ELA reading standards. Hollenbeck
& Saternus (2013) suggest the standards outline a vision of what it means to be a literate person in the 21st century. “Students who meet the Standards readily undertake the close, attentive reading that is at the heart of understanding and enjoying complex works of literature” (p. 558).

Administrators in Montana commonly lead the implementation of one universal reading screening assessment three times per year to formatively compare district wide student learning by determining the percentage of students who are proficient at each grade level. An example of this type of assessment is the Standardized Test for the Assessment of Reading (STAR). The STAR is a computer based diagnostic assessment implemented to determine student proficiency within the four major areas related to the Common Core State Standards: Reading Foundations, Reading: Informational Text, Reading: Literature, and Language Use.

This same screening tool is also formatively facilitated by principals and implemented by teachers one or two times a month to monitor students’ progress towards proficiency of the Montana English Language Arts (ELA) reading standards. However, the 1999 Standards for Educational and Psychological Testing state that an educational decision or representation that will have major impact on a student should not be made on the basis of a single test score. Other relevant information should be considered if it will enhance the overall validity of an instructional decision (Guskey, 2007 & Koretz, 2006). The problem with relying on one assessment is more precisely described by Rubin (2011) who writes,
At the elementary level, many districts use a standardized reading assessment to cover five essential elements of reading (phonemic awareness, phonics, fluency, vocabulary, and comprehension). However, research has questioned the wisdom of using results from only one tool to pass judgment on how well students comprehend text—which, after all, is the main reason for measuring reading ability (p. 606).

Research suggests that effective reading assessments designed to evaluate student reading skills should be ongoing and not a summative assessment administered at the end of a curricular unit as a separate activity from the ongoing daily instruction. Instead, formative assessment should work in close harmony with instruction, occurring almost simultaneously as student feedback is provided through the teaching and learning process (Fisher & Frey, 2014; Stiggins, 2014). While at the same time, in response to the assessment evidence, the teacher makes adjustments to teaching and learning, the student is receiving feedback about their learning, and the student is able to process through self-assessment (Heritage, 2010). This type of assessment is formative; thus, it informs teachers exactly how students are performing. By comparing the work of individual students over time, patterns of growth can be determined. Nevertheless, whether assessments are formative or summative, they must first be accurate and yield actionable diagnostic information that provides results that identify student specific learning needs (Chappuis, 2014).

Perceptions of the Formative Assessment Process

The use of a universal screening measure in reading creates the opportunity for administrators to make quick proficiency comparisons and inform policy and decision
making at both the school and district level. This type of an interim or benchmark assessment does provide indicators of student learning; however, this is a misappropriation of the formative assessment label as this refers to the standard view of formative assessment as the use of an instrument and gives little attention to the data that surrounds us everyday (Fisher & Frey, 2014; Shepard, 2005). Furthermore, absent from this view is the perception of consistently working from students’ emerging understandings within Vygotsky’s (1978) zone of proximal development (ZPD) (Heritage, 2010).

The zone of proximal development is the space between the actual developmental level as determined by independent problem solving and the level of potential problem solving under adult guidance or in collaboration with more capable peers (Vygotsky, 1978, p. 86).

When a teacher provides instruction within a student’s ZPD, learning is supported through instructional scaffolding, including feedback, and the active involvement with the student in the assessment/learning process. Instead of perceiving formative assessment within the context of a measurement paradigm, educators have the opportunity to focus on the process of formative assessment within a learning paradigm (Heritage, 2010).

There are few studies that describe teachers’ and administrators’ perceptions of how formative assessments are viewed within a learning paradigm, as the majority of educators did not begin educational careers as experts with classroom assessment. Typically, pre-service preparation programs primarily focus on the act of instructing as planning and delivering lessons have been viewed separately from assessment and are to
be given from a textbook after instruction is complete (Chappuis 2014). This lack of training has led to the chronic problem of the lack of understanding of sound assessment practice as this problem is shared among, teachers, administrators, district leaders, and state education leaders (Stiggins, 2014).

This ongoing problem has been represented by the reluctance of teachers to make changes with instructional strategies and/or the pacing of lessons once they are planned, even when students are progressing poorly. This confirms the lack of formatively monitoring students’ learning progress (Cotton, 1988). Moreover, school districts have reduced formative assessment by relying heavily on only two or three district benchmark/universal screening assessments to determine if a student is proficient with reading standards (Fisher & Frey, 2014).

Problem Statement:

Most of the research on formative assessment focuses on analyzing student assessment results to inform teachers’ decisions to guide, adjust, and scaffold ongoing instruction for groups or individual students to lead students to the next level of learning (Stiggins & Chappuis, 2008; Stiggins & Chappuis, 2005; Roskos & Neuman, 2012). Other formative assessment research shares that “formative assessment is- or should be- the bridge or causeway between today’s lesson and tomorrow’s” (Tomlinson, 2014, p. 11). By its alignment with current content goals, formative assessment can transform instruction by providing timely data that captures students’ strengths and instructional needs (Risko & Walker-Dahlhouse, 2010; Tomlinson, 2014).
However, with the increased attention on testing, educators report they are fearful they are not wisely using all of the data they are collecting (Peverini, 2009). Furthermore, Popham (2008) suggests that most of the various forms of interim and benchmark assessments, similar to the computerized STAR assessment, are not helpful for informing instructional decisions and there is no research to suggest the assessments have direct educational benefits for students. Moreover, the concern of using data only from benchmark assessments is the issue of future instructional alignment with students’ educational needs.

On the contrary, the interim data from universal screening/benchmark measures are designed to enable teachers to make overall baseline instructional decisions for students during benchmarking periods and as the assessment is administered to monitor student progress monthly or bi-monthly. However, the authentic purpose of a universal screening assessment is to identify, as early as possible, students who, without intensive intervention, are at risk for failing (Buffum, Mattos, & Weber, 2012).

However, there are few studies that describe teachers' and administrators' perceptions of how formative assessments are viewed within a learning paradigm. Principals as high-impact instructional leaders contribute to increases in student proficiency of grade level standards when they work together with teachers in a culture of collaboration where members maintain the shared perception that the team is mutually accountable to work interdependently to arrive at a consensus about students’ ongoing instruction (Buffum et al., 2012). Based on research that includes 800 meta-analyses, comprising over 50,000 individual studies, and representing the student achievement of
over 80 million students worldwide, Hattie (2012) notes that "it is a collective, school-
wide responsibility to ensure that all students are making at least a year's growth for a
year's input, and to work together to diagnose, recommend interventions, and collectively
evaluate the impact of teachers and programs" (p. 63).

Analysis of Universal Screening Results:

It is not enough to know whether students are performing at or below grade level
standard; it is important to diagnose the type of learning difficulty that is standing in the
way of mastery so that teachers can plan appropriate ongoing instruction (Chappuis,
2014). When only one assessment tool is used, the likelihood of misdiagnosis of student
reading deficits is increased, thus creating a mismatch between students’ needs and the
choice of reading intervention (Wixon & Valencia, 2011). Regardless if universal
screening assessments are used three times per year or one time per month to monitor
student progress, they can rarely provide the evidence necessary to support
administrators, teachers, or students to make on-the-spot or immediate future adjustments
in instruction and learning (Popham, 2009).

A range of reading assessment procedures using multiple assessments have been
discussed in the literature. However, it may be difficult for teachers and administrators to
make decisions about the best reading assessment practices to use without a common
understanding and consensus of the most accurate and effective assessment methods.
When this is the case, students may not be afforded the most effective core instruction
and are not likely to be placed in the most appropriate interventions relative to the
students’ learning deficits according to grade level standards. Administrators and teachers need to work together to diagnose and recommend instruction and/or intervention (Hattie, 2012).

Purpose Statement:

The purpose of this research study is to identify school administrators’ and teachers’ perceptions of the overall formative assessment process in reading and determine their perceptions of effective formative reading assessment practices commonly used within the formative assessment process to indicate students’ level of proficiency according to ELA reading standards and to plan students’ ongoing instruction. Furthermore, the motivation for this study was to develop a clear understanding of the degree of consensus or discrepancy between these perceptions of administrators and teachers and to consider the implications for students’ ongoing instruction.

The impetus for identifying these perceptions was inspired by the framework of Guskey’s (2007) study focused on indicators of student learning. This study explored the comparative perceptions between teachers’ and administrators’ use of various assessment measures as indicators of student learning, beyond large-scale state and nationwide assessments. This study shared that educators recognize that no single assessment can address all of the standards that students need to know and be able to do, hence the need for multiple measures.
Furthermore, the implications from Guskey’s study identified that administrators and teachers need detailed information about student learning on an ongoing basis to understand a student’s learning strengths and deficits, allowing for the possibility to initiate specific strategies or intervention lessons for improvement. The meaningfulness and relevance of assessment results affect the motivation and effort educators implement to improve instruction and student learning (Guskey, 2007). The assessment measures used within a school should be collectively trusted and believed by administrators and teachers alike. “Specifically, they should include sources of evidence directly relevant to teachers and their classroom activities” (Guskey, 2007, p. 25).

For this reason, it is essential that teachers and administrators collaborate with a common understanding of the formative reading assessment process used to identify students’ level of proficiency according the grade level reading standards and to plan students’ ongoing instruction (Buffum et al., 2012; DuFour et al., 2010; Popham, 2006).

**Research Questions**

The research questions in this study are:

1. What measurements and instructional practices do elementary teachers and administrators perceive as effective for guiding ongoing reading instruction?

2. What measurements and instructional practices do elementary teachers and administrators perceive as evidence for student progress toward meeting Common Core English Language Arts Reading Standards?
3. How do elementary teachers and administrators define the formative assessment process in the area of reading instruction?

**Conceptual Framework:**

Formative reading assessment involves the systematic and frequent use of intentional multiple reading assessment measures that demonstrate student evidence of learning against clear standards. This evidence is used to identify students’ areas of strengths and weaknesses in reading to plan ongoing instruction (Rubin, 2011; Risko & Walker-Dalhouse, 2010). The rationale for implementing formative assessment in reading with multiple measures includes the opportunity to provide a comprehensive and adequate representation of student progress and performance, thus ensuring more equitable ways for educators to interpret the evidence of student learning (Guskey, 2007).

For example, criteria for developing credible formative assessments require careful planning and deliberate teacher actions to determine *what should be measured* (ex. use of self-corrections strategies during student oral reading), *how it should be measured* (ex. running records), *how frequently it should be measured* (ex. two minutes of oral reading three times each week per student), and to *decide what adjustments will be made to ongoing instruction* (ex. small groups of students practicing self-correction strategies to aid meaning-making while reading). Each assessment should link directly to instructional learning goals (Risko & Walker-Dalhouse, 2010). Without continuous and ongoing formative assessment, teaching is aimed at the middle and does not provide the information that teachers need to know to determine which students are ready for more
advanced instruction and which would benefit from reteaching (Brookhart, Moss, & Long, 2010; Fisher & Frey, 2014). This researcher believes that teachers and administrators should have a collective understanding of the formative assessment process to provide opportunities for collaborative data-based decision making to guide ongoing instruction. Understanding the formative reading assessment process is essential to the role of school administrators as instructional leaders.

Robinson, Lloyd, and Rowe’s (2008) research discovered that the effect instructional leaders have on student outcomes was three to four times greater than that of a leader who only leads as a transformational leader. High-impact instructional leaders take their transformational leadership one step forward to focus more directly on students. These leaders create a framework within the school day for teachers, and, at times, the principal, to participate in professional learning communities. This structure enables the teachers to collectively review student data to make collaborative decisions about student progress. The high-impact instructional leader guides teachers to see student data from assessments as feedback on their impact on student learning (Hattie, 2015).

The underpinnings of this research are founded on Vygotsky’s (1978) social constructivist theory. For example, a student is struggling learning to read while he makes quick guesses on unknown words. The teacher prompts the student to try again and asks a specific questions, “Did what you just read make sense?” or “There was a tricky part on that page, can you find it?” The child has an opportunity to think about
what was read and try again with the teacher’s guiding support. This is referred to as working within a student’s zone of proximal development (ZPD) (Heritage, 2010).

As an example of a teacher working within a student’s ZPD, if he/she self-corrects an error when reading aloud, the teacher will specifically praise, “Great correction!” or the student might go back and reread a sentence correctly, and the teacher will specifically praise, “Wonderful job rereading the sentence accurately”, providing immediate feedback. These instructional strategies are the hallmarks of effective formative assessment. Instead of perceiving formative assessment within the context of a measurement paradigm, Vygotsky’s theory provides the framework to focus on the process of formative assessment within a learning paradigm (Heritage, 2010).

Furthermore, this research is also founded upon Hattie’s (2015) high-impact leadership theory. School administrators who are instructional leaders focus more on students. These educational leaders have increased impact on student learning as their focus is on teachers’ instruction and the school’s impact on student learning and instructional issues. For example, the instructional leader welcomes errors from him/herself as well as from students and teachers. The leader views errors as learning opportunities and creates environments in which teachers and students can learn from errors without losing face (Hattie, 2015).

The concepts aligned with this conceptual framework include understanding and clarifying the perceptions of how teachers and administrators collectively understand the impact of the formative reading assessment process. Moreover, this research will focus on the specific assessments and/or instructional strategies identified within the literature
review to clarify administrators’ and teachers’ perceptions of their effectiveness to provide evidence of student learning and planning ongoing instruction.

The conceptual framework (Figure 1) for this research is founded upon best practices within the formative assessment process in reading. However, it may be difficult for teachers and administrators to make decisions about the best reading assessment practices to use without a common understanding and consensus of the most accurate and effective assessment methods. Considering this, the theoretical framework of this research is structured around high-impact instructional leadership. This type of leadership seeks colleagues’ agreement about what constitutes as convincing evidence of high-impact practices and publicly defines what student success means (Hattie, 2015).

Furthermore, Vygotsky’s social constructivism theory, working within a student's zone of proximal development (ZPD), aligns with the high-impact instructional leadership theory as both are explicit about success criteria and welcome errors in teaching and/or learning in order to make adjustments along a student’s learning continuum, increasing achievement toward specific learning goals. This research will reveal if administrators and teachers in Montana work within a high-impact transformational and instructional leadership framework where educators collaborate and collectively agree on best practices of formative assessment in reading and therefore collaboratively evaluate effective and clear evidence that represents student learning.
Limitations:

This research study has three limitations that should be considered when examining the results. First, teachers and administrators who answered the survey questions may not be familiar with the types of formative reading assessment practices listed. Educators may view the formative assessment process as a specific measurement tool. Second, the amount of teacher submitted surveys may be greater than the amount of administrator submitted surveys due to the smaller number of administrators employed as compared to teachers. Third, self-reporting perception surveys possess limitations in accuracy. It is challenging to determine if the questions are answered authentically.

Delimitations:

The setting for this research involved Montana elementary schools that educate grades kindergarten through five. The delimitations of the study were focused on exploring the overall perceptions of the formative assessment process in reading and specific formative reading assessment practices implemented within Montana elementary
schools. With this in mind, a quantitative twenty question survey was emailed to administrators within a school setting, district office administrators, and former superintendents who are currently serving as mentors to new principals and vice principals. The administrators were asked to forward the survey link to classroom teachers, Title One tutors, and instructional coaches. Furthermore, specific teachers and administrators were asked to participate in a qualitative survey that focused on their understanding of the formative assessment process and their perceptions of specific formative assessment measures.

**Definition of Terms:**

*Formative Assessment* - Formative assessment is a planned process, not a single test, intended to generate evidence of students’ status of proficiency that is used to improve and accelerate student learning. Teachers use knowledge gained to adjust ongoing instructional plans and students use the feedback to adjust strategies for learning (Buffum et al., 2012; Popham, 2009; Sadler, 1998). When teachers use formative assessment in this way, students can learn in six to seven months what will normally take an entire school year to learn (Leahy, Lyon, Thompson, & Wiliam, 2005).

Bearing in mind the grade level and subject matter, formative assessment measures can differ in form and length. They can be short quizzes, written assignments, oral presentations, skill demonstrations, or performances. In essence, formative assessment measures are any device teachers use to gather evidence of student learning (Guskey, 2010). Recently, “theorists and researchers have broadened the definition of
formative assessment to include any means of gathering information on student learning that can be used to provide feedback on learning progress and guide revisions in instructional activities” (Guskey & Lee, 2012, p. 25).

**Summative Assessment** - This type of assessment is defined as identifying the mastery of several skills or concepts. However, these assessments are not solely used at the completion of a unit or course; the data provided from these assessments are vital in determining whether an intervention has worked or if more intensive instruction is necessary (Guskey & Lee, 2012; Buffum et al., 2012). Historically, summative assessment has had the greatest impact on individual students as the assessments included teacher judgment in the form of grading classroom final exams and assigning report card grades based on them (Brookhart, 2013).

**High-Impact Leadership** - Effective leadership that focuses beyond student learning and relentlessly searches for evidence of learning (Hattie, 2015).

**Ongoing Instruction** - The next-step process of teacher developed instructional lesson plans focused on specifically stated learning goals. As part of the formative assessment process, teachers use evidence elicited by students to make immediate and/or future adjustments, if necessary, to what they are doing in the classroom (Popham, 2009).

**Response to Intervention (RTI) Framework** - RTI is a school wide systematic structure that assists teachers with identifying and intervening with students as soon as they begin demonstrating difficulty with grade level standards (Wixon & Valencia, 2011). This analysis of student assessment data prompts changes with curriculum, instruction, and assessment.
**Universal Screening Assessment** - A critical first step in the Response to Intervention (RTI) process, this type of an assessment is brief and is administered to the entire student population to identify potential reading difficulties and students who without intervention are at risk for failing (Buffum, Mattos, & Weber, 2012; Ball & Christ, 2012; Galanter, Rosengarten, Camacho, 2010; Green, Matthews, Carter, Fabrizio, Hoover, & Schoenfeld, 2012). Typically, computer adaptive testing (CAT) and curriculum-based measurements (CBM) have been suggested as effective for universal screening purposes. Considering the relatively low cost, ease of administration, and ability to address school wide needs, universal screening assessments are used for both benchmark screening and progress monitoring assessments (Ball & Christ, 2012).

**Significance of the Study:**

“In the complex and sometimes cantankerous world of reading assessment, formative assessment is often taken for granted. It has been around for a long time, and it is part and parcel of good teaching” (Roskos & Newman, 2012, p. 534). As the formative assessment process has emerged as an increasingly prominent school improvement strategy (Stiggins & Chappuis, 2005), the process must be understood and jointly trusted by administrators and teachers to yield information that ensures a clear and rich collection of evidence for making defensible decisions about students’ proficiencies (Guskey, 2007). When stated within a learning paradigm, formative reading assessment is a powerful engine. When it is led by administrators and used effectively, it can provide teachers and students with the information they need to move reading achievement
forward (Hattie, 2015; Roskos & Neuman, 2012). Research confirms the need for the efficacious use of formative reading assessment by sharing that implementing formative assessment successfully can quite literally double the speed of student learning simply by using day-to-day classroom assessments in more thoughtful, purposeful ways (Stiggins, 2014; Wiliam, 2008).

However, administrators and teachers need to work together to diagnose and recommend instruction and/or intervention (Hattie, 2012). If teachers are going to have the opportunity to implement the formative reading assessment process, they need collegial support from administrators. This leads to the necessity of developing and maintaining the professional learning community (PLC) framework. PLC descriptions vary; however, the general concept refers to a committed, high-performing team of educators (administrators and teachers) who collaboratively seek, share, and act on their learning to achieve better results for the students they serve (DuFour, DuFour & Eaker, n.d.; Bullough, 2007; Renfro, 2007).

Administrators positively lead the implementation of an effective formative assessment process within the context of grade level PLCs where there is a common understanding of student assessment data and collaboration with teacher teams. Overall, implementing the formative assessment process is wonderfully affordable; however, it does not work unless school administrators provide teachers with sufficient time within the master schedule to meet within a professional learning community (Popham, 2009).
Summary:

In summary, the implementation of CCSS prompted the development of the SBAC and the PARCC large-scale assessments as well as has been a significant factor in motivating teachers and administrators to reflect on the effectiveness of current assessment practices in the area of reading. Since many elementary schools typically implement a universal screening assessment measure to identify and compare student proficiency levels as well as to make instructional recommendations, it is important to know that research states that an instructional decision and/or proficiency characterization that will have a major impact on a student should not be determined on the basis of one test score as other relevant information should be taken into account (Chappuis, 2014; Guskey, 2007; Wixon & Valencia, 2011).

Considering this, the extent to which ongoing instruction is guided by the formative assessment process depends on the leadership of school administrators (Fox, 2003). Administrators need to have the ability to support teachers in acquiring the necessary skills to effectively implement the formative assessment process as well as establish school wide norms that pave the way to adjust instruction and learning. Without acquiring, maintaining, and sharing common reading instruction and assessment knowledge, it is impossible for school administrators to provide collegial support to guide teachers if they do not know and understand the formative assessment process (Popham, 2009; Popham, 2011).

Furthermore, educational research states that multiple assessments should be administered; this study will focus on revealing, in the area of reading instruction, if
administrators and teachers have similar or dissimilar perceptions about the formative assessment process when identifying students’ proficiencies according to reading standards.
CHAPTER TWO - REVIEW OF LITERATURE

Introduction

Student mastery of the Montana ELA essential reading standards is an expectation in elementary classrooms. Educators are confronted daily with students who arrive at their schools and in their classrooms with diverse experiences, exposures, and background knowledge in the area of reading; hence, administrators and teachers are faced with the question: how do we match instruction to meet each student’s strengths and needs? Researchers answer this question by stating that assessment should guide instruction (Tomlinson, 2014; Wren, 2002). Assessments that reveal actionable diagnostic information provide results that identify specific learning needs. Such assessments are instructionally tractable (Chappuis, 2014).

The purpose of this research is to identify school administrators’ and teachers’ perceptions of the overall formative assessment process in reading, their beliefs of specific formative reading assessments that are commonly used to indicate students’ level of proficiency according to the Montana ELA reading standards, and which assessments are most effective to plan students’ ongoing instruction.

Summative and Formative Reading Assessment

Almost any reading assessment measure can be used for summative or formative purposes as these terms refer to the time at which a test is administered and, more importantly, how the results are interpreted. If the interpretations of the test are to
modify and adjust instruction while it is ongoing, the test would be considered formative. If the interpretations are used to sum up the learning at the end of teaching, the assessment is considered summative (Hattie, 2012).

In general, summative assessment results are typically used to make some sort of a judgment about how much learning has occurred at a specific point in time, such as determining a student's grade on a classroom assignment, measuring program effectiveness, or identifying whether a school has made adequate yearly progress. In contrast, a formative assessment measure provides information during ongoing instruction, allowing the interpretation of the results to be used to make decisions about what actions should take place next to improve and enhance student learning (Chappius & Chappius, 2008; Fisher & Frey, 2011).

However, a common misconception is that any reading assessment implemented throughout the school year is formative assessment. This is not the case unless the assessment is used to inform teachers’ decisions to guide, adjust, and scaffold ongoing instruction for groups or individual students to get students to the next level of learning (Stiggins & Chappuis, 2008; Stiggins & Chappuis, 2005; Roskos & Neuman, 2012). Formative assessment is conducted during instruction to give teachers and students timely and clear data about what a student understands as it compares to the current learning goal. When students experience the formative assessment process that emphasizes clear learning goals and explicit feedback about how to move toward mastery, their learning increases (Stiggins & Chappuis, 2008; Stiggins & Chappuis, 2005; Roskos & Neuman, 2012).
Furthermore, Black and Williams’ (1998) seminal research suggests that formative assessment consists of frequent interactions of feedback between students and teachers (Black & Williams, 1998; International Literacy Association, 2013). Current position statements from the International Literacy Association (ILA) suggest that formative assessment is not a process associated with grading. Rather the formative assessment process should be purposeful, engaging, and dynamic as it is an ongoing process where teachers and students share the responsibility to provide feedback that informs instruction and leads the way for continuous improvement (ILA, 2013; Shepard 2005).

Stiggins and DuFour’s (2009) research states that assessments provide information for educators at three different levels. First, at the classroom level, formative classroom assessments continuously provide information to students, teachers, and parents about where a student is performing in his or her learning during ongoing instruction. In contrast, summative classroom assessments verify a student’s progress by finalizing it with a grade.

Second, at the school level, periodic school wide benchmark assessments provide comparable student learning evidence for teacher leaders, instructional coaches, and administrators. These assessments enable educators to formatively identify components of an instructional program that are working effectively and those that need to be improved. Furthermore, when individual student progress when each standard is identified, teachers are able to use this evidence to identify the standards where students struggle and use the information for program improvement.
Third, at the institutional level, summative standardized accountability assessments are most common. Superintendents, school boards, and legislators use annual summaries that analyze whether or not students are meeting the required standards. Specific grade levels are required to have standardized assessments administered to reveal the proportion of students mastering standards, thus evaluating the overall institutional impact. On the other hand, institutional level assessments can be formative if the assessments are designed and analyzed to reveal students’ performance in mastering each standard. Considering this evidence of student learning, timely and systematic interventions can be developed to support students in mastering grade level standards.

**Professional Learning Communities**

At the school level, student data from formative assessments can be analyzed collaboratively with staff within a PLC framework. In schools that function as a PLC, teachers and administrators are actively involved in improving student learning by gathering information, making decisions, and implementing decisions. They are active in their own learning and open to new ideas (Buffum et al., 2012; Hattie, 2012; DuFour et al., 2010; Fleming & Leo, 1999; Rentfro, 2007). Thus, there is an increased commitment to the school’s mission and a reduction in teacher isolation (DuFour et al., 2008; DuFour & Fullan, 2013). “Teachers often refer to students as ‘our’ students instead of ‘my’ students, reinforcing the collective atmosphere” (Rentfro, 2007, p1).
The difference between a PLC and a traditional school is the response to data (Jessie, 2007, p. 2). DuFour (2011) cites, “In a professional learning community, evidence trumps appeals to mindless precedent (‘This is how I have always done it’) or personal preference (‘This is how I like to do it’)” (p.59). When determining if a student is proficient with Montana ELA reading standards or when planning ongoing instruction, it is not reasonable to assume that a single teacher knows everything, a team is necessary.

Likewise, the transformational, high-impact instructional leader does not work alone to lead a school to advance student achievement. Improving student outcomes requires a PLC team to effectively collaborate together and come to a consensus on defining the evidence of student success (Hattie, 2015). Furthermore, it is essential that the leader create time within the school day for teams to learn together and to collectively review student data. The collegial relationships developed through these teams leads to the development of a school culture that encourages teachers and students to believe it is okay to say “I don’t know” or “I need help”. Teachers and students feel comfortable actively seeking feedback as errors made by teachers and students are viewed as opportunities for learning (Hattie, 2015).

High-Impact Transformational and Instructional Leadership

The development of a clear and shared vision that communicates specific goals for improving school achievement occurs when integrating the leadership characteristics of both transformational and instructional leaders (Hallinger, 2010). A high-impact transformational and instructional leader is highly visible throughout the school in order
to model expectations, values, and priorities (Hallinger, 2010). The high-impact transformational and instructional leader meets with teacher teams during their PLC time to review formative assessment data and to discuss students’ needs (Shatzer, Caldarella, Hallam, & Brown, 2014).

The transformational leadership component of this integration creates a platform for establishing relationships that are conducive for improving the quality of instruction and creating conditions that support the academic growth of students. Combining this with instructional leadership components brings clarity, focus, and consistency to the academic needs of students (Printy, Marks, & Bowers, 2009). The integration of transformational and instructional leadership supports an effective implementation of PLCs. These characteristics as shared by King (2015) include:

1. Shared mission/purpose, clear visions, goals with explicit targets all focused on student learning.
2. Collective inquiry about best practices vs. school’s current reality.
3. Taking action and learning by doing.
4. School wide commitment to continuous improvement.
5. A focus on student results.

Response to Intervention

As student reading data is reviewed within a PLC infrastructure, it is analyzed by teachers and administrators when reading intervention instruction is imminent for students who are not proficient in the Montana ELA reading standards; therefore,
elementary schools across the state have begun to explore and implement the Response to Intervention (RTI) framework. RTI is a school wide, systematic structure that assists teachers with identifying and intervening with students as soon as they begin demonstrating difficulty with grade level standards (Wixon & Valencia, 2011).

RTI is described as a multilevel system of supportive interventions that increase in intensity across tiers. These tiers are represented in three layers. In Tier one, high-quality classroom instruction is provided to every student. In Tier two, strategic instruction, additional instruction is given that supplements the classroom program for students who do not respond to regular classroom instruction. Finally, Tier three is ultimately for students who do not respond to Tier two instruction; therefore, they need a more intensive and flexible level of instruction. The RTI approach demands that assessment meaningfully informs reading instruction throughout these tiers (Friedman, 2010; Wixon & Valencia, 2011).

The reauthorization of the Individuals with Disabilities Education Act (IDEA) of 2004 authorizes the use of RTI by stating that assessments should include data based documentation or repeated assessments of achievement at reasonable intervals (Wixon & Valencia, 2011). Considering this law, the International Reading Association (IRA) formed a Commission for RTI to provide guidance to educators as they develop and implement the RTI framework. One of the significant contributions resulting from this Commission is the guideline established on the topic of assessment. The Commission makes three tenets clear: first, literacy assessment should not be sacrificed for efficiency of an assessment procedure. Second, not all available assessments are appropriate for all
purposes or all students. Third, “the assessment principle supports the need for coherence rather than the more common collection of measures that are used inappropriately or are misaligned” (p. 466).

**Universal Screening and Progress Monitoring**

The administration and student analysis of school wide universal screening assessments is where many schools begin the formative assessment process. The universal screening assessment is designed to provide initial information on which students need additional and specialized support and to identify students who are struggling and are at risk for learning difficulties (Buffum et al., 2009; Buffum et al., 2012). Universal screening assessments are typically given three times per school year. This type of an assessment is a crucial component of any comprehensive system of assessment as it is essential for identifying students who are at risk for reading difficulty as well as a starting point for instruction within a RTI model (Galanter et al., 2010; Hosp, Hosp, & Dole, 2011; Green, Matthews, Carter, Fabrizio, Hoover, & Schoenfeld; 2012; Hughes & Dexter, n.d.). However, identification is not enough. Buffum et al. (2012) suggest that universal screening assessments should be used by teachers to guide their development of instructional plans with specific learning goals unique to each student’s academic needs.

Several methods have been suggested as effective for universal screening purposes, including curriculum-based measurement (CBM), computer adaptive testing (CAT), and single-skill assessments for younger students (Ball & Christ, 2012). CBM is
widely used across general and special education populations for screening and progress-monitoring purposes as it is a popular method due to its cost-effectiveness and ease of administration (Ball & Christ, 2012; Deno, Reschly, Lembke, Magnusson, Callender, Windram, & Stachel, 2008). Increased attention has been given to the use of CAT as a universal screening tool; however, this type of measurement typically takes longer to administer and is more costly than CBM (Ball & Christ, 2012).

Following universal screening results, students who have been determined to be below benchmark or at risk for not having the skills to meet learning goals are monitored on a frequent basis to evaluate the effectiveness of instruction (Deno et al., 2009). Progress monitoring is defined by the National Center on Response to Intervention as a scientifically based practice that is administered to determine students’ academic performance and evaluate the effectiveness of instruction (Galanter, 2010). When comparing universal screening data to progress monitoring data, the collection of data occurs on a more frequent basis typically with fewer students.

Nonetheless, progress monitoring is useful to implement school wide as the assessments can identify students who are at-risk for reading difficulty and can support educators in planning ongoing instruction more effectively (Stecker & Lembke, 2011). Research has demonstrated that progress monitoring is a critical component of the formative assessment process; as teachers gather data to guide instruction while simultaneously involving the students in taking ownership of their learning, students achieve more and teacher decision-making improves (Buffum et al., 2012; Stecker &
Lembke, 2011; Galanter, 2010). Hence, the data from a progress monitoring assessment is most powerful when:

1. Students’ current level of performance in a specific skill area in reading is identified,
2. Students know and understand their learning goal,
3. Students know how they are progressing toward meeting that goal, and
4. There is a success criteria established to determine if students are mastering the specific reading standards/goals (Buffum et al., 2012; Galanter, 2010).

**Curriculum-Based Measurement**

Considering reading standards, curriculum-based measurement (CBM) was developed to monitor progress in the basic skill areas of reading (Christ, Zopluoglu, Long, & Monaghan, 2012). Over thirty years of research supports CBM as an effective scientifically reliable and valid form of student progress monitoring that includes a set of procedures that are uniquely suited to improve student achievement within a problem solving or RTI framework (Christ et al., 2012; Stecker & Lembke, 2011; Fuchs & Fuchs, 2011). Moreover, CBM can be used for both universal screening and progress monitoring across a school year. This type of an assessment is not used to evaluate problems as right or wrong, it is used to audit overall student skill development to support planning ongoing instruction (Fuchs & Fuchs, 2011; Buffum et al., 2012; Deno et al., 2008).
CBM reading assessments, also called reading probes, are brief and easy to administer at regular intervals (weekly, bi-weekly, monthly). Since the probe is standardized, it is administered the same way every time. Each probe is a different assessment; however, the probes assess the same skills at the same difficulty level (Fuchs & Fuchs, 2011). The CBM Manual for Progress Monitoring in Reading shares the reading probes have been prepared by researchers and test developers to align curriculum passages to be of equivalent difficulty from passage to passage within each grade level (Fuchs & Fuchs, 2011). Implementing the use of CBM involves using general outcome measures (GOM) of achievement or skill-based measures of achievement. For example, a GOM is the process of measuring a student’s reading fluency for one minute over time in standardized conditions to determine overall achievement in reading (Stecker & Lembke, 2011).

Oral Reading Fluency and Maze Fluency assessment measures have a significant amount of research to support the use of CBM for universal screening or progress monitoring (Stecker & Lembke, 2011). Furthermore, CBMs are especially helpful when monitoring early literacy progress such as letter naming, letter sound fluency, nonsense word fluency, and phonemic segmentation and blending tasks (Buffum et al., 2012).

Feedback

Feedback is the linchpin that connects students and teachers to the learning paradigm within the formative assessment process (Bookhart, Moss, & Long, 2010). Effective feedback describes the specific quality of student work against clear
learning goals and focuses on specific strategies for improvement, revealing the learning that comes next (Brookhart et al., 2010; Tomlinson; 2014; Stiggins, 2014; Stiggins & Chappius, 2005). This is what Stiggins (2014) considers as assessment for learning. Assessment for learning involves three critical elements:

- Using assessment to generate learning, not just grade it;
- Relying on learning success rather than intimidation and anxiety to motivate students;
- Increasing the positive impact of instruction for all by increasing the quality of our day-to-day classroom assessments (Kindle location, 241).

The terms formative assessment and assessment for learning can essentially be seen as interchangeable (Popham, 2014). Furthermore, Hattie (2012) shares the perspective of assessment as feedback as an alternate for assessment for learning. Hattie’s research argues that it is very powerful when assessment feedback is oriented towards the teacher and focused on which students are moving forward towards the success criteria, focusing on strengths and gaps of their teaching.

The essence of this formative interpretation enables teachers to glean evidence about student performance, interpret the evidence, and modify teaching so that it is more likely to benefit students (Tomlinson, 2014). Hattie’s (2012) research continues by suggesting that teachers too often perceive assessment feedback as making statements about their students and not about their teaching, consequently the benefits of feedback from such testing are often diluted.
Furthermore, the most important assessment decisions tend to be made by adults on behalf of students. Instead, both the teacher and the student should be involved collaboratively, both having a clear concept of the goal, comparing current student progress against the goal, and then planning the ongoing instruction within the learning process (Roskos & Neuman, 2012; Hattie, 2012). The act of providing feedback should be consistently approached purposefully as it should not just be evaluative, but tailored to meet the needs of the learner (Fisher & Frey, 2011).

**Running Records and Informal Reading Inventories**

Considering this, research reveals that a large number of teachers implement the standardized procedure of running records to assess students’ reading progress and to individually diagnosis students’ reading difficulties. The running record is a test of contextual reading accuracy and student strategy use where teachers can code and analyze student’s reading behaviors (Fawson, Reutzel, Smith, Ludlow, & Sudweeks, 2006; Fountas & Pinnell, 2013). Furthermore, there is a high correlation between teachers’ frequent use of running records and students’ reading achievement as a running record provides explicit information about a student’s use of strategies to plan ongoing instruction (Serravallo, 2014; Fawson et al., 2006).

Additionally, an Informal Reading Inventory (IRI) is designed to evaluate different aspects of a students’ reading performance. IRIs are administered individually to students and have been recommended as valuable when measuring students’ fluency and reporting reading growth throughout a school year (Rubin, 2011; Nilsson, 2008). Bearing
in mind that benchmark and/or universal screening information/data is old news in a few weeks, the frequent use of running records and/or IRIs assists in monitoring progress and diagnosing students’ reading difficulties. Analyzing this information enables formative assessment to take place and future instruction to be planned effectively (Fawson et al., 2006; Nilsson, 2008; Fountas & Pinnell, 2013).

**Basal Reading Series Assessments**

A basal reading series contains a complex collection of reading selections, support materials, and assessments that are held together by a hefty teacher’s edition. The assessments within the basal reading series are criterion-referenced tests that assess the essential and sequential skills that have been taught. It has been noted by some researchers that basal reading series assessments cannot assist in planning ongoing instruction in isolation because doing so would require additional data about the performance of individual students (Dewitz & Jones, 2012).

**Multiple Measures**

Formative Assessment in reading involves the systematic and frequent use of intentional, multiple reading assessment measures that demonstrate student evidence of learning against clear standards. This evidence can capture a student’s areas of strengths and weaknesses in reading to plan ongoing instruction (Rubin, 2011; Risko & Walker-Dalhouse, 2010). Furthermore, when teachers and administrators use a shared system for
communicating student progress data, they work collaboratively and systematically to promptly address each student’s reading instruction needs.

The rationale for implementing formative assessment in reading with multiple measures includes the opportunity to provide a comprehensive and adequate representation of student progress and performance, thus ensuring more equitable ways for educators to interpret the evidence of student learning (Guskey 2007).

Summary

The formative assessment process simply asks a teacher to monitor students’ progress to determine whether the teacher’s instructional decisions were good ones (Popham, 2014). Furthermore, Popham’s research defines formative assessment as a planned process to monitor progress, not a spur-of-the moment undertaking.

Characteristics of the formative assessment process include:

1. A carefully conceived process where the results of assessment measures are used by teachers and students to improve what they are doing,
2. Teachers adjusting ongoing instruction and students adjusting learning procedures or strategies,
3. Collecting student assessment-based evidence to make adjustments with ongoing instruction, and
4. Advanced planning; however, this is a right now process focused on shaping what is currently being taught and learned (Popham, 2014).
If implemented effectively, the formative assessment process improves student learning (Black & Wiliam, 1998) as schools can identify student proficiency with Montana ELA reading standards and plan ongoing reading instruction intentionally.
CHAPTER THREE – METHODS

Introduction

The purpose of this research study was to investigate school administrators’ and teachers’ perceptions of their overall understanding of the formative assessment process in reading. In addition, the research focus was to identify what they believe to be effective formative reading assessment practices that are commonly used to measure students’ level of proficiency according to ELA Common Core reading standards and used to inform students’ ongoing instruction. Furthermore, the motivation for this study was to develop a clear understanding of the degree of consensus or discrepancy between these perceptions of administrators and teachers and to consider the implications for students’ ongoing instruction as well as professional development options for the teachers and administrators.

The data for this research was gathered from Montana teachers and administrators who work in a school setting with any of the grades kindergarten through five.

Research Questions:

The research questions in this study were:

1. What measurements and instructional practices do elementary teachers and administrators perceive as effective for guiding ongoing reading instruction?

2. What measurements and instructional practices do elementary teachers and administrators perceive as evidence for student progress toward meeting Common Core English Language Arts Reading Standards?
3. How do elementary teachers and administrators define the formative assessment process in the area of reading instruction?

Research Design

This study used a multimethod research design where both quantitative and qualitative techniques were used to answer the research questions posed for this study. Morse (2003) defines multimethod research as “the conduct of two or more research methods, each conducted rigorously and complete in itself, in one project. The results are then triangulated to form a complete whole” (p. 190). For this study, a sequential design (Morse, 2003) was used to collect data (Morse, 2003). First, a quantitative survey was developed and administered to teachers and administrators followed by interviews from key informants who completed the survey.

This multimethod study began with the development of a multiple choice and rank order survey created online with Qualtrics survey software through Montana State University. The research questions were answered from data collected from a survey developed to assess teachers’ and administrators’ perceptions of the overall formative reading assessment process. The first four survey questions developed focused on identifying the participants’ demographics in order to classify years of experience, formative assessment training, and the participant’s role as an educator or administrator. The following questions were developed from the formative reading assessment research and from the researcher’s years of experience as an elementary classroom teacher and elementary administrator.
In the literature review, there were seven reading assessment measures discussed. In preparing for this study, a previous pilot study conducted by this researcher and a similar Likert Scale survey was administered. This resulted in many of the same ratings making comparative analysis difficult. Rank ordering allowed for increased variance in individual participant’s judgments, allowing for more discrete comparisons to be made when analyzing the results. The second set of questions asked the respondent to rank order formative assessment measures.

These questions were aligned with Guskey’s (2007) main research questions as they asked the participants to rank order the seven assessments believed to determine best if a student is proficient with grade level reading standards and to plan ongoing instruction. For the purpose of this study, the independent variables were the reading assessment measures and the dependent variables were the frequency of their use. Descriptive statistics and correlations were used to determine the relationships among assessment knowledge and compared to the participant’s role in their school district and/or years of experience.

The three research questions were answered in increased detail through the use of structured qualitative interviews with both teachers and administrators (Appendix B). Eight educators participated in one on one structured interviews.

**Participants:**

The participants in the study included elementary school teachers, instructional coaches, elementary school assistant principals and principals, and district level
administrators. The survey was administered through the school district email as the researcher personally contacted school district superintendents for permission to email staff to forward the research participation requests to school districts. The initial email was sent in early September 2015. The sampling procedure used was a purposeful sampling considering the public schools are governed by the same ELA Reading Standards. The survey instrument was sent to elementary teachers and administrators who work within the state of Montana and in schools that have any of the grades kindergarten through five.

**Instruments and Data Collection:**

The quantitative instrument that was used for data collection was an online survey created with Qualtrics survey software through Montana State University. The instrument was designed to identify the participants’ view of their overall perceptions of the formative assessment process and of specific formative reading assessments. The survey’s purpose was to gather data about the participants’ perceptions for an overall preferred assessment measure and if provided the opportunity to use multiple measures, which three assessments would the participants choose to determine grade level proficiency in reading and to plan or to assist in planning ongoing instruction.

The survey developed for this study is found in Appendix C. Administrators and teachers who have significant knowledge of the formative assessment process and who have been considered experts reviewed the survey. Their feedback and suggestions were considered prior to sending out the survey for face validity (Bornstein, 2004).
The qualitative instrument that was used is an interview protocol found in Appendix B. Open-ended questions were asked for more in depth understanding about teachers’ and administrators’ perceptions of the formative reading assessment process. There were eight questions included within the protocol. The first, second, and fourth questions were developed by synthesizing the foundational research from Black and Wiliam (1998) and current research from Stiggins (2014) and Popham (2014). The collective research states that formative assessment is a process, not a single measure as it should be planned, purposeful, engaging, and dynamic. The process occurs within a learning paradigm where teachers and students share the responsibility to provide feedback that is focused on evidence of student learning. Hence, this carefully conceived process has a positive impact as it guides teachers and students to improve what they are doing.

The third question was developed based on the Vygotsky’s theory (1978) of working within a student’s zone of proximal development (ZPD). When a teacher provides instruction within a student’s ZPD, learning is supported through instructional scaffolding, including feedback, and the active involvement of using planned assessment to guide the learning process.

The development of the fifth question was founded mainly from the literature on progress monitoring from Galanter (2010) and Buffum et al. (2012). This summarized research states that progress monitoring is a critical component of the formative assessment process as teachers’ decision-making improves and students are involved in taking ownership of their learning. This monitoring is most powerful when students are
aware of their current progress within a set of learning progressions, know and understand their learning goal, and have identified how they are progressing to meet the goal. The following three questions were developed to inform the researcher of detailed teachers’ and administrators’ perceptions of the effectiveness of specific assessments.

Table 1. Table of Specification

| Purpose of the development of the Quantitative Survey | 1. To gather data about the participants’ perceptions for an overall preferred assessment measure.  
2. If provided the opportunity to use multiple measures, which three assessments would the participants choose to determine grade level proficiency in reading and to plan or to assist in planning ongoing instruction. |
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Qualitative Survey questions one, two, &amp; four</td>
<td>Developed by synthesizing the foundational research from Black and Wiliam (1998) and current research from Stiggins (2014) and Popham (2014).</td>
</tr>
<tr>
<td>Qualitative Survey question three</td>
<td>Developed based on the Vygotsky’s theory (1978) of working within a student’s zone of proximal development (ZPD).</td>
</tr>
<tr>
<td>Qualitative Survey question five</td>
<td>Developed mainly from the literature on progress monitoring from Galanter (2010) and Buffum et al. (2012).</td>
</tr>
<tr>
<td>Qualitative Survey questions six through eight</td>
<td>Developed to inform the researcher of detailed teachers’ and administrators’ perceptions of the effectiveness of specific assessments.</td>
</tr>
</tbody>
</table>

Procedures:

The survey instrument and interview protocol was sent to the Institutional Review Board (IRB) for approval in July 2015. Next, the survey was sent to experts and piloted with a small group of teachers and administrators who reviewed the survey items for relevancy, clarity, and accuracy of questions (DeVillis, 2011). Based on feedback from
the expert panel, the pilot group completed the survey and provided feedback related to
the question content and format.

Once the survey was reviewed, revised and piloted, superintendents and principals
were contacted for permission to send out the survey. Kirk Miller, the Executive Director
of the School Administrators of Montana (SAM), provided the SAM listserv, which
consisted of email contact information for principals and superintendents within the state
of Montana. This organization is an association of school administrators with the core
purpose of providing, advocating, and creating educational excellence for Montana
students. The data from the survey was gathered, as each form was submitted online and
later uploaded to SPSS to be analyzed. Qualitative interviews were conducted with both
teachers and administrators selected from the pool of participants who completed the
electronically distributed 20-item quantitative survey assessing their perceptions of the
formative reading assessment process and formative assessment tools. These interviews
were conducted to gain a deeper understanding of teachers, instructional coaches and
administrators perceptions of the formative reading assessment process and the
effectiveness of these assessments for determining elementary students reading levels and
planning instruction. Both teachers and administrators were interviewed until the same
themes continued to emerge. Similarities in themes indicated saturation across both
teachers and administrators has been reached.
Data Analysis:

Descriptive statistics were used to report results of teachers and administrators perceptions of the formative reading assessment process and the use of formative reading assessments. Results from the questionnaire were also disaggregated by respondents’ role within the school district as well as aligned with their experience in the field of education and level reading assessment training. Descriptive statistics were used to present an overview of teacher and administrators rankings of formative reading assessment effectiveness.

Results from qualitative interviews were coded using analysis methods recommended by Corbin and Strauss (2007) and Creswell (2013) to identify emergent themes across participant transcripts. To ensure trustworthiness of the qualitative data, the following procedures were used: First, credibility was ensured by interviewing in an environment that was comfortable and safe allowing for participants to feel ease in answering questions. Furthermore, this researcher maintained a consistent interview technique with each participant that was nonjudgmental allowing for the participants to feel the information provided was unbiased to his or her answers. Second, transferability was facilitated by purposefully selecting participants and providing a consistent and dense description of the research and the research questions. The participants were self-selected by choosing to reply to an email link at the end of the quantitative survey.

Dependability was the third element that was used to determine the trustworthiness of the qualitative data. This included peer examination, also referred to as member checking. This procedure included having the participants review their stated
answers to ensure they were correct and were collected accurately. Finally, the fourth element that was reviewed to ensure trustworthiness was confirmability. This involved the triangulation technique of interviewing participants to represent the different demographics included in the research (Creswell, 2013).

When analyzing the data the following procedures were included: First, the recorded and collected verbatim responses were transcribed. Second, this researcher recorded the responses in order to conduct multiple readings of each participant’s complete response. Third, key points, common aspects, and unique or divergent statements were identified in the form of margin notes (Creswell, 2013). Consequently, the margin notes were used to identify common and distinct features to form a preliminary set of codes. Fourth, a working definition for each code was created to manage the data in a systematic fashion. Each response was meaningfully coded into distinct units.

Following the coding of the responses, the fifth step included verifying the accuracy of preliminary codes by selecting a sample of the responses and asking a colleague to assign each distinct segment with a code using the working definition named above. This constant comparison approach (Strauss & Corbin, 2007) enabled the similarities and differences of coding attempts to be compared and examined. Each segment that was coded differently was discussed in depth until an agreed code or a development of an additional code appropriately represented the segment meaning; as a result, all coded segments were clearly defined (Codkrell, Placier, Cockrell, & Middleton, 1999).
The sixth step involved organizing the coded data into specific categories that accurately represented the complexity of the data and best answered the study’s three research questions. Furthermore, examples from the data for each code and each category were provided. The seventh, and final step, included examining the validity of the categories created with the technical method as described by Constas (1992). First, a colleague unrelated to the study received an orientation to the investigation, an overview of the study’s design, and about forty percent of the random sample of the segmented data. Next, the colleague coded the selected portion of the data using the refined category definitions. Finally, agreements and disagreements were recorded and the raw rate of agreement was calculated and reported.

Positionality:

This researcher is currently an elementary principal who was a classroom teacher for fourteen years. During this researcher’s experience as a teacher, training was pursued in the area of reading instruction. The training received provided an essential framework for daily instruction in reading as it was consistently aligned with the formative assessment process within a learning paradigm. This research is essential to educational leadership; as an administrator this researcher has realized that associated educators are unfamiliar with the perspective of the formative reading assessment process within a learning paradigm. As the research shares and the researcher’s experience has shown, when the formative reading assessment process is implemented within a learning paradigm students acquire higher levels of learning.
The purpose of this research is to develop a thorough understanding of teachers’ and administrators’ perspectives of the formative assessment process in reading. This clarity will enable the researcher to determine what types of professional development are necessary to ensure educators share common understandings of the teaching and learning framework within the formative assessment process. Having this specific professional development available will ensure that students gain higher achievement in the area of reading.

Summary

This multimethod study employed a research design that used both quantitative and qualitative techniques to answer the three research questions presented for this study. The participants in the study included K- 5 elementary school teachers, instructional coaches, elementary school assistant principals and principals, and district level administrators. The quantitative instrument that was used for data collection was an online survey created with Qualtrics survey software through Montana State University. The data from the survey was gathered, as each form was submitted online and later uploaded to SPSS to be analyzed. Descriptive statistics were used to report results of teachers and administrators perceptions of the formative reading assessment process and the use of formative reading assessments.

Furthermore, qualitative interviews were conducted with both teachers and administrators who were self-selected from the pool of participants who completed the
survey. The qualitative data was transcribed and coded to identify specific themes found within the interview data.
CHAPTER FOUR - RESULTS

Introduction

The purpose of this research study was to identify school administrators’ and teachers’ perceptions of the formative reading assessment process as well as identify what they believe to be effective formative reading assessment practices that are commonly used to measure students’ levels of proficiency according to ELA Common Core reading standards and used to inform students’ ongoing instruction. Furthermore, the motivation for this study is to develop a clear understanding of the degree of consensus or discrepancy between administrator and teacher perceptions and to consider the implications for students’ ongoing instruction as well as professional development options for teachers and administrators.

Research Questions:

The research questions in this study were:

1. What measurements and instructional practices do elementary teachers and administrators perceive as effective for guiding ongoing reading instruction?
2. What measurements and instructional practices do elementary teachers and administrators perceive as evidence for student progress toward meeting Common Core English Language Arts Reading Standards?
3. How do elementary teachers and administrators define the formative assessment process in the area of reading instruction?
Participants:

The participants in the study included elementary school teachers, instructional coaches, Title One tutors, elementary school assistant principals and principals, and district level administrators. This population involved elementary teachers and administrators who work within a Montana school district in elementary schools that serve students in kindergarten through grade five with or without Title One funding. The tables below represent the demographics of the survey respondent population.

Table 2. Educators’ Size of School District

<table>
<thead>
<tr>
<th>Size of School District</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>AA</td>
<td>118</td>
<td>29.1</td>
</tr>
<tr>
<td>A</td>
<td>64</td>
<td>15.8</td>
</tr>
<tr>
<td>B</td>
<td>81</td>
<td>20</td>
</tr>
<tr>
<td>C</td>
<td>79</td>
<td>19.5</td>
</tr>
<tr>
<td>K-8 Independent Elementary</td>
<td>63</td>
<td>15.6</td>
</tr>
</tbody>
</table>

The school district sizes are defined by student enrollment in Montana school districts that include at least one high school. The following are the enrollment classifications.
Table 3. School Enrollment Classifications

<table>
<thead>
<tr>
<th>Class</th>
<th>Enrollment</th>
</tr>
</thead>
<tbody>
<tr>
<td>AA</td>
<td>825+</td>
</tr>
<tr>
<td>A</td>
<td>825-340</td>
</tr>
<tr>
<td>B</td>
<td>339-120</td>
</tr>
<tr>
<td>C</td>
<td>119-1</td>
</tr>
</tbody>
</table>

Nearly three-fourths of the respondents had ten or more years of experience in the field of education. For administrators, the survey did not distinguish between years of teaching versus years in administration.

Table 4. Educators’ Years of Experience

<table>
<thead>
<tr>
<th>Years of Experience</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-2</td>
<td>26</td>
<td>6.2</td>
</tr>
<tr>
<td>3-5</td>
<td>35</td>
<td>8.4</td>
</tr>
<tr>
<td>6-9</td>
<td>45</td>
<td>10.8</td>
</tr>
<tr>
<td>10-13</td>
<td>42</td>
<td>10.1</td>
</tr>
<tr>
<td>14-18</td>
<td>79</td>
<td>18.9</td>
</tr>
<tr>
<td>19 or more</td>
<td>190</td>
<td>45.6</td>
</tr>
</tbody>
</table>
Table 5. Educators’ Role

<table>
<thead>
<tr>
<th>Role</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>K-2 Teacher</td>
<td>98</td>
<td>23.6</td>
</tr>
<tr>
<td>3-5 Teacher</td>
<td>70</td>
<td>16.9</td>
</tr>
<tr>
<td>Special Education Teacher</td>
<td>50</td>
<td>12</td>
</tr>
<tr>
<td>Instructional Coach</td>
<td>11</td>
<td>2.7</td>
</tr>
<tr>
<td>Title Tutor</td>
<td>25</td>
<td>6</td>
</tr>
<tr>
<td>School Level Administrator</td>
<td>84</td>
<td>20.2</td>
</tr>
<tr>
<td>District Level Administrator</td>
<td>77</td>
<td>18.6</td>
</tr>
</tbody>
</table>

At the end of the survey, respondents had the opportunity to click a link to demonstrate interest in participating in a follow up qualitative interview. There were six teachers and two administrators who participated in a follow up survey. One curriculum director was interested in participating; however, her role in education did not meet the criteria of the sample population. Two administrators shared initial interest in participation; however, after several attempts to schedule, both interviews did not occur. Finally, this researcher asked two administrators who lead in a double A district to participate. Both of them agreed and followed through with the interviews.

Case Descriptions:

The first case included a female fourth grade teacher in a Class AA school district. Prior to teaching fourth grade she taught grades three and five. In addition to teaching for more than 19 years, she is a district trainer for the instructional professional
development model CRISS: Creating Independence through Student-Own Strategies, a RTI implementation team member, and her grade level PLC team leader.

The second case also included a female teacher. This teacher has taught for nine years and currently teaches first and second grade in a Class B school district. She is a Montessori trained teacher and worked alongside this researcher at Montana State when earning her master’s degree in educational leadership.

The third case involved a female teacher who is a reading specialist in a Class AA sized school district. She currently works with struggling readers in grade levels first through fourth. Within this role, she manages instruction for her own student groups and instructional groups who are assigned to paraeducators. Prior to serving as a reading specialist, she was a teacher for bilingual education in Mexico, worked in a Montessori instructional setting in Montana, and taught in general education classrooms in grades kindergarten through grade three in Colorado.

A female resource teacher was the fourth case. Her current position involves serving students in grades kindergarten through grade eight who have current Individualized Education Plans (IEP) in a K-8 Independent Elementary. Prior to this assignment in a Class B school district, she completed her special education student teaching in a Class AA district where this researcher was an assistant principal.

Another female teacher with more than nineteen years of experience was the fifth case. Currently, she is a fourth grade teacher in Class B sized school district. Her past assignments were diverse as she served as an art teacher and as the coordinator for the
district’s elementary gifted and talented program. Recently, she was awarded the
Montana Natural History Center’s Educator of the Year Award.

The sixth case completed the teacher interviews. This case involved a female
teacher who currently serves students who have a reading or math IEP in grades
kindergarten through grade six. These students are provided instruction in her special
education resource classroom. Prior to this assignment, she was a high school special
education teacher and a general education reading teacher who worked with students
struggling with reading skills.

The seventh case was the first principal interview. This principal is a female who
leads the largest elementary school within her Class AA school district. Her school’s
current enrollment maintains over 650 students, which requires almost eighty staff
members to serve students, including a full-time assistant principal. Before becoming a
principal, she led this same school as a part-time assistant principal and
instructional/behavioral specialist for six years. Prior to this, she worked in a Class C
school district as a third grade teacher and in a K-8 Independent Elementary district as a
K-8 special education teacher.

The final case involved the only male educator interviewed. This case involved
an elementary principal who has led his building for nine years. During the last four of
years, his school has received significant training within the Montana Striving Readers
Grant. The size of this school is much smaller than the prior case as the enrollment is
around 300. Prior to working at the elementary level, he was a middle school math
teacher and a middle school dean who also served as an activities director. Table 6 summarized the case descriptions for those interviewed.

Table 6. Educators’ School Size, Role, and Years of Experience

<table>
<thead>
<tr>
<th>Interview Date</th>
<th>Gender</th>
<th>School District Size</th>
<th>Current Role in School District</th>
<th>Previous Roles in Education</th>
<th>Years of Experience</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oct. 20, 2015</td>
<td>Female</td>
<td>AA</td>
<td>Grades 3-5 Teacher</td>
<td>District trainer for professional development: CRISS- Creating Independence through Student-Owned Strategies</td>
<td>19 or more</td>
</tr>
<tr>
<td>Oct. 20, 2015</td>
<td>Female</td>
<td>B</td>
<td>Grades K-2 Teacher</td>
<td>Montessori training; Masters in Education Leadership</td>
<td>6-9</td>
</tr>
<tr>
<td>Oct. 21, 2015</td>
<td>Female</td>
<td>AA</td>
<td>Grades 1-4 Reading Specialist</td>
<td>Teacher for bilingual education in Mexico, Montessori teacher</td>
<td>19 or more</td>
</tr>
<tr>
<td>Oct. 21, 2015</td>
<td>Female</td>
<td>K-8 Independent Elementary</td>
<td>Grades K-8 Special Education Teacher</td>
<td>General education and special education degree; completed special education student teaching in the building where the research was an assistant principal</td>
<td>3-5</td>
</tr>
<tr>
<td>Nov. 11, 2015</td>
<td>Female</td>
<td>B</td>
<td>Grades 3-5 Teacher</td>
<td>Coordinated GT program; Art teacher; Won Montana Natural History Center’s Educator of the Year Award</td>
<td>19 or more</td>
</tr>
<tr>
<td>Nov. 12, 2015</td>
<td>Female</td>
<td>AA</td>
<td>Grades K-6 Special Education Teacher</td>
<td>High school special education teacher; general education reading teacher</td>
<td>14-18</td>
</tr>
<tr>
<td>Jan. 8, 2016</td>
<td>Female</td>
<td>AA</td>
<td>K-5 Principal</td>
<td>Elementary special education teacher; general education 3rd Grade teacher; Behavior Specialist; RTI Facilitator</td>
<td>14-18</td>
</tr>
<tr>
<td>Jan. 9, 2016</td>
<td>Male</td>
<td>AA</td>
<td>K-5 Principal</td>
<td>Middle school math teacher; middle school dean and activities director</td>
<td>19 or more</td>
</tr>
</tbody>
</table>
Data Collection:

This multiple methods study was undertaken as a descriptive and comparative study that began with the development of a multiple choice and rank order survey created online with Qualtrics survey software through Montana State University. The three research questions were answered from data collected from the survey developed to assess teachers’ and administrators’ perceptions of the overall formative reading assessment process. The first four survey questions developed focused on identifying the participants’ demographics in order to classify years of experience, size of school district, formative assessment training, and the participant’s role as a teacher or administrator. The succeeding questions were developed from the formative reading assessment research completed in the literature review and from the researcher’s years of experience as an elementary classroom teacher and administrator.

The survey link was emailed to 328 administrators who were selected from the School Administrators of Montana (SAM) listserv if they were leaders in schools or districts with students in any of the grades kindergarten through grade five. The first request was sent in early September 2015. An example of this request can be found in Appendix D as each request was personalized to the administrator. In this researcher’s school and district, the request was personalized to the individual teams (Appendix E). A second email request was sent in the beginning of October 2015 (Appendix F). At the end of October, a request was sent just for administrators. At that time, the data collection revealed that 244 teachers and 118 administrators had submitted a survey. To obtain smaller confidence level and confidence interval for school administrators, the survey
was sent a third time and an additional 35 administrators responded to the survey. An example of this request is in Appendix G. Each survey submitted has been defined as self-selected since the participation was voluntary. The final confidence interval for teachers and administrators was 95% with a 6% confidence level for administrators and a 5% confidence level for teachers.

Teacher and administrative participants volunteered to participate in the qualitative interview. Once a respondent reached the end of the survey, there was an email link to click if he/she was interested in participating in a follow-up interview. Once a follow-up email was received from the survey, this researcher responded by email to schedule four phone interviews and four face-to-face interviews. Six teacher volunteers were selected for interviews. The same process was followed with the two school administrative cases who also volunteered for interviews. However, these selected cases did not lead to final scheduled interviews. One of the administrators was emailed the interview questions a few minutes prior to the interview. However, the phone was not answered at the time of the scheduled interview and a message was left to reschedule. The interviewee, an assistant principal, returned the call and shared that he was unsure of the answers and would like to consult with the principal during the interview. This researcher sent an email reply to reassure him that he did not need to know all of the answers and attempted to schedule another interview time. No response was received. After this first interview effort, the following eight interviews and one additional interview attempt did not include providing the questions prior to the interview. Finally, two elementary administrators who also completed the survey were asked to participate
in an interview, they willingly agreed. The final interview numbers included six teacher and two administrator interviews.

Each completed interview followed a consistent process. Once the interview began the interview protocol script was followed and participants agreed to have their session recorded. After the introduction was read aloud and a complete description and the purpose of the research was described, a copy of the interview questions was offered to each participant to follow along. The four phone interviewees did not feel they needed a copy of the questions. The four face-to-face interviewees referred to the copy provided to reread a couple of the questions. Furthermore, each question was read in exactly the same manner and repeated when requested. When a participant completed answering a question, a summary of their response was reread aloud to review their stated answers and to ensure the answers were collected accurately.

Analysis of Quantitative Data and Qualitative Data

Quantitative Data Analysis:

The following procedures were followed when analyzing the quantitative data. First, the results from the individual surveys were collected within the Qualtrics software and then uploaded to SPSS. Second, descriptive statistics were used to report results from each question on the survey and respondent data was disaggregated by respondents’ role within the school district as well as aligned with their experience in the field of education and level of reading assessment training. Third, this researcher reviewed the data reports from each question. When analyzing results from the questionnaire that
asked respondents about agreement, this researcher calculated and compared the frequency and percentage of the total agreement between teachers and administrators. Fourth, this researcher analyzed the ranking questions. Each report was analyzed by reviewing the standard deviation and mean for the assessments ranked. Finally, this researcher determined which assessments had the lowest standard deviation and mean to identify the highest agreement. While analyzing each question’s results, notes were made in the margins of the reports. The notes were focused on calculations of agreement, ranking of agreement, frequencies and percentages of teachers and administrators. Furthermore, notes also included reminders of definitions of standard deviation as it relates to participants agreement.

**Qualitative Data Analysis:**

When analyzing the qualitative data, the following procedures were followed: first, the recorded and collected verbatim responses were transcribed. Second, this researcher conducted multiple readings of each participant's response to ensure statements were understood and similar themes could be identified. Third, key points and common aspects were highlighted and identified with margin notes to develop a set of codes. Fourth, a working definition was developed for each code to manage the data in a systematic manner. To ensure the dependability and trustworthiness of the qualitative data, the fifth step was completed. A colleague was asked to review three of the six-interviewee responses and to assign each distinct segment with a previously defined code or to develop an additional code. Once this was complete, the colleague and researcher
compared and examined codes while discussing in depth the agreed upon codes and their final definitions. Considering inter-rater agreement, both the colleague and this researcher agreed on the major codes; however, there were a few cases with subtle differences. For example, focused instruction versus purposeful instruction: these differences were discussed in detail until a common interpretation evolved with consistent agreement.

The sixth step involved organizing the coded data into specific categories that accurately represented the complexity of the data and best answered the study’s three research questions. Once this step was complete, the seventh and final step involved meeting with a colleague unrelated to the study who would code a sample of the interviews to establish inter-rater reliability for the codes and themes identified by the researchers. The second rater is a doctoral student who taught graduate level classes in the area of coding methods for qualitative research. During the meeting, this researcher described the study and the steps that were taken to analyze the qualitative data. Samples of the transcribed data, marginal notes, and definitions of the codes were shared and discussed. This researcher was reassured the process followed to identify and confirm themes was accurate.

The quantitative and qualitative data were used together to have the opportunity to effectively answer the three research questions. Using this multiple methods approach enabled this researcher to take an eclectic approach to method selection allowing the use of multiple approaches in answering the research questions (Johnson & Onwuegbuzie, 2004). Furthermore, “many research questions and combinations of questions are best and most fully answered through mixed research solutions” (p.18). Overall, using a
multiple methods approach supported this researcher in gaining an understanding of the strengths and weaknesses of the quantitative and qualitative research thus putting this researcher in a position to combine results for a deeper understanding of the perceptions between teachers and administrators.

Quantitative Results:

Research questions one and two were primarily answered by participants’ responses to the quantitative survey. After determining the demographics of the educators who submitted the survey, the purpose of the first question was to determine the overall experience the respondents have with reading assessment training. Both descriptive and inferential analyses were used to compare teacher and administrator survey responses.

Table 7. Which of the following describes your experience with reading assessment?

<table>
<thead>
<tr>
<th>Teacher &amp; Administrator Responses</th>
<th>T Freq.</th>
<th>T %</th>
<th>A Freq.</th>
<th>A %</th>
</tr>
</thead>
<tbody>
<tr>
<td>I have attended several trainings on reading assessment.</td>
<td>60</td>
<td>23.7</td>
<td>63</td>
<td>39.1</td>
</tr>
<tr>
<td>I have a reading endorsement.</td>
<td>27</td>
<td>10.7</td>
<td>8</td>
<td>5.0</td>
</tr>
<tr>
<td>I have a graduate degree that focused on reading assessment.</td>
<td>34</td>
<td>13.4</td>
<td>9</td>
<td>5.6</td>
</tr>
<tr>
<td>I have attended some trainings or taken some courses focused on reading assessment.</td>
<td>69</td>
<td>27.3</td>
<td>51</td>
<td>31.7</td>
</tr>
<tr>
<td>My bachelor’s degree provided a course or courses about reading assessment.</td>
<td>52</td>
<td>20.6</td>
<td>21</td>
<td>13</td>
</tr>
<tr>
<td>I have not attended training or had any courses that involve reading assessment.</td>
<td>11</td>
<td>4.3</td>
<td>9</td>
<td>5.6</td>
</tr>
</tbody>
</table>
Collectively, the highest percentage of experience with reading assessments for teachers and administrators in this study represents that 23 to 39 percent have attended some or several trainings or taken some courses on reading assessment. However, in both categories administrators demonstrate more experience with 31 to 39 percent attending some or several trainings or taken some courses in the area of reading assessment. Conclusively, almost 40 percent of administrators who submitted a survey have attended several trainings focused on reading assessment. Nevertheless, the percentage of teachers having a reading assessment course or courses provided within their bachelor’s degree is seven percent higher than administrators. Furthermore, five percent more teachers have a reading endorsement than administrators and almost one percent more administrators than teachers have not attended training or had any courses that involve reading assessment.

**Research Question 1.** Tables 8 -14 represent the educators’ survey responses that answer research question number one: In the area of reading instruction, what measurements and instructional practices do teachers and administrators perceive as effective for guiding ongoing instruction?
Table 8. Student data from formative reading assessments are used to develop reading instruction.

<table>
<thead>
<tr>
<th>Level of Agreement</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Somewhat Disagree</th>
<th>Somewhat Agree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teacher</td>
<td>3.6(9)</td>
<td>2(5)</td>
<td>3.2(8)</td>
<td>22.2(56)</td>
<td>44.4(112)</td>
<td>24.6(62)</td>
</tr>
<tr>
<td>Administrator</td>
<td>2.5(4)</td>
<td>.1(0)</td>
<td>1.2(2)</td>
<td>16.1(26)</td>
<td>47.2(76)</td>
<td>32.9(53)</td>
</tr>
</tbody>
</table>

Table Note. Frequencies are in parentheses

At least ninety-one percent of teachers and administrators agreed that student data from formative reading assessments are used to develop reading instruction. The level of agreement among administrators was five percent higher than teachers with administrators agreeing at 96.2 percent and teachers agreeing at 91.2 percent. Moreover, less than nine percent of teachers and administrators disagreed with administrators having the least disagreement.

Table 9. To adjust and modify ongoing instruction, teachers can gather formative reading assessment data/evidence from students’ comments and their facial expressions.

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Somewhat Disagree</th>
<th>Somewhat Agree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teacher</td>
<td>2(5)</td>
<td>10.7(27)</td>
<td>7.9(20)</td>
<td>36.5(92)</td>
<td>34.5(87)</td>
</tr>
<tr>
<td>Administrator</td>
<td>6.2(10)</td>
<td>13.7(22)</td>
<td>6.8(11)</td>
<td>28.6(46)</td>
<td>32.3(52)</td>
</tr>
</tbody>
</table>

Table Note. Frequencies are in parentheses
Nearly three-fourths of the teachers and administrators agreed that teachers can
gather formative reading assessment data/evidence from students’ comments and their
facial expressions. The overall agreement of teachers was six percent higher than
administrators with teachers agreeing at 79.3 percent and administrators agreeing at 73.3
percent.

Table 10. Formative assessment in reading supports students in learning to read.

<table>
<thead>
<tr>
<th></th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Somewhat Disagree</th>
<th>Somewhat Agree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teacher</td>
<td>.4(1)</td>
<td>2(5)</td>
<td>4(10)</td>
<td>21(53)</td>
<td>50.4(53)</td>
<td>22.2(56)</td>
</tr>
<tr>
<td>Administrator</td>
<td>.6(1)</td>
<td>0(0)</td>
<td>1.3(2)</td>
<td>11.9(19)</td>
<td>44.4(71)</td>
<td>41.9(67)</td>
</tr>
</tbody>
</table>

Table Note. Frequencies are in parentheses

A little over half of teachers agreed that formative assessment in reading supports
students in learning to read with agreement expressed by only 44.4% of administrators.
However, the overall level of agreement of administrators is close to five percent higher than
teachers with administrators’ total agreement at 98.2 percent and teachers’ total agreement at
93.6 percent. Inclusively, over 93 percent of administrators and teachers collectively agree
that formative assessment in reading supports students in learning to read.

Table 11. When students make mistakes during reading instruction, it helps them learn to
read.

<table>
<thead>
<tr>
<th></th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Somewhat Disagree</th>
<th>Somewhat Agree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teacher</td>
<td>2(5)</td>
<td>5.9(15)</td>
<td>7.1(18)</td>
<td>32.8(83)</td>
<td>45.8(116)</td>
<td>6.3(16)</td>
</tr>
<tr>
<td>Administrator</td>
<td>1.9(3)</td>
<td>3.8(6)</td>
<td>5(8)</td>
<td>27.7(44)</td>
<td>44.7(71)</td>
<td>17(27)</td>
</tr>
</tbody>
</table>

Table Note. Frequencies are in parentheses
Nearly half of teachers and administrators agreed that when students make mistakes during reading instruction, it helps them learn to read. Teachers’ agreement was higher at 45.8 percent with administrators agreeing at 44.7 percent. However, the overall level of agreement of administrators was higher at 4.5 percent than teachers with the collective level of agreement of administrators at 89.4 percent and teachers’ collective agreement at 84.9 percent. Almost 85 percent of teachers and administrators agree when students make mistakes during reading instruction, it helps them learn to read.

Although, some conclusions can be drawn from examining the proportion of teacher and administrator responses, it is difficult to make an overall comparison. To more effectively make these comparisons, the values for each response category (Strongly Disagree = 1, Disagree = 2, Somewhat Disagree = 3, Somewhat Agree = 4, Agree = 5, and Strongly Agree = 6) were averaged and means for teachers and administrators were compared inferentially. Prior to the comparative analysis, distributions for both teachers and administrators were examined for normality and homogeneity of variances. Almost all of the responses for both teachers and administrators exhibited significantly non-normal distributions as well as group heterogeneity. Thus, Mann-Whitney U tests were conducted. An adjusted Alpha level to account for multiple comparisons was used to evaluate the significance of the results. A total of nine comparisons for the nine items were made to inform the three research questions for this study. Thus an Alpha level of .006 (.05/9) was used as the threshold for determining significance. Effect sizes for the Mann-Whitney U, symbolized as $r$, were calculated by dividing the z statistic by the square root of the sample size (Cohen, 1988).
Comparisons for survey questions related to the use of formative assessment for guiding on-going instruction are presented in Table 12.

Table 12. Teacher and Administrator Comparisons for Questions Assessing Formative Assessment’s Role in Ongoing Instruction

<table>
<thead>
<tr>
<th>Item</th>
<th>Teacher M</th>
<th>Teacher SD</th>
<th>Administrator M</th>
<th>Administrator SD</th>
<th>r</th>
<th>p</th>
<th>Effect Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student data from formative reading assessments are used to develop reading instruction.</td>
<td>4.72</td>
<td>1.2</td>
<td>5.04</td>
<td>0.97</td>
<td>-2.08</td>
<td>.005</td>
<td>-.14</td>
</tr>
<tr>
<td>When students make mistakes during reading instruction, it helps them learn to read.</td>
<td>4.32</td>
<td>1.1</td>
<td>4.55</td>
<td>1.1</td>
<td>-2.55</td>
<td>.011</td>
<td>-.13</td>
</tr>
<tr>
<td>To adjust and modify ongoing instruction, teachers can gather formative reading assessment data.</td>
<td>4.13</td>
<td>1.2</td>
<td>4.04</td>
<td>1.4</td>
<td>-.125</td>
<td>.90</td>
<td>-.006</td>
</tr>
</tbody>
</table>

Means, standard deviations, and effect sizes are reported for the comparisons for the three items found in Table 13. Generally, teachers evidenced higher mean ratings than administrators. Teachers were found to have significantly higher mean rating for the item “Student data from formative reading assessments are used to develop reading instruction.” when using an Alpha of .006. Although, this difference was significant the effect size for this comparison and the others was very small according to recommendations suggested by Cohen’s (1988). However, the other two items compared did not differ significantly from one another.

The assessments and instructional strategies identified were ranked by teachers and administrators in the order of importance when determining a student’s ongoing instruction. On the survey, assessments were listed in alphabetical order. The teachers
and administrators were asked to review the assessments and determine the order in which they perceive the assessments as the most effective to produce student data that is effective for ongoing instruction.

Table 13. Rank the following assessments in the order that you perceive as the most effective to determine a student’s ongoing instruction, with 1 being the most effective.

<table>
<thead>
<tr>
<th>Assessment Type</th>
<th>Teacher Mean Rank</th>
<th>Administrator Mean Rank</th>
<th>( r )</th>
<th>( p )</th>
<th>Effect Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Classwork and Observations</td>
<td>1.82 (1.78)</td>
<td>2.35 (1.51)</td>
<td>-3.40</td>
<td>.001</td>
<td>-.17</td>
</tr>
<tr>
<td>Running Records/ Informal Reading Inventories Feedback</td>
<td>3.38 (1.80)</td>
<td>3.56 (1.74)</td>
<td>-3.06</td>
<td>.002</td>
<td>-.15</td>
</tr>
<tr>
<td>Basal Reading Assessments</td>
<td>3.79 (1.78)</td>
<td>3.85 (1.92)</td>
<td>-7.05</td>
<td>.481</td>
<td>.03</td>
</tr>
<tr>
<td>Basal Reading Assessments</td>
<td>3.94 (1.78)</td>
<td>3.87 (1.72)</td>
<td>-1.52</td>
<td>.129</td>
<td>-.08</td>
</tr>
<tr>
<td>Curriculum Based Measurement</td>
<td>4.40 (1.54)</td>
<td>4.15 (1.58)</td>
<td>-8.60</td>
<td>.390</td>
<td>-.04</td>
</tr>
<tr>
<td>Universal Screening/Benchmark Assessments</td>
<td>4.97 (1.85)</td>
<td>4.27 (2.08)</td>
<td>-4.17</td>
<td>.001</td>
<td>-.21</td>
</tr>
<tr>
<td>Criterion Based Measurement/Criterion Referenced</td>
<td>5.68 (1.49)</td>
<td>5.95 (1.56)</td>
<td>-1.35</td>
<td>.175</td>
<td>.07</td>
</tr>
</tbody>
</table>

Table Note. Standard deviations are in parentheses

Teachers and administrators ranked classwork and observations as the most effective to determine a student’s ongoing instruction while at the same time this data
reveals this first choice ranking also displays the highest agreement with the lowest standard deviations in both groups. The mean determined by teachers was 1.82 and administrators was 2.35. Furthermore, teachers and administrators agreed that the least effective assessment within the formative assessment process was the Criterion Referenced Test (CRT). Similarly, the standard deviation demonstrates in both groups the second highest agreement. Running records were ranked within the top three choices with teachers and administrators, while also demonstrating teachers have a higher agreement of the effectiveness of running records. The mean for teachers is 3.38 with a standard deviation of 1.8087 and the mean for administrators equals 3.85 with a standard deviation of 1.92.

Again, Mann-Whitney U tests were conducted to compare teachers and administrator mean ratings. The Alpha level set to evaluate comparisons was .05/7 or .007. Administrators ranked classwork/observations and the use of running records significantly higher than teachers. Teachers on the other hand ranked the importance of Universal Screening Methods significantly higher than administrators. Although these three results were significant, the effect sizes ($r$) were very small and did not indicate important differences.

The following table presents the top three assessment choices teachers and administrators recommend for the use of multiple assessments measures to determine ongoing instruction for a student. In addition, chi square tests were conducted to determine the magnitude of difference between proportions of teachers and
administrators ranks for each assessment. The Alpha level set for these comparisons was set at .007 (.05/7).

Table 14. Multiple Measures: Top Three Assessments Recommended by Teachers and Administrators to Determine a Student’s Ongoing Reading Instruction

<table>
<thead>
<tr>
<th>Assessment Type</th>
<th>Teacher Percent and Frequency</th>
<th>Administrator Percent and Frequency</th>
<th>$\chi^2$</th>
<th>$p$</th>
<th>$\phi$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Classwork and Observations</td>
<td>85(216)</td>
<td>76.4(123)</td>
<td>25.51</td>
<td>&gt;.001</td>
<td>.27</td>
</tr>
<tr>
<td>Running Records/Informal Reading Inventories</td>
<td>66.1(168)</td>
<td>53.4(86)</td>
<td>26.47</td>
<td>&gt;.001</td>
<td>.32</td>
</tr>
<tr>
<td>Curriculum Based Measurement</td>
<td>35.8(91)</td>
<td>50.3(81)</td>
<td>.581</td>
<td>.446</td>
<td>.06</td>
</tr>
<tr>
<td>Feedback</td>
<td>31.5(80)</td>
<td>30.4(49)</td>
<td>7.45</td>
<td>.006</td>
<td>.24</td>
</tr>
<tr>
<td>Basal Reading Assessments</td>
<td>35(89)</td>
<td>31.7(51)</td>
<td>10.31</td>
<td>.001</td>
<td>.27</td>
</tr>
<tr>
<td>Universal Screening/Benchmark Assessments</td>
<td>32.7(83)</td>
<td>30.4(49)</td>
<td>8.76</td>
<td>.003</td>
<td>.26</td>
</tr>
<tr>
<td>Criterion Based Measurement/Criterion Referenced</td>
<td>10.2(26)</td>
<td>12.4(20)</td>
<td>.783</td>
<td>.376</td>
<td>.13</td>
</tr>
</tbody>
</table>

Table Note. Frequencies are in parentheses

Administrators and teachers ranked equivalent top three assessment choices for multiple measures. More than three-fourths of both groups ranked classwork and
observations as one of their top three choices with teachers choosing at eighty five percent and administrators choosing at 76.4 percent. Furthermore, over half of both groups chose the second choice of Running records/ Informal Reading Inventories with teachers, again, having a higher percentage with 66.1 percent and administrators with 53.4 percent. The third choice of Curriculum Based Measurements reveals a dramatic decrease in similar choice agreement for teachers with a percentage of 35.8 percent while half of the administrators maintained agreement that curriculum based measurements was an effective multiple measure with classwork and observations and running records/informal reading inventories.

Results show that the proportions of teachers choosing the top three assessments most effective for guiding on-going instruction differ significantly from administrators only for curriculum based measurement and criterion referenced tests. However, the effect size for each comparison represented by Phi coefficient ($\phi$) according to Cohen’s criteria ranged from moderate (.30) to small (.10).

Research Question 2. Tables 15-18 present teacher and administrator survey responses that answers research question number two: In the area of reading instruction, what measurements and instructional practices do teachers and administrators perceive as evidence of student progress toward meeting Common Core English Language Arts Reading Standards?
Table 15. Universal Screening/Benchmark reading assessment data is essential for monitoring the progress of students’ reading achievement.

<table>
<thead>
<tr>
<th></th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Somewhat Disagree</th>
<th>Somewhat Agree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teacher</td>
<td>2.4(6)</td>
<td>4.4(11)</td>
<td>5.6(14)</td>
<td>24.6(62)</td>
<td>45.2(114)</td>
<td>17.9(45)</td>
</tr>
<tr>
<td>Administrator</td>
<td>1.3(2)</td>
<td>0(0)</td>
<td>.6(1)</td>
<td>13.1(21)</td>
<td>40.6(65)</td>
<td>44.4(71)</td>
</tr>
</tbody>
</table>

Table Note. Frequencies are in parentheses

The majority of both teachers (63%) and administrators (85%) agreed that Universal Screening/Benchmark reading assessment is essential for monitoring the progress of students’ reading achievement. Administrators’ total level of agreement was approximately 85% as compared to 63% agreement expressed by teachers.

Table 16. Students should know the goal of an assessment.

<table>
<thead>
<tr>
<th></th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Somewhat Disagree</th>
<th>Somewhat Agree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teacher</td>
<td>.4(1)</td>
<td>1.2(3)</td>
<td>2.4(6)</td>
<td>15(38)</td>
<td>48.6(123)</td>
<td>32.4(82)</td>
</tr>
<tr>
<td>Administrator</td>
<td>.6(1)</td>
<td>.6(1)</td>
<td>.6(1)</td>
<td>6.9(11)</td>
<td>40(64)</td>
<td>51.2(82)</td>
</tr>
</tbody>
</table>

Table Note. Frequencies are in parentheses

Both administrators (81%) and teachers (91%) overwhelmingly agreed that students should know the goal of an assessment. Administrators strongly agreed at 51.2 percent with teachers strongly agreeing significantly lower with 32.4 percent. However, close to half of the teachers and administrators chose the level agree with teachers at 48.6 percent and administrators at 40 percent.
Means, standard deviations and effect sizes are reported for the comparisons for the two items assessing perceptions of reading assessments used for evaluating reading proficiency found in Table 17. Generally, administrators evidenced significantly higher mean ratings than teachers for these two items using an Alpha of .006. Although, these difference were significant the effect sizes for these comparisons and the others was very small according to recommendations suggested by Cohen’s (1988).

Table 17. Teacher and Administrator Comparisons for Questions Assessing Formative Assessment’s Role for Evaluating Proficiency with Standards

<table>
<thead>
<tr>
<th>Item</th>
<th>Teacher M</th>
<th>Teacher SD</th>
<th>Administrator M</th>
<th>Administrator SD</th>
<th>r</th>
<th>p</th>
<th>Effect Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Universal Screening/Benchmark reading assessment data is essential for monitoring the progress of students’ reading achievement.</td>
<td>4.56</td>
<td>1.20</td>
<td>5.22</td>
<td>.953</td>
<td>-6.45</td>
<td>&lt;.001</td>
<td>-.32</td>
</tr>
<tr>
<td>Students should know the goal of an assessment.</td>
<td>5.06</td>
<td>.914</td>
<td>5.35</td>
<td>.890</td>
<td>-4.05</td>
<td>&lt;.001</td>
<td>-.21</td>
</tr>
</tbody>
</table>

Table 18. Rank the following assessments in the order that you perceive as the most effective to determine a student’s proficiency level with the Montana English Language Arts Reading Standards, with 1 being the most effective.

<table>
<thead>
<tr>
<th>Assessment Type</th>
<th>Teacher Mean Rank</th>
<th>Administrator Mean Rank</th>
<th>r</th>
<th>p</th>
<th>Effect Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Classwork and Observations</td>
<td>2.57(1.68)</td>
<td>3.14(1.74)</td>
<td>-3.363</td>
<td>.001</td>
<td>-.18</td>
</tr>
<tr>
<td>Running Records/Informal Reading Inventories</td>
<td>3.43(1.84)</td>
<td>4.02(1.87)</td>
<td>-2.057</td>
<td>.040</td>
<td>-.10</td>
</tr>
</tbody>
</table>
Table 18 Continued

<table>
<thead>
<tr>
<th>Assessment Type</th>
<th>Mean Teacher</th>
<th>Mean Administrator</th>
<th>t-value</th>
<th>p-value</th>
<th>Effect Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Feedback</td>
<td>4.61(1.86)</td>
<td>4.74(1.89)</td>
<td>-.466</td>
<td>.641</td>
<td>-.02</td>
</tr>
<tr>
<td>Curriculum Based Measurement</td>
<td>3.85(1.77)</td>
<td>3.69(1.70)</td>
<td>-1.625</td>
<td>.104</td>
<td>-.08</td>
</tr>
<tr>
<td>Universal Screening/Benchmark Assessments</td>
<td>4.13(2.08)</td>
<td>3.25(1.96)</td>
<td>-3.35</td>
<td>.001</td>
<td>-.17</td>
</tr>
<tr>
<td>Basal Reading Assessments</td>
<td>4.30(1.84)</td>
<td>3.99(1.88)</td>
<td>-1.77</td>
<td>.076</td>
<td>-.09</td>
</tr>
<tr>
<td>Criterion Based Measurement/Criterion Referenced Test</td>
<td>5.11(1.86)</td>
<td>5.17(2.12)</td>
<td>-3.00</td>
<td>.003</td>
<td>.15</td>
</tr>
</tbody>
</table>

Table Note. Standard deviations are in parentheses

Administrators and teachers both ranked classwork and observations as most effective to determine a student’s proficiency level with the Montana Common Core ELA Reading Standards. The mean for teachers was lower at 2.57 and administrators at 3.14. This demonstrates that teachers view classwork and observations as somewhat more important than administrators. Furthermore, both groups ranked criterion based measurements/ criterion referenced test as the least important assessment for determining English Language and Reading proficiency. The average teacher ranking for criterion based measurements was 5.11. This result was very similar to the 5.17 average ranking by administrators. However, the larger standard deviation for the administrators’ ranking indicated that there was similarity in variability yet slightly less agreement for them than for teachers whose mean rank was accompanied by a standard deviation of 1.86.
Mann-Whitney U tests were used again, to compare teachers and administrator mean ratings. The Alpha level set to evaluate comparisons was .05/7 or .007. Administrators ranked Classwork/Observations, the use of running records and the use of criterion reference assessments significantly higher than teachers. Teachers, on the other hand, ranked the importance of Universal Screening Methods significantly higher than teachers. Although these three results were significant, the effect sizes were very small (less than .20) and did not indicate important differences.

Table 19 represents the top three assessments recommended by teachers and administrators, when given the opportunity to use multiple measures, to use to determine students’ proficiency with grade level standards. The table is organized by teachers’ highest rankings and then aligned by the administrators’ rankings.

Table 19. Multiple Measures: Top Three Assessments Recommended by Teachers and Administrators to Determine a Student’s Proficiency with Grade Level Reading Standards

<table>
<thead>
<tr>
<th>Assessment Type</th>
<th>Teacher Percent and Frequency</th>
<th>Administrator Percent and Frequency</th>
<th>$x^2$</th>
<th>$p$</th>
<th>$\phi$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Classwork and Observations</td>
<td>66.9(170)</td>
<td>52.8(85)</td>
<td>28.30</td>
<td>&gt;.001</td>
<td>.33</td>
</tr>
<tr>
<td>Universal Screening/Benchmark</td>
<td>55.9(142)</td>
<td>68.3(110)</td>
<td>4.10</td>
<td>.044</td>
<td>.13</td>
</tr>
<tr>
<td>Assessments</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Running Records/Informal Reading</td>
<td>53.5(136)</td>
<td>45.3(73)</td>
<td>19.00</td>
<td>&gt;.001</td>
<td>.30</td>
</tr>
<tr>
<td>Curriculum Based Measurement</td>
<td>48(122)</td>
<td>32.9(53)</td>
<td>27.21</td>
<td>&gt;.001</td>
<td>.39</td>
</tr>
</tbody>
</table>
Table 19 Continued

<table>
<thead>
<tr>
<th>Basal Reading Assessments</th>
<th>28.7(73)</th>
<th>29.8(48)</th>
<th>5.20</th>
<th>.023</th>
<th>.21</th>
</tr>
</thead>
<tbody>
<tr>
<td>Criterion Based Measurement/Criterion Referenced Test</td>
<td>23.2(59)</td>
<td>29.8(48)</td>
<td>1.31</td>
<td>.288</td>
<td>.12</td>
</tr>
<tr>
<td>Feedback</td>
<td>17.7(45)</td>
<td>19.3(31)</td>
<td>2.58</td>
<td>.108</td>
<td>.18</td>
</tr>
</tbody>
</table>

Table Note. Frequencies are in parentheses

The highest percentage of administrators and teachers recommended using classwork and observations and running records/informal reading inventories to determine if a student is proficient with grade level reading standards. However, the top choice assessment differed between the educators. Almost 70% of teachers chose classwork and observations with approximately 68% of administrators choosing universal screening/benchmark assessments for their top choice.

Over half (59%) of the educators in both groups chose universal screening/benchmark assessments while at approximately 59% of administrators choose classwork and observations as the second most effective assessment strategy for determining English and Reading proficiency. Teachers and administrators also differed on their third most recommended assessment technique. Nearly 56 percent of teachers chose running records/informal reading inventories while close to fifty percent of administrators chose curriculum based measurements.

Chi square tests were conducted to determine the magnitude of difference between proportions of teachers and administrators’ ranks for each assessment. The
Alpha level set for these comparisons was set at .007(.05/7). Results show that the proportions of teachers choosing the top three assessments most effective for determining reading and language arts proficiency only differed significantly from administrators for classwork and observations, informal reading assessments/running records and curriculum based measurements. However, the effect sizes for each comparison represented by Phi coefficient ($\phi$) according to Cohen’s criteria ranged from moderate (.30) to small (.10).

**Research Question 3.** The following tables represent the educators’ survey responses that answers research question number three: In the area of reading instruction, how do teachers and administrators define the formative assessment process?

**Table 20. The purpose of formative assessment is to increase learning.**

<table>
<thead>
<tr>
<th></th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Somewhat Disagree</th>
<th>Somewhat Agree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teacher</td>
<td>0.8(2)</td>
<td>6.3(16)</td>
<td>8.3(21)</td>
<td>16.7(42)</td>
<td>46(116)</td>
<td>21.8(55)</td>
</tr>
<tr>
<td>Administrator</td>
<td>2.5(4)</td>
<td>4.4(7)</td>
<td>2.5(4)</td>
<td>15.2(24)</td>
<td>38(60)</td>
<td>37.3(59)</td>
</tr>
</tbody>
</table>

Table Note. Frequencies are in parentheses

Administrators expressed a slightly higher level of agreement than teachers related to the main purpose of formative assessment is to improve learning. Over 67% of teachers and a little over three-fourths of administrators agreed that the purpose of formative assessment is to increase learning.
Table 21. Student data from formative reading assessments are to be collegially shared with teachers.

<table>
<thead>
<tr>
<th></th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Somewhat Disagree</th>
<th>Somewhat Agree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teacher</td>
<td>.8(2)</td>
<td>1.6(4)</td>
<td>4.0(10)</td>
<td>17.1(43)</td>
<td>52(131)</td>
<td>24.6(62)</td>
</tr>
<tr>
<td>Administrator</td>
<td>.6(1)</td>
<td>.6(1)</td>
<td>0(0)</td>
<td>7.5(12)</td>
<td>44.4(71)</td>
<td>46.9(75)</td>
</tr>
</tbody>
</table>

Table Note. Frequencies are in parentheses

Both teachers and administrators overwhelmingly agreed that formative reading assessments are to be collegially shared with teachers. Almost fifty percent (46.9%) of administrators strongly agreed with fifty two percent of teachers expressing agreement. The overall agreement among administrators was slightly below one hundred percent at 98.8 as compared to an overall agreement of 93.7% for teachers.

Table 22. Student data from formative reading assessments are to be collegially shared with administrators.

<table>
<thead>
<tr>
<th></th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Somewhat Disagree</th>
<th>Somewhat Agree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teacher</td>
<td>.4(1)</td>
<td>.8(2)</td>
<td>6.4(16)</td>
<td>20.8(52)</td>
<td>53.6(134)</td>
<td>18(45)</td>
</tr>
<tr>
<td>Administrator</td>
<td>.6(1)</td>
<td>2.5(4)</td>
<td>1.2(2)</td>
<td>8.1(13)</td>
<td>47.8(77)</td>
<td>39.8(64)</td>
</tr>
</tbody>
</table>

Table Note. Frequencies are in parentheses

About 50 percent of teachers and administrators agree student data from formative reading assessments are to be collegially shared with administrators with administrators agreeing at 53.6 percent and teachers agreeing slightly lower at 47.8. However, the overall agreement of teachers and administrators is over ninety two percent
with administrators agreeing at 95.7 while teachers’ overall agreement was, again, slightly lower at 92.4 percent.

Means, standard deviations and effect sizes are reported for the comparisons for the three items assessing perceptions of reading assessments used for evaluating reading proficiency found in Table 22. Generally, administrators evidenced significantly higher mean ratings than teachers for these two items using an Alpha of .006. Although, these difference were significant the effect sizes for these comparisons and the others was very small according to recommendations suggested by Cohen’s (1988).

<table>
<thead>
<tr>
<th>Item</th>
<th>Teacher M</th>
<th>Teacher SD</th>
<th>Administrator M</th>
<th>Administrator SD</th>
<th>r</th>
<th>p</th>
<th>Effect Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>The purpose of formative assessment is to increase learning.</td>
<td>4.63</td>
<td>1.21</td>
<td>4.84</td>
<td>1.36</td>
<td>-2.73</td>
<td>.006</td>
<td>-.14</td>
</tr>
<tr>
<td>Student data from formative reading assessments are to be collegially shared with teachers.</td>
<td>4.88</td>
<td>1.01</td>
<td>5.32</td>
<td>.849</td>
<td>-5.25</td>
<td>&gt;.001</td>
<td>-.26</td>
</tr>
<tr>
<td>Student data from formative reading assessments are to be collegially shared with administrators.</td>
<td>4.73</td>
<td>1.05</td>
<td>4.91</td>
<td>1.02</td>
<td>-5.41</td>
<td>&gt;.001</td>
<td>-.27</td>
</tr>
</tbody>
</table>

The following table represents the comparisons of teachers’ and administrators’ perceptions of the use of the assessments reviewed for this study. Teachers and
administrators were asked to designate if the assessments below should be use for formative or summative purposes.

Table 24. How do you perceive the use of the following assessments?

<table>
<thead>
<tr>
<th>Assessment</th>
<th>Formative</th>
<th>Summative</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Teacher</td>
<td>Administrator</td>
</tr>
<tr>
<td></td>
<td>%</td>
<td>f</td>
</tr>
<tr>
<td>Basal Reading Assessments</td>
<td>55</td>
<td>133</td>
</tr>
<tr>
<td>Classwork and Observations</td>
<td>83</td>
<td>200</td>
</tr>
<tr>
<td>CBM/CRT</td>
<td>18</td>
<td>44</td>
</tr>
<tr>
<td>Curriculum Based Measurements</td>
<td>47</td>
<td>111</td>
</tr>
<tr>
<td>Feedback</td>
<td>83</td>
<td>197</td>
</tr>
<tr>
<td>Running Records/Informal Reading Inventories</td>
<td>82</td>
<td>196</td>
</tr>
<tr>
<td>Universal Screening/Benchmark Assessments</td>
<td>33</td>
<td>79</td>
</tr>
</tbody>
</table>

Table Note. CBM/CRT represents Curriculum Based Measurement and Criterion Referenced Tests. The Sig. column the significance of teacher – administrator from chi square tests when comparing proportions of formative and summative assessment uses.

Although administrators perceived the use of feedback about ten percent higher and classwork and observations about nine percent higher than teachers, both groups
overwhelmingly perceived the use of feedback and classwork and observations for primarily formative assessment. Furthermore, about 82% of administrators and teachers also perceived the use of running records/informal reading inventories for formative assessment purposes. Otherwise, most teachers and administrators indicated use of criterion based measurements/criterion referenced tests for summative assessment purposes. Again, administrators’ perceptions of the use of criterion based and criterion referenced assessments as summative was nine percentage points higher than that of the teachers.

Chi square tests were conducted to determine the magnitude of differences between proportions of teachers and administrators’ perceptions of formative and summative use for seven types of assessments considered. The Alpha level set for these comparisons was set at .007(.05/7). Teachers and administrators differed on all of the formative assessment category uses with the exception of Universal/Benchmark Screening. Likewise, they were found to significantly differ on five of the seven summative assessment use categories. Teachers and administrators did not differ significantly on Feedback and the use of Running Records/Informal Reading Inventories for summative assessment purposes.

Qualitative Results:

The qualitative interview protocol was designed to answer the three research questions in more depth while tapping into administrators and teachers descriptions of how they view and define the formative assessment process and how it is used to
determine student proficiency as well as plan ongoing instruction. There were six teachers who participated in the interviews and two administrators.

The first interview involved a fourth grade teacher who has taught nineteen plus years in a Class AA school district. The majority of the interviewee’s teaching experience has occurred in grades three through five. This was a face-to-face interview with a duration of twenty-four minutes. The second interview occurred for twenty-one minutes and followed the first interview on the same day. This was also a face-to-face interview. The interviewee has taught between six and nine years in a Class B district. The interviewee’s teaching experience has been in grades kindergarten through grade two within a multi-age setting. The third interview occurred the next day with a twenty-two minute phone conversation. Again, the interviewee was a teacher who has taught for nineteen plus years in a Class AA district. The interviewee’s role changes each year based on elementary grade level students’ reading needs; however, current experience involves remedial reading instruction in grades one through four.

The fourth interview followed the third on the same evening. This was also a phone interview. This interview duration was thirty-four minutes with a special education resource teacher who has taught between three and five years. This teacher’s experience has been in the same school in a K-8 Independent Elementary while serving students who have an Individual Education Plan (IEP). She works with students in grades kindergarten through grade eight in their classrooms and in the resource room. The fifth and sixth interviews occurred three weeks after the first four interviews.
The fifth interviewee was a fourth grade teacher who has taught for nineteen plus years in a Class B school district. The interview took place over the phone for eighteen minutes. This teacher’s experience also involves coordinating a Gifted and Talented program. The sixth interview took place the following day with a teacher who has taught for nineteen or more years. The duration of this interview was fifteen minutes and occurred over the phone. The current role of this teacher is as a special education resource teacher who works with students who have an IEP in grades kindergarten through grade six. This teacher also taught reading in regular education in the elementary school as well as special education for fifteen years at the high school level.

The final two interviews involved administrators. The seventh interviewee is currently an administrator with twenty years of experience as an educator. Prior to becoming a principal of an elementary school, the administrator was a middle school math teacher and a student activities director at the same school. The eighth interviewee is also currently an elementary school principal. Before becoming an administrator, this principal was a third grade teacher and a special educator in a kindergarten through grade four building.

Examples of teacher and administrator quotes that were coded and used to identify and interpret common themes to the interview questions are summarized in the order the questions were asked. The first question is: How do you define the formative assessment process in reading? Both administrators and teachers shared that formative assessment involves the frequent use of, sometimes planned, multiple assessments to determine student strengths and deficits in order to develop and determine progress with
student learning goals. An example definition from an experienced fourth grade teacher is,

The frequent checks you do in reading and they should be planned; however, mine are not always planned. They should be set up to assess different skills throughout reading so you can plan to move forward with students. Formative assessment is what you do to figure out what their deficiencies are and to plan further within your lessons.

The administrators increased this definition by adding a collaborative component of teachers and administrators analyzing student data together over time to determine possible changes with instruction and learning goals. Furthermore, when considering each interviewee discussing student learning goals, the ELA Common Core Reading Standards were not specifically mentioned.

Both teachers and administrators defined formative assessment as a vehicle for planning ongoing instruction and for determining student progress toward meeting learning goals. When asked to describe the differences between formative and summative assessment, summative assessment was defined by both groups of educators as a summation of student learning as compared to mastery of learning goals. This was explained by a K-6 resource teacher, “Formative is something that tells me what I have to do next. Summative is the sum total of where a kid falls on a reading level.” However, administrators included that summative assessment involves comparing student progress to same age peers, looking further at why students were or were not proficient with learning goals.

The third question involved capturing teachers’ and administrators’ understanding of Vygotsky’s (1978) zone of proximal development (ZPD), how students’ emerging
understanding guides the formative assessment process in reading. Teachers shared that the formative assessment process enables them to know and teach within a student’s ZPD range. This range provides for an optimal instructional platform, understanding exactly when to move instruction forward and when to reteach. Administrators described working in the formative assessment process within students’ emerging understandings as more supportive in the early grades when students are learning to read. Therefore, teacher cues and guidance changes and decreases as students get older. One administrator described it this way, when students are older: “You can give them a cue and let them work and then assess them to see what they have done as opposed to those kids who are not developmentally ready, you’ve got to kind of bring them along the whole time.”

Teachers and administrators were also asked to describe the role of feedback for supporting the effectiveness of the formative assessment process in reading (interview question 4). Administrators described feedback as a very important part of the formative assessment process. One administrator defined feedback as,

- the biggest if not the most important piece of the formative assessment process. Without feedback students aren’t getting the appropriate guidance on whether they are heading in the right direction or the wrong direction… it is harder to get them redirected and get them out of habits.

Teachers described feedback as essential for providing information to students about where they are in the process of reaching their learning goals. Furthermore, a teacher explained, “Feedback has two venues: encouragement and corrective.” Corrective feedback was described as teachers prompting students to work out issues or errors and encouraging feedback was explained as giving specific feedback to celebrate progress
toward learning goals. Above all, teachers shared that the better the relationship the student and teacher have, the more progress will be made when providing feedback because there is a mutual trust.

The fifth interview question focused on the effectiveness of student progress monitoring as a strategy for guiding the formative assessment process. Teachers and administrators shared that progress monitoring is effective when frequent and brief assessments are given to students to determine progress toward achieving learning goals and ongoing instruction. This part of the process allows for purposeful and focused instruction. A primary teacher with nine years of teaching experience shared,

You need to keep an eye on their progress. It does not always have to be a formal progress monitoring piece of paper, but I do need to have some notes or something by which I can gauge whether or not they are making progress.

Administrators added, “Progress monitoring is an important part of the process to inform teachers’ instruction and guide students as well, it is good for providing feedback to teachers and feedback for students.” The progress monitoring theme from both groups of educators is founded upon teacher reflection about current instruction, thus providing a path toward intention teaching to meet all students’ needs.

Teachers shared a blended perspective of the effectiveness of universal screening/benchmark assessments within the formative assessment process. When asked about the effectiveness of using universal screening/benchmark assessments for formative assessment purposes, half of the teachers do not believe it is an essential part of the process. An intermediate grade teacher with more than twenty years of teaching experience shared, “It is just a tiny piece.” Another experienced teacher shared, “I do not
use this for formative assessment at all; however, it is summative information only.”

On the contrary, other teachers aligned with the administrators’ perspective. These teachers and administrators shared that universal screening/benchmark assessments are a critical piece of the process as they serve to identify student needs and guide intervention and skill groups. One reading specialist shared, “During PLC we print reports and look at them to determine RTI levels and then use three data points to determine placement.” Another primary teacher shared, “Within the school, when we talk about a student we are all using the same language and the same assessment.” Moreover, the administrators shared the universal screening/benchmark assessments provided a global view baseline of where all of our students are performing towards achieving standards. One administrator explained, “It helps us kind of guide where we need to set goals and where we need to target our interventions and target our instruction.” Another shared,

I think it important to implement those for number one, baseline data and then number two, over the course of time (you can determine) how have they done and how are they progressing… and share this with others that are working with them.

The seventh question was: How is implementing basal reading assessments effective within the formative assessment process? Both teachers and administrators showed agreement that basal reading assessments show progress with how students are performing within a curriculum. However, five out of six teachers interviewed shared they either did not like using a basal reading series or they had never used one. The only teacher who shared a positive perspective said, “I like to use a pretest, a basal pretest
because it really shows me where I do not have to go and I hate to hold a kid back.”

When considering the administrators’ perspective, one administrator shared, “I think it is important if you are using a basal series to know if the materials you are using are effective.” Another administrator explained,

It is designed to be able to target and give indicators of progress within that curriculum...all of the data is important, not designed for that curriculum, they may not perform well; designed for that curriculum, yes they perform well.

Collectively, teachers and administrators agreed that if a basal reading series is implemented, the assessments within that curriculum are an effective part of the formative assessment process.

The final interview question was asked to determine how implementing criterion referenced tests supported the effectiveness of formative reading assessment. Teachers and administrators expressed agreement that a criterion-referenced test is summative and not a part of the formative assessment process. Typically, this type of assessment is given at the end of the school year with student results available at the beginning of the next school year. However, positive formative perspectives were shared. One experienced intermediate teacher shared,

That is formative assessment for me. If my kids are doing well and if I get data from my last year’s kids and I have pretty good numbers, I must have done something okay. But I get that criterion-referenced test like in September for my new kids. I think, Oh, I have some pretty good readers and we could get the social studies book open during the first week of school or, man, I have some students with some deficits and I am going to have to do some serious ground work before we can start content reading and the textbook.

Administrators shared that the criterion reference test is outside of the formative
assessment process; however, similar to the positive teacher perspective, the student data can be used formatively the next school year. One administrator explained, “You can used it as a comparison...a check to see that everything is lining up and it is a good point of reference.”

Overall, the interview answers from administrators and teachers demonstrated similar agreements; however, administrators expressed a more global, school wide, perspective on the formative assessment process. Administrators viewed feedback as the most important part of the formative assessment process as it specifically guides ongoing instruction. Furthermore, the universal screening/benchmark assessment was also viewed by administrators as the critical starting point of the formative assessment process. The teachers’ perspective was similar; however, feedback and assessment data were viewed as essential parts of the formative assessment process while also including that relationship between the teacher and the student as critical as the students need to trust the instruction from the teacher to take learning risks and be content with making mistakes.

Interpretation of Emergent Themes:

After identifying the codes throughout the qualitative data and aligning them with the three research questions, the following five themes emerged:

1. It is essential to identify and work within students zone of proximal development to develop a platform for guiding wise instructional direction.
2. Reciprocal feedback is an essential component of the formative assessment process as it intentionally moves student instruction forward.
3. Universal Screening/Benchmark Assessment data is the starting point of the formative assessment process.
4. Teacher reflection on current assessment data is essential to provide direction for intentional teaching.
5. The use of multiple assessments provides data that creates a clearer picture of students’ strengths and weaknesses inside and outside of reading curriculum.

The following Table 25 represents the alignment of codes identified within the qualitative data with emergent themes and their alignment with the three research questions.

Table 25. Themes and Codes Emerged from the Qualitative Data and Where They Align with the Research Questions

<table>
<thead>
<tr>
<th>Theme</th>
<th>Codes</th>
<th>Research Question</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. It is essential to identify and work within students zone of proximal development to develop a platform for guiding wise instructional direction.</td>
<td>Optimal instruction; more support in earlier grades; organizes and informs wise instructional planning vs. Summary of learning and comparison to same age peers</td>
<td>1; 3</td>
</tr>
<tr>
<td>2. Reciprocal feedback is an essential component of the formative assessment process as it intentionally moves student instruction forward.</td>
<td>Accurate assessments; proficiency is determined by growth in students owning skills and strategies; most important part of the process; wise direction and instructional trust</td>
<td>1; 2; 3</td>
</tr>
<tr>
<td>3. Universal screening/benchmark assessment data is the starting point of the formative assessment process.</td>
<td>Global view of all students; guides goal setting; baseline/starting place of the formative assessment process; beginning of multiple measures</td>
<td>1; 2; 3</td>
</tr>
<tr>
<td>4. Teacher reflection on current assessment data is essential to providing direction for intentional teaching</td>
<td>Reflection on current assessment; continual focus on future intentional teaching; keeping current with data-determine progress with goals; CRTs are ineffective</td>
<td>2; 3</td>
</tr>
<tr>
<td>5. The use of multiple assessments provides data that creates a clearer picture of students’ strengths and weaknesses inside and outside of a reading curriculum.</td>
<td>Frequent assessments over time; data from multiple assessment determine learning goals- drives teacher and administrator decision making; curriculum achievements; provide additional student data</td>
<td>1; 2; 3</td>
</tr>
</tbody>
</table>
Theme 1: It is Essential to Identify and Work within Students’ Zone of Proximal Development to Develop a Platform for Guiding Wise Instructional Direction. Once a student’s zone of proximal development is identified, optimal instruction and learning occur. For example, when asking teachers and administrators about the concept of Vygotsky’s zone of proximal development as it relates to English Language Arts Reading assessment, one reading specialist expressed, “You want to be fairly clear about where you think a child is so you can teach them right at their correct zone.” Another intermediate teacher with more than twenty years of experience shared, “Formative assessment also gives you the information that the students do have it and move on.” An administrator explained optimal instruction within the formative assessment process as, “Especially in K-1, there is going to be far more guidance from the formative assessing than there would be when they are developmentally ready to be able to think in terms of complex situations or ideas.”

Purposeful and frequent assessment data provides teachers with information that allows them to plan instruction intentionally. Teachers and administrators shared that they use a variety of assessments to gather student data to determine if students are proficient with English/Language Arts reading standards. One fourth grade teacher uses quick check classroom assessments. She commented, “I can get a quick check if they understand similes, I can check if they understand inferences so I know they know what that is.” A reading specialist shared that she uses frequent assessment checks to be sure students are mastering reading skills. She discussed the specific assessment implemented to determine progress, “We use progress monitoring with running records.” These
assessments provide information about where students’ strengths and weakness are according to the standards. Moreover, teachers shared the importance of intentional planning. One teacher explained it this way, “You always want to be fairly clear about where you think a child is so you can teach them right at their correct zone. You do not want to waste a moment of their time.” Another teacher commented, “You are giving them what they need.”

Formative assessment was described as organizing instructional planning further supporting wise instructional decision-making. For example an intermediate teacher described how she uses assessment results, “It gives me the direction on how lesson plans should change to meet their needs next week based on what happened this week.” Two more teachers commented similarly. One teacher said, “Formative is something that tells me what I have to do next.” Another explained, “Formative assessment really tells me what I have to do next with this kid.”

Theme 2: Reciprocal Feedback is an Essential Component of the Formative Assessment Process. Reciprocal feedback from the student and teacher sets the course for ongoing instruction. When the educators were asked about using formative assessment to provide guidance for ongoing instruction, they used their experience to make decisions about when to move instruction forward. For example, one primary teacher who has taught reading for the past nine years summarized well her view of the importance of feedback. She commented that,

You need to keep an eye on their progress. It does not always have to be a formal progress monitoring piece of paper, but I do have to have some clear
notes or something by which I can gauge whether or not they are making progress. You cannot start the RTI cycle without documentation.

Three experienced teachers summarized the necessity of providing feedback. One fourth grade teacher commented, “Feedback at this time is critical because it gives them knowledge of where they are in their learning process.” A reading specialist shared what her students need, “The more they know exactly where they are, the more they succeed. I want them to know exactly where they are.” Furthermore, the longer a teacher is in the classroom, the more he or she learns more about students’ learning behaviors. A teacher with over twenty-five years of experience commented that,

When they are getting ready to take the risk, they may be trying a hard word or thinking about how this relates to another thing or whatever. So what I think...so if you have been watching them carefully, you can kind of stand behind them and push them over the edge...So that stepping back and forth between the push and pull and the shove over the cliff to assure them that there is water down there and they can swim to the edge.

However, a resource teacher with three years of teaching experience shared,

I feel like depending on the age, older kids are able to understand feedback and digest it. Younger children… I think it is essential for all children, you can’t get them to do anything without, unfortunately, I would say, a carrot in front of them.

Experienced teachers demonstrated that their background knowledge of past instructional interactions with students provides them with wisdom to give specific feedback to students and to determine an effective direction for ongoing instruction. Administrators’ responses were similar to teachers as moving a wise instruction direction is much more effective than having to redirect. One administrator commented,

It is harder to get them redirected… It is tougher to get them out of those habits and out of the mindset they are in...the more feedback you can give,
the better direction and better understanding the students will have, and therefore a better result.

The formative assessment process takes time to identify a student’s zone of proximal development and proficiency level. Identifying students’ proficiency level is dependent on accurate assessments. A veteran teacher who has worked in grades three through five expressed the need for implementing assessments. She said, “We make assumptions that students are getting it. But when we actually stop and assess their learning, you will often find that many really do not have a true understanding when we take away adult support.” Another teacher expressed the benefits of student observation over time giving teachers the accurate knowledge of their progress. She shared,

So the fantastic thing about the whole kid watching deal with formative assessment is that overtime you can see where they are brave and where they are going to take that next step and take a risk and may stumble a little.

Another important idea that emerged from teacher interviews was that teachers could determine reading proficiency when the focus of reciprocal feedback is on students’ awareness of their progress toward standard mastery. Teachers and administrators agreed that students need to know exactly where they are on the continuum of becoming proficient with learning goals. An intermediate classroom teacher shared, “I try to be real specific and tell them, this is the skill we are going to work on and this is why.” A reading specialist shared similar perspective. She said, “I want them to know exactly where they are.” Moreover, students need to clearly understand their progress. A primary classroom teacher shared the importance of teacher and student communication. She commented that, “They may think they are doing
marvelously well, which is possible or they feel like a total failure.” Administrators shared an aligned perspective, that is, they agreed with teachers’ perspectives that students should know what the target is and where they are in the process of achieving it. An administrator expressed the benefits of students using graphs to identify their progress. She commented,

If you are a second grader, I think they should know and can understand by the end of the year, they need to read 90 words per minute. This is where you are now and this is where we are going. Those quick check-ins are important, kids should grasp where they are and have a discussion about it.

Teachers and administrators reported that reciprocal feedback did not support instruction unless there was mutual trust between the student and the teacher; a classroom teacher described it this way, “For one thing they trust you more as a teacher. It empowers me as a teacher. I am still yacking at them. The yacking has a purpose and it is designed for them.”

Theme 3: Universal Screening/ Benchmark Assessment

Data is the Starting Point of the Formative Assessment Process. The universal screening supports goal setting to achieve standard proficiency. A universal screening assessment is typically given to students three times per school year. Teachers’ perceptions of this type of an assessment were positive. A resource teacher commented, “It is a nice way to chart growth and it is absolute proof that something is happening or Oh my God! What is happening?” Another primary grade teacher believes having a common assessment for all students is beneficial to use to set goals aligned with
standards. She shared, “You are comparing oranges to oranges or apples to apples. You need to have something and we’ve got STAR and DRA.”

Administrators also recognize that universal screening/benchmark assessments support educators in setting student goals. An elementary administrator identified this type of an assessment, “Is a global view of where all of our kids are… and a guide for where to set goals.” Another administrator shared that benchmark assessment data, “gives you a baseline of where they (students) are” according to the grade level standards.

Identifying learning goals was described as beginning with the universal screening process involving the use of multiple measures. Teachers discussed the need for multiple assessments. A reading specialist shared, “Universal Screening is very critical. During the PLCs we can print reports and look at them to determine RTI levels. We use three data points to determine placement.” A primary teacher said, “Within the school, when we talk about a student, we are using the same language and same assessments for certain grades.”

Theme 4: Teacher Reflection on Current Assessment Data is Essential to Providing Direction for Intentional Teaching. A key description of the formative assessment process that emerged was the importance of teacher reflection. More specifically, taking the time to consider students’ reading skill levels and plan ongoing instruction focused on skill attainment required to meet proficiency levels defined by grade level standards. A fourth grade teacher shared the benefits of reflection and intentional teaching. She commented,

I can walk around the room from group to group. When they work together
then they are able to see how other people are interpreting the reading process and questions. I have just found that to be the greatest progress monitoring. Man, it is so powerful watching their discussion groups.

Another teacher shared the benefits of classwork and observations to guide ongoing instruction. She said, “I can read the numbers and I can do some of the computer interpretations but the boots on the ground and watching the students discuss is really applying their knowledge.” An administrator shared an aligned perspective as the classwork and observation piece of the formative assessment process provides good reflection for teachers to implement intentional instruction. It was commented that,

The progress monitoring is that data piece that tells you, are the things we are doing for this student helping him or her and making them become better at what they are doing? Are they reading their target at a rate at which they should?

A resource teacher explained that criterion referenced tests (CRT) are not always fun for students; however, the assessment results provide a reflective perspective for future planning. She commented, “They constantly show me that we have ways to go to get a kid to grade level.” The only reading specialist interviewed shared another positive perspective about CRTs. As schools move to full implementation of the new standards and assessments are becoming more aligned with classroom instruction, she said, “The tests have helped to move people toward Common Core implementation.”

Student assessment data drives instruction that continually focuses instruction on gaps in student reading skills. Teachers described focused instruction as effective for making changes and moving forward with intentional instruction. One teacher commented, “If they are not making progress, you need to tweak things that you are
doing. You need to keep an eye on their progress.” Another teacher shared, “It is effective when it allows me to know where I am going.”

Theme 5: The use of Multiple Assessments Provides Data that Creates a Clearer Picture of Students’ Strengths and Weaknesses Inside and Outside of a Reading Curriculum. In general, participants defined formative assessment as planned assessments that are used daily to gather student data to guide ongoing instruction focused on supporting students in meeting grade level standards. Teachers and administrators had similar agreements on frequent assessments. An experienced teacher shared,

Formative assessment is the frequent checks you do in reading and they should be planned; however, mine are not always planned. Formative assessment is what you do to figure out what their deficiencies are and to plan further within your lessons.

Another teacher articulated the assessments she implements and how the student data is used. “Formative assessments are guiding my instruction. Like MAPs, individual 1:1 and group testing that are used then to guide my instruction.” An administrator articulated, “You do many formative pieces of assessment through the process towards a learning goal.”

The use of more than one measure was identified as important for determining proficiency toward reading standards and/or ongoing instructional planning. For example, a resource teacher explained the need for multiple assessments by expressing, “You can easily, depending on the school, warrant needing four or five different types of assessment to figure out where a kid is, because kids test differently anyway.” Another teacher commented, “I am doing formative assessment all of the time.” An administrator
commented on multiple assessments, “It is important just because certainly there are many indicators and assessments that you can create.”

Participants stated that the use of multiple formative assessment data guides the learning goals of ongoing instruction and determines proficiency. A teacher shared her description of ongoing instruction and assessment. She said,

You are doing checks on skills to see if they are reaching their learning goal you are teaching either for that day or multi-lessons, some kind of assessment for all of your students. Sometimes you are just getting the temperature in the room so you can plan accordingly.

Furthermore, another teacher commented about the application of the results of an assessment, “At the end of the assessment, it shows you exactly what you need to work on.”

The use of a basal assessment was determined as a measure that was helpful to determine ongoing instruction within a specific curriculum. For example an experienced teacher shared, “I like to use a basal pretest because it really shows me where I do not have to go. I hate to hold a kid back.” A principal with twenty years of experience commented, “The assessments that come within the curriculum are designed purposefully for that curriculum. It is designed to be able to target and give indicators of progress with that particular curriculum.” Although this measure is helpful to determine ongoing instruction within a curriculum, multiple measures need to be implemented to determine standard proficiency and possible instruction outside of the reading curriculum.

Basal assessments that are administered throughout the year were recommended by teachers and administrators to be given in addition to the universal screening measures
outside of the reading curriculum. Using these multiple measures gives the teacher the opportunity to compare students’ progress outside of the curriculum and determine overall proficiency in meeting reading standards. Although the majority of teachers interviewed did not use a basal reading series, an intermediate teacher who shared a positive perception said, “I like to use a basal pretest. I really like to know they’ve got this and I don’t need to go there with this one.” A resource teacher who uses the basal reading series student data shared, “They (the assessment data) create a baseline to see progress and growth.” Furthermore, one administrator identified the purpose of basal reading series assessments. He commented,

The assessments that come within the curriculum are designed purposely for that curriculum. It is designed to be able to target and give indicators of progress with that particular curriculum.

Summary of Qualitative Results:

Overall, the qualitative interview data from teachers and administrators provided a clear definition of the formative reading assessment process, informing research question three. Administrators emphasized that feedback is the most critical component in supporting students within the formative assessment process. Teachers added to this by explaining that effective feedback is only possible when the most important part of this process is founded upon the mutual trust between the teacher and the student. Therefore, the definition of the formative assessment process as summarized by the qualitative data is: A process founded on mutual trust between teachers and students where feedback is encouraging and corrective as aligned to learning goals and gathered from frequent and
multiple assessment data. This student data provides for a path of wise instructional planning, intentional teaching, and a clear understanding of student proficiency with reading standards.

Furthermore, the qualitative data continued to confirm quantitative data collected and summarized to answer research questions one and two. When considering the first question: What do teachers and administrators perceive as effective for guiding ongoing instruction? Teacher feedback, again, was identified as critical as this guides instruction. Moreover, this guidance is only as effective as the teacher reflection. The more time teachers take to reflect on the student data, the more intentional their planning can be as it relates to leading students to reach their clear learning goals.

The qualitative data from teachers and administrators also identified clear learning goals to support answering research question number two. What do teachers and administrators perceive as evidence of student progress toward meeting reading standards? Teachers’ and administrators’ interview data identifies that this can question can only be answered by setting clear learning goals for students. Once the goals are set as aligned to reading standards, intentional instruction can be planned and frequent assessments can be implemented for students and teachers to clearly identify where a student’s progress aligns on the continuum of meeting learning goals.

Quantitative and Qualitative Comparisons

The purpose of completing the qualitative interviews was to gather more in depth data to answer the three research questions further and, therefore, gain more insight into
how administrators and teachers define formative assessment, plan ongoing instruction, and determine standard proficiency within the process. Research question number one asks: In the area of reading instruction, what measurements and instructional practices do teachers and administrators perceive as effective for guiding ongoing instruction? This question was answered in the qualitative survey and complimented by the data within specific interview questions.

Over 91 percent of the administrators and teachers indicated agreement that student data from formative reading assessments are used to develop reading instruction and supports students in learning to read. This was confirmed by the interviews where teachers and administrators described optimal teaching and learning occurs when students are taught within their zone of proximal development. Furthermore, the majority of teachers and administrators indicated that when students make mistakes during reading instruction, it helps them learn to read. This was verified as providing wise instructional direction with reciprocal feedback between the student and the teacher with two venues, encouragement and corrective. Teachers and administrators noted this feedback as critical and the most important part of the formative assessment process. Feedback provides students the necessary knowledge of where they are and where they are going within their learning process.

The quantitative data revealed that over three-fourths of teachers’ and administrators’ first choice for measurements and instructional practices for guiding ongoing instruction are found in classwork and observations. Similar findings were also shared in the qualitative data as teachers find the greatest progress monitoring occurs
when they are walking around the room with boots on the ground watching their students. Furthermore, teachers and administrators described formative assessment as frequent, planned checks used to figure out what students’ deficiencies are to plan further instruction.

Research question number two is: In the area of reading instruction, what measurements and instructional practices do teachers and administrators perceive as evidence of student progress toward meeting Common Core ELA Reading Standards? In the quantitative data, nearly 90 percent of teachers and administrators indicated that universal screening/benchmark reading assessments are essential to use to monitor student progress toward standard mastery. This result was supported by qualitative data derived from teacher interviews that described these assessments as “absolute proof that students were learning and making progress”. Furthermore, teachers shared that accurate comparisons can be made to evaluate student reading progress when all students take the same assessments throughout the school year. Administrators agreed with this comparison as common assessment data provides a global view of how all students are progressing as compared to same age peers.

Similar to the overwhelming first choice of the use of classwork and observations to guide instruction, teachers and administrators chose classwork and observations as the most important evidence of student progress toward proficiency of reading standards. This result was confirmed by qualitative data from interviews, which described how educators make assumptions that students are learning; however, when language skills are intentionally assessed, it is clear that student understanding of new concepts does not
always occur without adult support or guidance. Moreover, teachers described using reciprocal feedback to be very specific with students about the skill focus in a lesson. Also taking time to explain the why behind a lesson, as it is essential for students to know exactly where they are on the path to reaching standard proficiency.

Administrators also believe reciprocal feedback is essential and more supported in the younger grades. As students get older, the need for guidance decreases. Furthermore, administrators shared that feedback is critical to guide all students because it is more difficult when students have to be redirected and break learned habits. This is confirmed with the similar findings within the quantitative data where teachers and administrators overwhelmingly agreed that students should know the goal of an assessment, confirming the importance of knowing the why of a lesson or assessment.

In terms of research question three: In the area of reading instruction, how do teachers and administrators define the formative assessment process? Quantitative data revealed that almost 85 percent of teachers and administrators believe the purpose of the formative assessment process is to increase learning. This result was verified in the qualitative interview data by teachers describing formative assessment as the planned and frequent proficiency checks teachers do in reading. The process was further described by teachers and administrators in the interview data as the formative assessment process supports identifying student deficiencies to plan ongoing instruction and determines if students are reaching their learning goals. Thus, teachers need to be clear where they think a child is proficient so they can be taught within their correct zone; therefore, instructional time is not wasted.
In addition, the quantitative survey data demonstrates that teachers and administrators collectively agreed at over 93 percent that student data from formative assessments are to be collegially shared with teachers. The qualitative interviews support these results when teachers described the universal screening process as very critical during their Professional Learning Communities to be able to look at student reports and determine Response To Intervention (RTI) levels. Moreover, when teachers and administrators talk about students within a school they are using the same student data language since they are using the same assessment.

Finally, the use of classwork and observations was the first choice for administrators and teachers when planning ongoing instruction and for evidence of student progress toward meeting Common Core ELA Reading Standards. Considering this, the quantitative data indicated that over 83 percent of teachers and administrators perceive classwork and observations as formative. This result was supported by the qualitative data collected from teacher and administrator interviews which revealed that students need to be able to trust their teacher to know the teacher is instructionally giving the students exactly what they need.

Summary

In summary, the results of the data in this study answer the three research questions by defining how administrators and teachers perceive the formative assessment process and how the process is used to plan ongoing instruction and provide evidence of student progress toward mastering the Common Core ELA Reading Standards. Overall,
the quantitative data reveals similar findings between teachers and administrators with
high percentages of agreement between both groups of the use of classwork and
observations as the favorite measurement and instructional practice for planning ongoing
instruction as well as for providing evidence for student progress toward meeting reading
standards.

Furthermore, the quantitative data from administrators and teachers also reveals
high percentages of the use of feedback as an effective instructional practice within the
formative assessment process. These results are also confirmed in the interview
descriptions from teachers and administrators.
CHAPTER FIVE – DISCUSSION

Introduction

Elementary administrators in Montana commonly lead one school wide universal reading screening assessment three times per year to formatively identify student performance and progress toward reading standard mastery as well as to compare overall student success with other schools. The fundamental purpose of this study was to identify the similarities and differences between administrators’ and teachers’ perceptions of the universal screening assessment as well as other common formative assessment measurements and instructional practices used to guide students’ ongoing reading instruction and used as evidence of student progress toward meeting standards. Furthermore, the purpose of this study sought to compare how teachers and administrators define the formative reading assessment process.

The impetus for this study is the notion that principals who lead in transformational and collaborative ways that focus on high-impact instructional methods experience grade level proficiency that is three to four times greater than when limiting instructional leadership to that of promoting only a focus on the implementation of the school’s mission and vision (Buffum et al., 2012; Robinson, Lloyd, & Rowe, 2008). Furthermore, Guskey (2007) explained that assessment measures used within a school should be collectively trusted and believed by administrators and teachers alike, thus the data produced from these assessments provides the necessary detailed information about student learning on an ongoing basis to understand students’ learning strengths and
deficits. This allows for the possibility to initiate specific strategies or intervention lessons for improvement.

Although teachers and administrators know about formative assessment and claim they use it for instructional purposes in their classrooms and schools, it is considered commonplace and often taken for granted (Roskos & Newman, 2012). This research effort was also undertaken to more specifically describe administrators’ and teachers’ common understanding of the formative assessment process as more than just a universal screening approach (Fisher & Frey, 2014) and to determine if they perceive the formative reading assessment process as a prominent school improvement strategy (Stiggins & Chappuis, 2005).

Elementary principals serve an important role in leading and providing continuous professional development of effective instructional practices in reading as well as the implementation of measurements that are authentic indicators of student learning as measured against grade level reading standards. Typically, administrators in Montana lead the implementation of one universal screening assessment three times per year. However, research suggests that effective reading assessments designed to evaluate student reading skills should be ongoing and not a summative assessment administered at the end of a curricular unit as a separate activity from the ongoing daily instruction. Instead, formative assessment should work in close harmony with instruction, occurring almost simultaneously as student feedback is provided through the teaching and learning process (Fisher & Frey, 2014; Stiggins, 2014).
Major Findings

The multimethods approached used in this study gathered data from teachers and administrators using quantitative surveys and qualitative interviews. Data from both sources were summarized and synthesized to answer the three research questions posed for this study. The following five main outcomes are summarized in the following sections.

Instruction Targeting the Zone of Proximal Development:

In general, both teachers and administrators indicated that data from formative reading assessments are used to develop reading instruction and support students in learning to read. In particular, they expressed that formative assessment data was important for targeting instruction aligned with students’ Zones of Proximal Development. Viewing reading assessment through the lens of Vygotsky’s theory provides the opportunity for educators to focus on the process of formative assessment within a learning paradigm rather than a measurement paradigm. (Heritage, 2010).

Instruction based on targeting students’ zone of proximal development was identified by both teachers and administrators to be supported by formative assessments that involving classwork and observations. Within the context of this study, classwork and observations included classroom assignments, tests, quizzes, and teacher observations with and without formal checklists. These types of formative assessments were ranked as most important for assessing student reading proficiency and guiding
reading instruction. Guskey’s (2007) research also found that portfolios of student’s work were found to be the most reliable indicators of student learning. However, the teachers and administrators from Guskey’s study also identified universal screening assessment as the most effective for determining student proficiency. The differences identified by Ankrum (2006) and Guskey (2007) related to the importance of formative reading assessment approaches and may be due to the “divergent orientations on the part of administrators and teachers stemming from their professional responsibilities” (Guskey, 2007, p. 23). The role of an administrator requires the opportunity to view the success of the entire school while providing a framework of support.

**Reciprocal Feedback:**

The importance of reciprocal feedback was also identified as necessary for optimizing the formative assessment process. Reciprocal feedback was described by teachers and administrators alike as providing more cues to younger students with guidance decreasing for older students. In particular, corrective and encouraging feedback in response to students’ comments and facial expressions during reading instruction when making errors. Prior research demonstrates that formative reading assessment that helps students to recognize errors through the use of teacher corrective feedback is an essential strategy for teaching children to learn fundamental reading concepts and skills (Archer & Hughes, 2012; Smolkowski & Gunn, 2012).

The importance of reciprocal feedback that is corrective was also highlighted by the seminal research conducted by Black and Wiliams (1998) which described the
formative assessment process as consisting of frequent interactions of feedback between students and teachers. In addition, as an organization, the International Literacy Association (ILA) suggest that formative assessment should be an ongoing process where teachers and students share the responsibility for providing feedback that informs instruction and leads the way for continuous improvement characterized by a purposeful, engaging, and dynamic process. (ILA, 2013; Shepard 2005). Hence, feedback is the linchpin that connects students and teachers to the learning paradigm within the formative assessment process (Bookhart, Moss, & Long, 2010). An example of the importance of providing feedback aligned with clear learning goals is supported by Zelenka’s (2010) research, which studied kindergarten teachers implementing Tier 2 interventions for reading instruction. This study observed instruction where teachers provided immediate feedback and reinforcement to students, resulting in students correcting errors and/or misunderstandings. Overall, results from Zelenka’s research found that students were able to achieve valuable learning outcomes.

**Universal Screening and Progress Monitoring:**

While the definition of high-impact instructional leadership seeks colleagues’ agreement about teaching strategies that are considered as convincing evidence of high-impact instructional practices, this framework also requires that administrators define the characteristics of student success within the context of the schools they lead (Hattie, 2015). A major finding from this study was that both teachers and administrators indicated that universal screening/benchmark reading assessments were essential to use to
monitor student progress toward mastering Language Arts/Reading standards. The use of these common assessments was found to provide a global view of how all students of the same age are progressing towards mastery. Green, Matthews, Carter, Fabrizio, Hoover, & Schoenfeld (2012), point out that the use of universal screening as a formative assessment strategy is a crucial component of any comprehensive assessment system for identifying students who are meeting proficiency relative to grade level reading standards and for providing data that Response to Intervention teams can use to design more instructional interventions to specific to individual student reading deficits (Galanter et al., 2010; Hosp, Hosp, & Dole, 2011). Hence, the universal screening results can identify student proficiencies as well as support other assessment data to guide ongoing instruction (Buffum, Mattos, & Weber, 2012).

Establishing clear instructional goals and communicating those goals to students was characterized as needed for effective progress monitoring using frequently administered formative assessments such as running records, fluency assessments, and comprehension checks. The importance of frequent assessments expressed by both teachers and administrators is clearly aligned with Stiggins & Chappuis’ (2008) view that suggests when students experience the formative assessment process that emphasizes clear learning goals and explicit feedback about how to move toward mastery, their learning increases. Hence, when students are involved in identifying their learning goals according to grade level standards while truly understanding them to monitor their progress against the established success criteria (goal of the assessment), achievement increases (Buffum et al., 2012; Galanter, 2010).
**Teacher Reflection:**

Teacher reflection was a theme that emerged from the qualitative data. Teachers and administrators shared that educators need to consistently review and reflect on student assessment data to identify strengths and weaknesses in order to effectively plan individualized ongoing instruction. Additionally, teachers and administrators commented that when they reflect on student feedback along with assessment data, they are able to identify students’ zone of proximal development.

Research shares that reflective teachers are intentional and deliberate with students’ ongoing instruction as they take the extra time to review student data to determine deliberate next steps for ongoing instruction (Marzano, 2012). Moreover, teacher reflection supports teachers to systematically improve their practice (Buzza, Kotsopoulos, Mueller, & Johnston, 2013) as they adjust their thinking to accommodate ongoing instruction.

Danielson (2009) suggests that teacher reflection is characterized by an intentional competence that enables a teacher to identify and replicate best practice. Research related to teacher reflection continues to state that all teachers can develop habits of mind conducive to appropriate decision-making (Danielson, 2009). Moreover, reflection is a skill that is best fostered with colleagues within a professional learning community.
How Teachers and Administrators Define Formative Assessment:

Overall, teachers and administrators overwhelmingly agreed that the purpose of the formative reading assessment process is to use student data to guide the development of instruction and therefore increase student learning to support them in developing the skills to read according to the expectations of grade level standards. However, they also voiced that this process is supported by collaborative efforts to review assessment results and plan instruction. In general, this finding aligns with recommendations from prior research, which suggests that the formative assessment process is dependent on the leadership of school administrators (Fox, 2003). More specifically, Popham (2009; 2011) recommends that administrators need to have the ability to support teachers in acquiring the necessary skills to implement the formative assessment process and they cannot lead teachers without understanding the process and its purpose.

This importance of teams of teachers and administrators collaborating over the meaning and use of student assessment data has been identified frequently within current research. For example, Hattie’s (2012) research includes 800 meta-analyses, comprising over 50,000 individual studies, and representing the student achievement of over 80 million students worldwide, "it is a collective, school-wide responsibility to ensure that all students are making at least a year's growth for a year's input, and to work together to diagnose, recommend interventions, and collectively evaluate the impact of teachers and programs" (p. 63).
At the school level, research shares that Professional Learning Communities (PLC) provide an effective approach for reviewing and discussing the implications of student data from formative assessments. PLC descriptions vary; however, the general concept refers to a committed high-performing team of educators (administrators and teachers) who collaboratively seek, share, and act on their learning to achieve better results for the students they serve (DuFour, DuFour & Eaker, n.d.; Bullough, 2007; Renfro, 2007). When using the PLC framework teachers and administrators are actively involved in gathering student results from formative reading assessments, discussing those results and making decisions about instructional approaches or curriculum revisions designed to improve student learning. Teachers and administrators are active in their own learning and open to new ideas (Buffum et al., 2012; Hattie, 2012; DuFour et al., 2010; Fleming & Leo, 1999; Rentfro, 2007).

An important outcome of teachers and administrators reviewing formative assessment results jointly is that the PLC can function much like a Response to Intervention team where instructional interventions can be proposed for use with students who are not proficient in reading standards (Wixon & Valencia, 2011). Hattie (2012) suggests that administrators and teachers need to work together to diagnose and recommend ongoing instruction and/or intervention. If teachers are going to have the opportunity to implement the formative reading assessment process, they need collegial support from administrators. To provide this type of support research suggests that administrators (school principals) then need to make efforts to develop a collaborative culture to maintain professional learning communities that share a collective
responsibility to improve student learning within their buildings (Dufour & Mattos, 2013).

Principal’s leadership skills for maintaining a consistent framework for PLCs was found to be essential for supporting collaboration that characterized teacher and administrative views of the formative assessment process. The peer support from colleagues was described as important for effectively using formative assessment to guide instruction. According to Bullough and Renfro (2007), teachers need collegial support from administrators if they are to successfully use formative reading assessment for instructional purposes. Moreover, this aligns with Hattie’s (2015) high-impact instructional leadership theory as administrators and teachers need to focus on students and work together within a PLC to diagnose and recommend instruction and/or intervention (Hattie, 2012). High-impact instructional leaders consistently participate in collaborative decision making about student progress (Hattie, 2015). Furthermore, teachers and administrators characterize high-impact instructional leaders that support PLCs as actively engaged in improving student learning by gathering information, making decisions, and implementing decisions. PLC’s provide collaborative and supportive environments where teachers and administrators actively engaged in their own learning about the use of formative reading assessment procedures for promoting positive gains in student reading achievement. (Buffum et al., 2012; Hattie, 2012; DuFour et al., 2010; Fleming & Leo, 1999; Rentfro, 2007).
Implications for Practice

The results from the quantitative survey and elaborated in the qualitative data make the implications of this study clear. First, administrators need to lead as high-impact transformational and instructional leaders (Hattie, 2015; Hallinger, 2010). This type of leadership increases student proficiency of grade level standards when administrators work together with teachers in a culture of collaboration that maintains the shared perception that the team as a professional learning community is mutually accountable to work interdependently to arrive at a consensus about students’ ongoing instruction (Buffum et al., 2012).

To lead as high-impact transformational and instructional leaders, administrators need first to have a shared vision with teachers of what student achievement in reading looks like (Hattie, 2015; Hallinger, 2010) while at the same time also knowing and understanding the formative assessment process in reading and the steps involved in analyzing student data (Popham, 2011). Considering the implication of student achievement, administrators need to have the ability to support teachers in acquiring the necessary skills to implement the formative assessment process in reading as they cannot lead teachers without understanding the process and its purpose (Popham, 2009; Popham, 2011).

Second, it was revealed in the quantitative data and described in the qualitative interviews that administrators need to lead and support school wide professional learning communities (PLC). This is demonstrated by collegial support from administration as
teachers implement the formative reading assessment process (DuFour, DuFour & Eaker, n.d.; Bullough, 2007; Renfro, 2007). Moreover, administrators need to provide time within a master schedule to have educators meet as a PLC (Popham, 2009). As this time for teachers to meet in grade level meetings was described in the qualitative data as the only time provided within a school day to collectively review student formative assessment data. Teachers explained that they value the time they share with their grade level teams to review assessment results together and to make collective changes to ongoing instruction and student intervention groups. Furthermore, research shares that administrators will find greater student success when they work collaboratively with teachers within a PLC to diagnose and recommend instruction and/or intervention (Hattie, 2012). Hence, the results from the research demonstrated that teachers and their grade level teams want to share student assessment data with administrators in order to have support in planning for ongoing instruction.

Third, administrators need to demonstrate the understanding that the formative assessment process in reading begins with a common universal screening assessment and is continued with daily classwork and observations to monitor student progress toward standard mastery and to make decisions about ongoing instruction. As it is defined, high-impact leaders collectively agree with teachers about the definition of the evidence of success with students’ classwork and observations (Hattie, 2015). Considering that the majority of the formative assessment process occurs in the classroom, administrators should be clear about how to lead teachers to effectively provide feedback while working within a student’s zone of proximal development (ZPD).
Providing instruction within a student’s ZPD enables students’ learning to be supported through instructional scaffolding, including feedback, and the active involvement with the student in the assessment/learning process. Instead of perceiving formative assessment within the context of a measurement paradigm, educators have the opportunity to focus on the process of formative assessment within a learning paradigm (Heritage, 2010). In the qualitative data, teachers and administrators demonstrated that they cared more about the learning paradigm than the assessment measurements.

Teacher and administrators described the student results and how to provide feedback and plan ongoing instruction to support students in reaching learning goals, not about which assessments they like using. The interview data reveals that teachers and administrators focus more on the type of feedback they are going to give students based on grade level standards. When teachers provide explicit feedback within the formative assessment process against clear learning goals, learning increases; therefore, students can learn in six to seven months what will normally take an entire school year to learn (Leahy, Lyon, Thompson, & Wiliam, 2005; Stiggins & Chappuis, 2008; Stiggins & Chappuis, 2005; Roskos & Neuman, 2012). Thus, an administrator as a high-impact transformational and instructional leader expects teachers to maintain clear learning goals for students while providing consistent feedback based on students’ emerging understandings.
Recommendations for Further Research

This research effort highlights teacher and administrators perceptions of effective formative assessment strategies for guiding reading instruction. However, this study did not examine explicit practices used in classwork and observation, protocols used to support PLC implementation, or specific strategies used by high-impact transformational and instructional leaders. It would be important for future research to investigate these topics related to formative assessment particularly in the area of reading.

Recommendations for further research are as follows: first, explore specific classwork used in elementary classrooms for reading instruction and define how teacher observations are documented to determine ongoing instruction and standard proficiency. Second, determine the common characteristics of effective feedback in reading instruction and describe how high-impact instructional administrators lead professional development in this area for teachers. Third, identify the characteristics of elementary school principals who lead the implementation of professional learning communities and define specific protocols used to discuss student data to determine ongoing reading instruction and student proficiency with reading standards. Finally, compare student reading achievement at similar sized elementary schools that are described as having high-impact transformational and instructional leaders.
Conclusion

As this researcher reflects on the synthesis of this study, it is imperative that teachers are led by administrators who know and understand the purpose and application of the formative assessment process in reading. When this process is led by administrators and used effectively, it can provide teachers and students with the information they need to move reading achievement forward (Hattie, 2015; Roskos & Neuman, 2012). This research effort along with others confirms the need for the efficacious use of formative reading assessment by sharing that implementing formative assessment successfully can quite literally double the speed of student learning simply by using day-to-day classroom assessments in more thoughtful, purposeful ways (Stiggins, 2014; Wiliam, 2008).

The implication for implementing the formative assessment process successfully confirms that it is critical for administrators to be high-impact transformational and instructional leaders. Administrators as high-impact leaders significantly contribute to supporting teachers in increases in student achievement as they effectively collaborate with teachers in decision-making about student progress, as these leaders are more focused on students’ learning and teachers’ instruction (Hattie, 2015). Outcomes from this study reveal that if the administrators and teachers within this study worked in the same building, they would have the foundation to work within a school that values a high-impact transformational and instructional leadership framework.
It is clear from this research and that of others that effective formative assessment strategies are critical for guiding instruction that can assist students in learning the skills required for mastering academic standards. Although teachers use some type of formative assessment in their classrooms, effective use of the data and more effective alternatives to current approaches is dependent on high-impact instructional leaders in elementary schools who are poised to guide formative assessment efforts (Hattie, 2015).
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APPENDICES
APPENDIX A

ASSESSMENT DEFINITIONS
Basal Curriculum Material – District wide curriculum used for teaching literacy skills: reading, writing, and language use. The assessment materials used include reading selection tests, classroom assignments, and fluency assessments that include comprehension questions involving multiple choice and written responses.

Classwork and Observations – This area includes classroom assignments, tests, quizzes discussions, and teacher observations with and without formal checklists.

Curriculum Based Measures (CBM) - A series of reading assessments, also called reading probes. The assessments are brief and easy to administer at regular intervals (weekly, bi-weekly, monthly). The probe is standardized and is administered the same way every time. Each probe is a different assessment; however, the probes assess the same skills at the same difficulty level.

Curriculum and Criterion Based Measures - Assessing Reading Multiple Measures - A K-12 collection of tests for the comprehensive assessment of skills related to reading. These assessments guide teachers in identifying reading proficiencies and reading difficulty to determine ongoing instruction.

Feedback - Describes the specific quality of student work against clear learning goals and focuses on specific strategies for improvement.

ISIP Early Reading - Istation’s Indicators of Progress Early Reading – A computer-based diagnostic assessment used to measure the critical areas in reading development: phonemic awareness, alphabetic knowledge, vocabulary, comprehension, and fluency.

ISIP Advanced Reading - Istation’s Indicators of Progress Early Reading – A computer-based diagnostic assessment used to measure the critical areas in reading development: word analysis, fluency, vocabulary, and comprehension.

Running Record and Informal Reading Inventories – Individualized reading assessment used to determine oral reading fluency, diagnose errors, and determine levels of reading comprehension.

STAR Early Literacy – Standardized Test for the Assessment of Reading – A computer-based diagnostic assessment used to determine early literacy and numeracy proficiency for emerging readers.

STAR Reading – Standardized Test for the Assessment of Reading – A computer based diagnostic assessment used to determine student proficiency within the four major areas related to the Common Core State Standards: Reading Foundations, Reading Informational Text, Reading: Literature, and Language Use.
APPENDIX B

INTERVIEW PROTOCOL
Interview Protocol – Interviewee: ____________________________

Thank you for participating in this interview. The purpose of this research study is to gain a deeper understanding of teachers’ and administrators’ perceptions of the formative reading assessment process and the effectiveness of the formative assessment process for determining elementary students reading levels and planning instruction.

If any question makes you feel uncomfortable, you do not have to answer. You can also end the interview at any point and for any reason. So, if you change your mind and want to stop let me know, and we will end the interview.

With your permission, I would like to record our conversation so I can listen to it later and reflect more carefully on your comments. I want to assure you that your answers will be kept as private and confidential as possible. The recording of this interview will be kept safe and will only be viewed by me; it will be erased as soon as my research is complete.

When I write up my results, responses from you will be made anonymous so that no one can identify the person giving a specific answer. If I quote or refer to your responses in my research, your name will not be mentioned and no one will be able to guess your identity based on your answers. Do I have permission to record this session?

Again, I thank you for your participation and want to emphasize that your participation will help to provide qualitative data that will inform this study about how teachers and administrators describe their understanding and use of the formative reading assessment process for planning student reading instruction.

1. How do you define the formative assessment process in reading?
   Potential Prompts:
   1. What is your experience with implementing this process?
   2. What have you observed of this process in your school?

2. How do you describe the difference between formative and summative reading assessment measures?
   Potential Prompts:
   1. What is your experience with using formative or summative reading assessment measures?
   2. How have you observed the difference in your school?
3. Considering Vygotsky’s (1978) zone of proximal development (ZPD), the space between the actual developmental level as determined by independent problem solving and the level of potential problem solving under adult guidance or in collaboration with more capable peers (Vygotsky, 1978, p. 86). How does the formative assessment process align with working from students’ emerging understandings?

Potential Prompts:
1. What is your experience with providing support for students to reach learning goals while working within their emerging understandings?
2. How have you observed teachers in your building support students’ emerging understanding as aligned to the potential learning goal?

4. How is providing feedback to students effective within the formative assessment process?

Potential Prompts:
1. What has been your experience with implementing the formative assessment process?
2. How have you observed the implementation of the formative assessment process within your school?

5. How is student progress monitoring effective within the formative assessment process?

Potential Prompts:
1. What has been your experience with implementing progress monitoring?
2. How have you observed the implementation of progress monitoring within in your school?

6. How is implementing universal screening/benchmark assessments effective within the formative assessment process?

Potential Prompts:
1. What has been your experience with implementing a universal screening assessments?
2. How have you observed the implementation of universal screening assessments within in your school?

7. How is implementing basal reading series assessments effective within the formative assessment process?

Potential Prompts:
1. What has been your experience with implementing basal reading series assessments?
2. How have you observed the implementation of basal reading series assessments within in your school?
8. How is implementing a criterion referenced test effective within the formative assessment process?
Potential Prompts:
   1. What has been your experience with implementing criterion-referenced tests?
   2. How have you observed the implementation of criterion-referenced tests within your school?
APPENDIX C

ADMINISTRATOR AND TEACHER SURVEY
*This survey can also be accessed at: [https://montana.qualtrics.com/SE/?SID=SV_cU4UDLwf39PwkUB](https://montana.qualtrics.com/SE/?SID=SV_cU4UDLwf39PwkUB)

The implementation of the Montana English Language Arts (ELA) Common Core Standards (CCSS) has prompted educators to reflect on the effectiveness of assessment practices in the area of reading, questioning which common assessments provide enough evidence to be authentic indicators of a student's level of proficiency and which assessments provide sufficient data to determine ongoing instruction.

Your participation in this study would significantly help to identify school administrators' and teachers' perceptions about student data revealed through various assessments used to determine elementary students' level of proficiency with the Montana ELA Reading Standards and to determine if specific reading assessments provide enough information to plan next step instruction.

Your participation in this survey is voluntary and anonymous. Consenting participants will be asked to answer 14 multiple choice, 4 ranking, and 1 side by side question(s). The results of this study will provide guidance for future professional development. You can choose not to answer any questions and/or you can stop at any time. There are no negative effects for declining to participate as this is non-funded doctoral research. If you have questions, please contact Natalie Miller, (406) 270-0866 or nbmiller@icloud.com.

For the four ranking questions, the assessments are defined below:
**Basal Curriculum Material** – District wide curriculum used for teaching literacy skills: reading, writing, and language use. The assessment materials used are reading selection tests, classroom assignments, and fluency assessments that include comprehension questions involving multiple choice and written responses. A student's performance is compared to sequential skills that have been previously taught.

**Classwork and Observations** – This includes classroom assignments, tests, quizzes, discussions, and teacher observations with and without formal checklists. A student's performance is compared to standards, goals, and/or expectations determined by the teacher.

**Criterion Based Measures/Criterion Referenced Tests (CRT)** - A K-12 collection of tests that are comprehensive assessments of skills related to reading. A student's performance is compared to specific criteria.

**Curriculum Based Measures (CBM)** - A series of reading assessments, also called reading probes. The assessments are brief and easy to administer at regular intervals (weekly, bi-weekly, monthly). The probe is standardized and is administered the same way every time. Each probe is a different assessment; however, the probes assess the same skills at the same difficulty level. A student's performance is compared to specific curriculum.

**Feedback** - Describes the specific quality of student work against clear learning goals and focuses on explicit strategy prompts for students to improve skills. A student's performance is compared to standards, goals, and/or criteria determined by the teacher.

**Running Records/Informal Reading Inventories (IRI)** - A standardized procedure used to assess students' reading progress, performance, and use of reading strategies.

**Universal Screening/Benchmark Assessments** - A brief assessment administered to an entire student population at least three times per year.

Student data determines individual levels of proficiency with grade level standards.

For questions about your rights as a human subject in a research study, contact Mark Quinn, Chairman, Institutional Review Board at Montana State University-Bozeman, (406) 994-4707.
Consent: If you click "I agree to participate", you may still decline to continue to participate at any time during the survey.

- I agree to participate.
- I disagree and would not like to participate.

What is the size of your school district?

- AA
- A
- B
- C
- K-8 Independent Elementary
<table>
<thead>
<tr>
<th>How many years have you been in the field of education?</th>
</tr>
</thead>
<tbody>
<tr>
<td>○ 0-2</td>
</tr>
<tr>
<td>○ 3-6</td>
</tr>
<tr>
<td>○ 6-9</td>
</tr>
<tr>
<td>○ 10-13</td>
</tr>
<tr>
<td>○ 14-16</td>
</tr>
<tr>
<td>○ 19 or more</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>What is your role within your school district?</th>
</tr>
</thead>
<tbody>
<tr>
<td>○ I am a Title Tutor.</td>
</tr>
<tr>
<td>○ I am a grade K-2 teacher.</td>
</tr>
<tr>
<td>○ I am a grade 3-5 teacher.</td>
</tr>
<tr>
<td>○ I am an instructional coach.</td>
</tr>
<tr>
<td>○ I am a special education teacher.</td>
</tr>
<tr>
<td>○ I am a school level administrator.</td>
</tr>
<tr>
<td>○ I am a district level administrator.</td>
</tr>
</tbody>
</table>
Which of the following describes your experience with reading assessment?

- I have attended several trainings focused on reading assessment.
- I have a reading endorsement.
- I have a graduate degree that focused on areas of reading assessment.
- I have attended some trainings or taken some courses focused on reading assessment.
- My bachelor's degree provided a course or courses about reading assessment.
- I have not attended training or had any courses that involve reading assessment.

Student data from formative reading assessments are used to develop reading instruction.

- Strongly Disagree
- Disagree
- Somewhat Disagree
- Somewhat Agree
- Agree
- Strongly Agree
Universal Screening/Benchmark reading assessment data is essential for monitoring the progress of students' reading achievement. (Scroll to the top of the survey to review assessment definition.)

- Strongly Disagree
- Disagree
- Somewhat Disagree
- Somewhat Agree
- Agree
- Strongly Agree

When students make mistakes during reading instruction, it helps them learn to read.

- Strongly Disagree
- Disagree
- Somewhat Disagree
- Somewhat Agree
- Agree
- Strongly Agree
The purpose of formative assessment is to increase learning.

- Strongly Disagree
- Disagree
- Somewhat Disagree
- Somewhat Agree
- Agree
- Strongly Agree

Students should know the goal of an assessment.

- Strongly Disagree
- Disagree
- Somewhat Disagree
- Somewhat Agree
- Agree
- Strongly Agree

Student data from formative reading assessments are to be collegially shared with teachers.

- Strongly Disagree
- Disagree
- Somewhat Disagree
- Somewhat Agree
- Agree
- Strongly Agree

Student data from formative reading assessments are to be collegially shared with administrators.

- Strongly Disagree
- Disagree
- Somewhat Disagree
- Somewhat Agree
- Agree
- Strongly Agree
To adjust and modify ongoing instruction, teachers can gather formative reading assessment data/evidence from students' comments and their facial expressions.

- Strongly Disagree
- Disagree
- Somewhat Disagree
- Somewhat Agree
- Agree
- Strongly Agree

Formative assessment in reading supports students in learning to read.

- Strongly Disagree
- Disagree
- Somewhat Disagree
- Somewhat Agree
- Agree
- Strongly Agree
Rank the following assessments in the order that you perceive as the most effective to determine a student's proficiency level with the Montana English Language Arts Reading Standards. (Scroll to the top of the survey to review assessment definitions.) You will need to click on the assessment name and move (drag) it up or down and drop it in the order you prefer. For this survey, rank 1 through 7 with 1 being the most effective.

- Basal Reading Assessments
- Classwork and Observations
- Criterion Based Measurement/Criterion Referenced Test (CRT)
- Curriculum Based Measurement (CBM)
- Feedback
- Running Records/Informal Reading Inventories (IRI)
- Universal Screening/Benchmark Assessments

Rank the following assessments in the order that you perceive as the most effective to determine a student's ongoing instruction. (Scroll to the top of the survey to review assessment definitions.) You will need to click on the assessment name and move (drag) it up or down and drop it in the order you prefer. For this survey, rank 1 through 7 with 1 being the most effective.

- Basal Reading Assessments
- Classwork and Observations
- Criterion Based Measurement/Criterion Referenced Test (CRT)
- Curriculum Based Measurement (CBM)
- Feedback
- Running Records/Informal Reading Inventories (IRI)
- Universal Screening/Benchmark Assessments
Rank the following assessments in the order that you perceive as the most effective to determine a student's ongoing instruction. (Scroll to the top of the survey to review assessment definitions.) You will need to click on the assessment name and move (drag) it up or down and drop it in the order you prefer. For this survey, rank 1 through 7 with 1 being the most effective.

- Basal Reading Assessments
- Classwork and Observations
- Criterion Based Measurement/Criterion Referenced Test (CRT)
- Curriculum Based Measurement (CBM)
- Feedback
- Running Records/Informal Reading Inventories (IRI)
- Universal Screening/Benchmark Assessments

Multiple Measures: Click in the boxes to choose the top three assessments you would recommend using to determine if a student is proficient with grade level reading standards? (Scroll to the top of the survey to review assessment definitions.)

- Basal Reading Assessments
- Classwork and Observations
- Criterion Based Measurement/Criterion Referenced Test (CRT)
- Curriculum Based Measurement (CBM)
- Feedback
- Running Records/Informal Reading Inventories (IRI)
- Universal Screening/Benchmark Assessments
Multiple Measures: Click in the boxes to choose the top three assessments you would recommend using to determine a student’s ongoing reading instruction? (Scroll to the top of the survey to review assessment definitions.)

- Basal Reading Assessments
- Classwork and Observations
- Criterion Based Measurement/Criterion Referenced Test (CRT)
- Curriculum Based Measurement (CBM)
- Feedback
- Running Records/Informal Reading Inventories (IRI)
- Universal Screening/Benchmark Assessments

<table>
<thead>
<tr>
<th>Assessment</th>
<th>Formative</th>
<th>Summative</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basal Reading Assessments</td>
<td></td>
<td></td>
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<tr>
<td>Classwork and Observations</td>
<td></td>
<td></td>
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<tr>
<td>Criterion Based Measurements/CRT</td>
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<tr>
<td>Curriculum Based Measurement (CBM)</td>
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<tr>
<td>Feedback</td>
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<tr>
<td>Running Records/IRI</td>
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<tr>
<td>Universal Screening/Benchmark Assessments</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

How do you perceive the use of the following assessments? (Scroll to the top of the survey to review assessment definitions.)

Thank you for taking the time to fill out this survey. If you are willing to participate in a follow-up interview, please email Natalie Miller: nbmiller@icloud.com.
APPENDIX D

FIRST EMAIL TO ADMINISTRATORS
Hi Amy,

I hope you have had a great start to the school year! I am in the final stages of my doctoral work and my dissertation research focus is on Montana administrators’ and teachers’ perceptions of the formative assessment process in reading.

**Would you mind filling out the survey and forwarding this request to your K-5 general/special education teachers, instructional coaches, and Title Tutors?**

My goal is to have 400 Montana administrators and elementary educators who work with students in grades K-5 complete the survey. Reaching this goal will allow me to develop a clear understanding of the degree of consensus or discrepancy between the perceptions and to consider the implications for students’ ongoing instruction.

For most respondents, the survey takes about ten minutes.

Please follow the link below:

[https://montana.qualtrics.com/SE/?SID=SV_cU4UDLwf39PwkUB](https://montana.qualtrics.com/SE/?SID=SV_cU4UDLwf39PwkUB)

I truly appreciate your consideration.

Sincerely,

Natalie
Natalie Miller, Principal
Cornelius Hedges Elementary
406-751-4070
406-270-0866
Visit us on the web
Follow us on Facebook
Follow my tweets
Follow my blog
APPENDIX E

EMAIL TO SCHOOL TEAM
Hi Team,

I have finally reached the survey stage of my dissertation research. As most of you know, it is focused on administrators’ and teachers’ perceptions of the formative assessment process in reading. Would you mind filling out the survey and forwarding this request to your teachers and Title Tutors?

My goal is to have 400 administrators and elementary educators complete the survey in order to develop a clear understanding of the degree of consensus or discrepancy between their perceptions and to consider the implications for leadership and students’ ongoing instruction.

The survey will take about 10 minutes to fill out. I truly appreciate your consideration. The survey link is below:

https://montana.qualtrics.com/SE/?SID=SV_cU4UDLw939PwkUB

Sincerely,

Natalie Miller, Principal
Cornelius Hedges Elementary
406-751-4070
406-270-0866
Visit us on the web
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Follow my blog
APPENDIX F

SECOND EMAIL TO ADMINISTRATORS
Dear John,

The data collection for my dissertation research has reached the halfway point towards the goal of 400 submitted surveys! 202 surveys have been completed by Montana teachers and administrators. **Would you mind sending a second request to your K-5 general/special education teachers and Title Tutors? Also, if you have not already completed it, would you fill out the survey?**

Here is the link: [https://montana.qualtrics.com/SE/?SID=SV_cU4UDLwf39PwkUB](https://montana.qualtrics.com/SE/?SID=SV_cU4UDLwf39PwkUB)

Thank you in advance for your time and efforts!

Sincerely,

Natalie
Natalie Miller, Principal
Cornelius Hedges Elementary
406-751-4070
406-270-0866
Visit us on the web
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Follow my tweets
Follow my blog
APPENDIX G

THIRD EMAIL TO ADMINISTRATORS
Dear Marilyn,

I am excited to share that my data collection from teachers is complete! I just need 35 Montana school level administrators who work with K-5 students/teachers or district level administrators who work with K-5 administrators/teachers to complete the survey. If you have not already, would you mind filling out my survey? Could you also send it again to your K-5 administrators?

Here is the link: https://montana.qualtrics.com/SE/?SID=SV_cU4UDLwf39PwkUB

It should take about 10 minutes. Thank you for your consideration. I will share my findings, once my research is complete.

Sincerely,

Natalie Miller, Principal
Cornelius Hedges Elementary
406-751-4070
406-270-0866
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Follow us on Facebook
Follow my tweets
Follow my blog