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Effects of Mixed Ability Guided Reading Groups in the Elementary Setting

Lauren Allison

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Lauren Allison

Northwestern College

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Abstract

This action research was driven by the researcher's interest in mixed ability guided reading groups and the effect they can have on student fluency scores and reading assessments. The researcher utilized mixed ability guided reading groups for nine weeks, while monitoring progress using FastBridge CBMreading fluency passages weekly. The research was conducted to analyze the effectiveness of mixed ability grouping within guided reading groups. The researcher is a second grade teacher in her ninth year of teaching. The findings revealed a common trend of increased fluency and accuracy within words per minute, specifically for students who fell below benchmark when the study began. This research was conducted to impact future classroom practices as well as school wide decisions in practices pertaining to guided reading interventions.

Keywords: mixed-ability, guided reading groups, fluency

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Mixed Ability Guided Reading Groups

Mixed ability reading groups are defined as groups where students of varied abilities are taught together rather than being split into groups of similar achievement levels. The problem with grouping by similar achievement levels in guided reading groups is this consists of grouping students based on their current reading level and strengths and weaknesses. This can be seen as very limiting to the potential of each individual students skills. By creating groups of mixed abilities, students interact with students of all different strengths and achievements, thus giving them the opportunity to learn from their peers.

While there is a wide range of research previously performed on this mixed ability grouping topic, a lot of the available references seem to be outdated and in need of a refresher. For instance, a researcher in the UK stated there was no significant rise in achievement through mixed ability groups, but the practice improved classroom rapport with many positive social affects (Lyle, 1999). While this outcome can be seen as a benefit, another researcher stated they observed higher behavioral problems on mixed ability groups as well (Venkatakrishnan & Wiliam, 2003). It was stated that the students with weaker literacy skills, who were participating in the mixed groups, were shown to increase in these behaviors as they displayed a lack of self-management (Venkatakrishnan & Wiliam, 2003). These are intriguing; however they are from years before the education we provide today.

With the findings of past research and sources of information, one is still left with many questions to contemplate especially in today's world. What strategies prove to be most effective in mixed ability learning environments? What is the best use of time management to implement these groups? How should students abilities impact the way in which students are mixed within these groups?

The purpose of this action research is to improve students' achievements in reading. This is a large goal and could include many small aspects to both reading and literacy. John Helgeson, a curriculum specialist and brain-based learning advocate, stated the straightforward purpose as working on reading comprehension, developing higher level discussion skills, motivating students to read more, but also building community in schools and classrooms (Helgeson, 2018). This is consistent with many teachers' goals with guided reading groups across the nation. In her research, Helgeson took this strategy a step further with mixed abilities and included mixed grade levels as well. In this practice teachers are able to make informed decisions based on their observations of students who are participating. She also found the groups she formed for discussions are more purposeful when looking at individual student needs (Helegson, 2018).

The goal of this action research is to answer the following questions:

Can the implementation of mixed ability guided reading groups positively impact FASTbridge test scores and help students meet 2nd grade standards in literacy?

Can we use the mixed ability guided reading groups to better meet the individual needs of students through small group instruction?

Educators try to focus on many factors when putting together guided reading groups; how to group students, the materials utilized, and teaching strategies within each group. Within classroom practices the last few years, the method of grouping students was solely based on reading abilities, keeping the lower levels, on level, and above levels grouped with each other, but I have always questioned if this is truly best practice.

The research performed with this can and will make a huge impact in many classroom practices with hopes of impacting others within the field. The main goal is to make decisions that

will benefit students in the best ways, so it is beyond exciting to research and experiment with this more to gain a deeper understanding of what would be best practice within the classroom.

There is a small variety of sources analyzing the implementation of mixed ability groups in both reading and mathematics; however there is so much valuable information pertaining to small group instructional strategies. Many of the references within the literature review focus on these reading instructional strategies. Some also focus on mixed ability grouping versus same ability grouping. Of the sources reviewed, the majority were discovered through the peer reviewed journals within the DeWitt Library and a small percentage from Google Scholar.

Review of the Literature

Purpose of mixed ability reading groups

Grouping students for instruction in smaller settings has been a successful tactic for a long time in education. The controversy of how the grouping should be done has been the real question with this technique. Is it better to group students who have similar strengths and areas for growth so instruction can be differentiated and focused for those students? Or should groups be mixed ability, where students have the chance to gain knowledge and skills from their peers as well as the teacher? What makes for better reading achievement growth in students?

Many educators have been faced with this question and may have experimented with different methods of grouping students. Educators, Adelson and Carpenter participated in collaborative action research to find the relationship between achievement growth and ability based groups in kindergarten (Adelson & Carpenter, 2011). Across 1,690 classrooms in 580 different schools, the action research concluded that kindergarten reading growth ranged from −11.20 to 43.63, with about 2% of the study sample experiencing negative growth in reading achievement (Adelson & Carpenter, 2011). This data was collected through the use of a reading assessment used to show the progression of skills over a period of time. The achievement data proved to be beneficial to the progression of student's reading skills when grouped based on ability. The question arises of how we can develop more growth in student's reading achievement? Mixed ability reading groups could be the answer to this question.

Mixed ability reading groups give students the opportunity for peer teaching and learning. Students collaboratively develop skills side by side and can grow through this exposure and experience. In another study, 45 first grade students experienced this method and showed evidence of peer interaction in reading groups with communicative competence (Guthrie, 1982).

Through this method of grouping and interacting, students were able to read and engage with longer texts that were of more interest to them, of which they normally were unable to do previously.

Experimenting with mixed ability literature circles has been a way to get answers on what is best for student growth. Educator Helgeson did just this when he embedded mixed ability literature circles in his classroom. He states these groups were more purposeful in discussion as each student had different needs individually, rather than the entire group (Helgeson, 2018). When all students have different strengths, discussion flows with natural progression for comprehension, thus expanding the growth for all in the area.

Grouping can be difficult, but should be a priority as there have been so many great leads for what they can produce. More research is needed to entirely prove the benefits to students' growth in reading, which makes this intended research more paramount than ever before. With the right technique and data tracking, it is hopeful the results will support this reasoning.

Practices

The question of best practice is constantly circulating in the area of reading in education. Still today views are changing on what is the most beneficial for reading development in students. Guided reading groups have been one of the latest strategies to help meet the needs of students with reading development. When being studied further, an emphasis had been placed on the planning and frequency of guided reading groups for teachers. After studying these techniques, results did suggest an increased emphasis does lead to a greater impact on students' reading abilities (Young, 2018).

Grouping students for guided reading has proven to be an ongoing deliberation as well as the frequency and emphasis. Teachers and researchers have been steadfast in their observations and efforts to observe results supporting a technique for grouping students. There have been many studies found where grouping methods were analyzed, including a study by Batya Elbaum, Jeanne Shay Schumm, and Sharon Vaughn. These researchers studied the outcomes of guided reading groups grouped by ability and then also by mixed abilities. The results of this study were divided. At times the results display students favored mixed ability groups, whereas others favored same ability groups (Elbaum, B. E., Schumm, J. S., & Vaughn, S., 1997).

Part of grouping students for guided reading that had been brought to light very early on in the guided reading era, was the issue of whether there was bias in grouping students based on socioeconomic status. It was evident in a particular study that with higher reading groups, students' reading ability was three times more robust than the socioeconomic status (Haller & Davis, 1980). In lower reading groups the effect of measured reading ability was over ten times more dominant than the SES (Haller & Davis, 1980).

Small group instructional methods

Fountas and Pinnel define guided reading as "a small group instructional context in which a teacher supports each reader's development of systems of strategic actions for processing new texts at increasingly challenging levels of difficulties" (Fountas and Pinnell, 2022). This instructional method has proven to be effective in itself aside from the strategies utilized within these groups. In a study from 2016, students who participated in the guided reading group method, showed a 20.9% increase in fluency and comprehension (Syahputera, 2016).

Instructional methods are another important area of focus in creating and planning for mixed ability guided reading groups. Typically a guided reading group would consist of an appropriate leveled reading book for the group's reading achievements, along with some other components. However, with mixed abilities in one group, choosing a leveled reader became more difficult. The focus shifted to decodable readers and other fluency practices.

In researching small group instructional methods in the elementary classroom, educators have dabbled with various strategies across many years. A study that compared repeated reading, listening passage preview, and listening only strategies proved to be considerably effective. Students participating in these interventions, typically retained the effects after two days (Begeny, J. C., Krouse, H. E., Ross, S. G., & Mitchell, R. C. , 2009). These interventions potentially portray an improvement in fluency and decoding skills.

Other strategies and interventions utilized in small groups consisted of selection of leveled books, introduction of the book, silent reading, and followed by discussion. This was analyzed as an effective instruction method with participants in elementary grade levels. Within the first year of utilizing these methods, students gained a year of progress in the and up to two years of progress the second year in second grade (Schirmer, B. R., & Schaffer, L. , 2010). While this method was deemed effective, student scores did decline from the end of one year to the beginning of the next, especially between the end of the first year of guided reading instruction to the start of the second year (Schirmer, B. R., & Schaffer, L. , 2010).

Past Research

Mixed ability guided reading groups are intermittently studied in today's education as they have been found to increase not only academics, but classroom rapport and attain many

other positive social effects (Lyle, 1999). Other previous action research has suggested mixed ability guided reading groups hosted within a single grade level classroom, do not show significant growth in reading; however across grade levels can produce more student achievement (Slavin, 1987).

Mixed abilities within a group setting can cause a change in behaviors and following of group expectations. In a study where students were grouped by ability across differing ages, found there was no significant difference in time on task within environments. There was however a slight decrease in the lower ability mixed classroom (Veenman, 1987). So the question arose of what effect this will play in mixed ability reading groups.

Mixed ability grouping is not isolated to the subject area of reading. In the past, researchers have spent time analyzing this method in other class subject areas. For instance, in a secondary mathematics setting, a study suggested mixed ability grouping should be the norm and the construction of groups is just as important as the content being taught (Venkatakrishnan & Dylan, 2003). Past experiences and observations have supported the belief that mixed ability grouping can be an effective strategy, if it is pursued in the correct manner.

Methods

Participants

The following research questions are shaping my action research plan:

Question 1:

Can the implementation of mixed ability guided reading groups positively impact FASTbridge test scores and help students meet 2nd grade standards in literacy?

Question 2:

Can we use the mixed ability guided reading groups to better meet the individual needs of students through small group instruction?

The two variables of this action research include the independent variable of implementation of mixed ability guided reading groups and the dependent variable of FASTbridge reading scores. These variables are being observed in the second grade classroom setting with fifteen students ranging from the ages of seven to eight. Of the fifteen students, six have FastBridge reading scores below benchmark and are receiving title reading services daily and one who has an IEP with a reading goal.

The intervention of mixed ability reading groups, consists of splitting students into three different guided reading groups containing five students of different reading levels ranging from high to low. Students participate in a reading group where the content is guided by current reading curriculum, decodable readers, and other intervention strategies that are noted in the documentation of attendance.

Students participating in this study will complete weekly progress monitoring, where they read a short passage for one minute while they are assessed for fluency and accuracy. Student test scores will also be collected for Winter and Spring aReading assessment.

Tools for data collection include teacher made plans for content and curriculum, teacher made attendance log for each group session, online progress monitoring scores and graphs, and online assessment scores taken in Winter and Spring from FastBridge. FASTbridge is provided in the areas of content, criterion, predictive, and discriminant. All of FASTbridge content is supported with recent research and continues to be.

All data will be collected weekly beginning in January 2022 through April of 2022. All data will be stored within the classroom setting, where the collection takes place and only shared for educational purposes. When analyzing the data, educator will look for growth rate, as well as the difference in scores from beginning of the study to the completion. Mean fluency scores will also be calculated for the before and after interventions as well as the standard deviation to determine the differences across all student scores in the group.

Data Collection

      The following research questions guided the choices for data collection:

Question 1:

Can the implementation of mixed ability guided reading groups positively impact FASTbridge test scores and help students meet 2nd grade standards in literacy?

Question 2:

Can we use the mixed ability guided reading groups to better meet the individual needs of students through small group instruction?

      For this action research the data collected was quantitative. The data collected was baseline fluency scores for CBMreading in FastBridge, as well as weekly fluency scores during progress monitoring with CBMreading. Scores were also collected for the winter aReading assessment, before the intervention began. The spring scores will also be collected after the testing period takes place. Student data will continue to be collected, and students will receive a new passage each week. After the completion of the collection of passages, students will return to the original passage they started with in week 1.

      In addition to the FastBridge reading fluency scores, attendance was also collected for their mixed ability reading groups, as well as notes pertaining to the content and intervention received. The independent variable is the implementation of the mixed ability reading groups and the dependent variable is the FastBridge reading scores as well as the standards based test scores of which align with the curriculum taught.

Findings

Data Analysis

      The data collected over nine weeks did show some growth in students' fluency, however not enough to justify its effectiveness. Nine weeks does seem like a short span of time to really see the impact of the new strategies. Continuing to build the data for a longer period of time may show more growth across the board. While the results provided did not show a significant rate of growth, implementation over a longer period of time may change that outcome.

      Figure 1

      Student Progress Monitoring Scores within action research implementation.

Student	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9
EB	145	150		159	133	169	163	149	141
HC	99	123		120	121	120	129	121	94
ED	65	52	75	57	49	71	55	66	67
HH	115	119		98	103	112	102	106	103
LI	86	67		83	82	108	92	105	89
LM	60	67	64			72	60	64	65
AM	55	61	53	61	63	60	57	64	72
MN	137	131		145	128	152	141	141	131
JP		28	40	25	35	37	36	36	44
JR	119	124		119	110	110	135	126	80
LS	28	24	19	25	28	41	35	37	30
CS	106	118		122	130	154	126	109	
JW		23	47	48	40		39	37	49
LW	172	184		187	176	189	212	177	144
ZW	91	101		106	90	104	108	105	102

Note. Week three scores were affected as researcher was out due to Covid.

      Figure 2

      Student progress monitoring data averages and standard deviations.

|	AVERAGE	Standard Dev.	APA Write Up
Week 1	98.30769	40.2852012	(M=98.3, SD=40.29)
Week 2	91.46667	49.35855211	(M=91.47, SD=49.36)
Week 3	49.66667	19.49016846	(M=49.67, SD=19.49)
Week 4	96.78571	49.48065445	(M=96.79, SD=49.48)
Week 5	92	44.38121571	(M=92, SD=44.38)
Week 6	107.0714	47.23177595	(M=107.07, SD=47.23)
Week 7	99.33333	52.49308344	(M=99.33, SD=52.49)
Week 8	96.2	43.80182645	(M=96.2, SD=43.8)
Week 9	86.5	35.44388848	(M=86.5, SD=35.44)

Figure 3

Dependent Sample T-test

t-Test: Two-Sample Assuming Unequal Variances

	Variable 1	Variable 2	
Mean	98.30769231	86.5	
Variance	1622.897436	1256.269231	
Observations	13	14	
Hypothesized Mean Difference	0		
df	24		
t Stat	0.806081075		
P(T<=t) one-tail	0.214055717		
t Critical one-tail	1.71088208		
P(T<=t) two-tail	0.428111433		P Value is greater than .05
t Critical two-tail	2.063898562		

Figure 4

Student progress monitoring averages

Weekly Average WPM
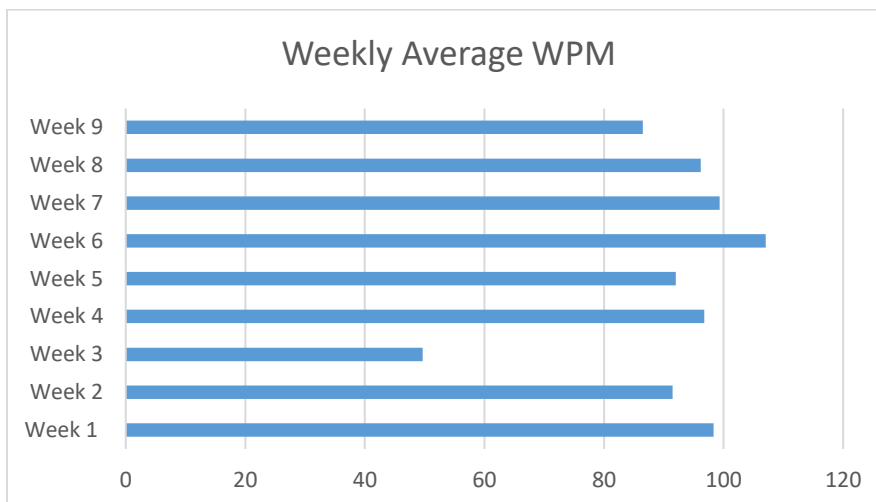
Note. Week three scores were affected as researcher was out due to Covid.

While fluency growth has not supported the action research questions thus far, it has supported student's self-confidence and willingness to participate in more challenging texts than previously. It was observed and noted in the small group documentation, students were assisting their peers during guided reading, thus resulting in a boost of self-confidence in their reading abilities.

When reviewing the documentation of small group implementation, there was a week within the data where the teacher was not present due to covid, so small group instruction was not delivered as usual. This also may have slowed any growth during that time, however; the students were still progress monitored as scheduled and no deficiencies were documented in students' fluency rate or accuracy.

Discussion

Summary of Major Findings

The action research study of the implementation of mixed ability guided reading groups did result in positive growth within most of the participants data; however the data significance is not conclusive enough to support the research questions completely. It is evident students who began this study with the lowest fluency rates, did show an increase in fluency over the nine weeks which could be considered significant, however not all students have that same growth rate.

This was similar to the results of a research study being performed with students age's nine to ten in the UK. Lyle states there wasn't any significant rise in achievement through these mixed ability groups, but there were many positive social effects (Lyle, 1999).

For example student JW in Figure 1, started in week two with twenty three words per minute and was reading at forty-nine words per minute in week nine. This student's growth rate was increasing approximately 2.89 words per week over the course of the study, with more than doubling his fluency rate at 113% of growth over nine weeks. This rate of change is seen as significant when analyzed independently; however the overall average of growth did not also reflect this outcome.

When analyzing independent student data, student AM also shows a significant increase in fluency rate from week one to week nine. Their starting words per minute is fifty-five which was lower than the class average. In week nine the student's words per minute had increased to seventy-two. This student growth rate was 1.89 words per week resulting in a 30.9% increase in fluency scores over nine weeks.

While there were a handful of students who did show some significant growth, there were also students who continued to increase in their fluency rate, but not as significantly as the few listed above. One factor to take into consideration when analyzing this data, is the students who made the most significant growth, were students who were in the bottom ten percent of reading rates when the action research began. This is to be expected as these students had more room for improvement than others who were starting out above the average reading score.

Guided reading groups are proven to be effective per the results of action research previously conducted. One researcher's results suggest that focusing on guided reading can make a bigger impact on second-grade students' reading ability (Young, 2019).

Limitations of the Study

The data does support some anticipated growth, however there is a large decrease in week three as the researcher was out due to covid, meaning groups were not being implemented as strategically as they would have in normal operations. Also, many of the students were not progress monitored; only students who fell below benchmark and were required to be progress monitored weekly were screened. This caused a skew in the data as you can see in Figure 4.

Further Study

Further research and continuation of this study would be more telling, as nine weeks is a short period of time to truly see significant results in all students. Another future study idea would be to use this guided reading method with a small section of the class, while also having a control group to see the difference in growth rates between both groups over time. There is a lot of room for further investigation on this topic. As this data has shown its effectiveness with a small number of students; is it truly a practice which could be effective over longer periods of time?

Furthermore, extending this research across grade levels could potentially also yield some great results with those higher reading level students as we did not see as much growth in their data. Allowing them to learn side by side with some readers who are even more advanced than themselves could stem some great comprehension skills and discussions. In opening these

strategies to more classrooms, it also opens the door for more collaboration and a larger set of

data to observe over time. Overall, continuing to study this process and its effects for longer and

a wider participant range would be beneficial to truly see outcomes in a brighter light.

Conclusion

This study provides students with support in the area of reading development, specifically fluency. Other skills developed through intervention engagement as well as discussions between students of various reading levels. Students participated in mixed ability guided reading groups for nine weeks, which did not result in significant results across all students. However, it did yield some individual success for students that were lower level readers with students achieving 30%- 113% of fluency growth from their starting rate in week one.

References

Adelson, J., & Carpenter, B. (2011). Grouping for achievement gains: for whom does achievement grouping increase kindergarten reading growth? Gifted Child Quarterly, 55(4), 265–278.

Begeny, J. C., Krouse, H. E., Ross, S. G., & Mitchell, R. C. (2009). Increasing elementary-aged students' reading fluency with small-group interventions: A comparison of repeated reading, listening passage preview, and listening only strategies. Journal of Behavioral Education, 18(3), 211-228. doi:10.1007/s10864-009- 9090-9

Carson, R. M., & Thompson, J. M. (1964). The joplin plan and traditional reading groups. *The Elementary School Journal*, *65*(1), 38–43.

Condron, D. J. (2008). An early start: skill grouping and unequal reading gains in the elementary years. Sociological Quarterly, 49(2), 363–363. https://doi.org/10.1111/j.1533-8525.2008.00119.x

Denton, C. A., Fletcher, J. M., Taylor, W. P., Barth, A. E., & Vaughn, S. (2014). An Experimental Evaluation of Guided Reading and Explicit Interventions for Primary-Grade Students At-Risk for Reading Difficulties. Journal of Research on Educational Effectiveness, 7(3), 268–293. https://doi.org/10.1080/19345747.2014.906010

Elbaum, B. E., Schumm, J. S., & Vaughn, S. (1997). Urban middle-elementary students' perceptions of grouping formats for reading instruction. The Elementary School Journal, 97(5), 475–500.

Haller, E. J., & Davis, S. A. (1980). Does socioeconomic status bias the assignment of elementary

    school students to reading groups? American Educational Research Journal, 17(4), 409–418.

    https://doi.org/10.3102/00028312017004409

Hasani, M.K. & Juliantine, T. (2019). The Effect of Learning Model and Motivation Level on Students'

    Self-Eficacy. Jurnal Pendidikan Jasmani Dan Olahraga, 4(2), 217–224.

    https://doi.org/10.17509/jpjo.v4i2.19951

Hawkins, M. L. (1967). Changes in reading groups. The Reading Teacher, 21(1), 48–51.

Helgeson, J. (2018). Mixed-ability and mixed-grade literature circles. Amle Magazine, 6(3), 23–25.

Guthrie, J. T. (1982). Research Views: Peer Interaction in Reading Groups. The Reading Teacher, 36(2),

    252–254. http://www.jstor.org/stable/20198199

Lyle, S. (1999). An investigation of pupil perceptions of mixed-ability grouping to enhance literacy in

    children aged 9-10. Educational Studies, 25(3), 283–296.

Nelson, T. (2020). Guided Reading: Effects of Ability Grouping on Reading Levels and Self Efficacy.

    Masters Theses and Capstone Projects.

    https://nwcommons.nwciowa.edu/cgi/viewcontent.cgi?article=1213&context=education_masters

Vaughn, S., Linan-Thompson, S., Kouzekanani, K., Pedrotty Bryant, D., Dickson, S., & Blozis, S.
  (2003). Reading instruction grouping for students with reading difficulties. Remedial and Special
  Education, 24(5), 301–315.

Veenman, S., Lem, P., & Voeten, M. (1987). Time-on-task in mixed-age classes. The Journal of
  Classroom Interaction, 23(2), 14–22.

Venkatakrishnan, & Wiliam , Dylan (2003). Tracking and mixed-ability grouping in secondary school
  mathematics classrooms: a case study[1]. British Educational Research Journal, 29(2), 189–204.
  https://doi.org/10.1080/0141192032000060939

Schirmer, B. R., & Schaffer, L. (2010). Implementation of the guided reading approach with
  elementary school deaf students. American Annals of the Deaf, 155(3), 377–385.

Slavin, R. E. (1987). Ability grouping and student achievement in elementary schools: a best-evidence
  synthesis. Review of Educational Research, 57(3), 293–336.

Young, C. (2019). Increased frequency and planning: a more effective approach to guided reading in
  grade 2. The Journal of Educational Research, 112(1), 121–130.
  https://doi.org/10.1080/00220671.2018.1451814

Syahputera, I. (2016, April 9). GUIDED READING STRATEGY TO IMPROVE READING
  COMPREHENSION | Syahputera | English Education Journal. English Education Journal.
  Retrieved February 4, 2022, from http://www.jurnal.unsyiah.ac.id/EEJ/article/view/3731/3421

Team, Fountas and Pinnell. 2022 "What Is Guided Reading?" Fountas & Pinnell Literacy™ Blog,

https://fpblog.fountasandpinnell.com/what-is-guided-reading.