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Effective Literacy Differentiated Instruction

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Capstone Project: A School Improvement Plan

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Abstract

This school improvement plan details the importance of using literacy differentiated instruction within the classroom to instruct the vast array of students' needs. This plan details different types of differentiated instruction and shares research of the success rates of differentiated instruction across various grade levels. It also highlights key components needed to make differentiation successful within the classroom, as well as obstacles in implementing differentiated instruction. The purpose of this school improvement plan is to display the need for using literacy differentiated instruction to improve students' literacy rates, as well as to tailor instruction to match students' individual needs.

Keywords: differentiated instruction, literacy, successful components

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School Improvement Plan - Effective Literacy Differentiated Instruction

Teachers in today's classrooms are working to address vastly diverse student needs, including academic, behavior, social emotional needs, as well as different cultures and interests (Parsons et al., 2013). Regarding literacy, teachers are seeing a wide range of alphabet knowledge beginning in young grades (Piasta, 2014). Thus, it is becoming harder to serve students' independent needs using a traditional whole class teaching approach for the literacy block (Parsons et al., 2013). Research has shown literacy knowledge begins at a young age, in which early alphabetic knowledge can be an indicator of literacy success in the future (Piasta, 2014). In addition, research has shown regardless of the type of school children attend, such as public, private, parochial, or charter, children within the same classroom display the vast range of alphabet knowledge (Piasta, 2014). Thus, using the whole class teaching approach during the literacy block may negatively impact students. It is likely their literacy needs are not being met, which could in turn greatly impact their future literacy success. Therefore, research supports the use of differentiated instruction to target specific students' needs.

Differentiated instruction changes instruction to meet students' individual needs at their level. This could look like changing instruction to match students' learning preference (such as visual, kinesthetic, or auditory), incorporating their interest, changing the process of instruction, changing the content given to students, or changing the product to display their knowledge (Vawter & Costner, 2013). In addition, teachers should provide students with materials and work at various levels of difficulty, along with scaffolding, enrichment, acceleration, flexible groupings, and different time schedules to further enhance the success of differentiated instruction in their classroom (Firmender et al., 2013). The purpose of this school improvement plan is to not only highlight the need for differentiated instruction in literacy, but also to

highlight which components of differentiated instruction have been successful and which areas have proven to be ineffective in this approach. It will also ask teachers to seriously examine their teaching practices and refine their skill to better serve students' literacy needs, thus preparing students for future literacy success according to the findings gathered in this study.

Differentiated instruction has become a closely examined topic since the passage of the 2001 No Child Left Behind Policy. No Child Left Behind included the Response to Intervention (RTI) three-tiered response to change instruction to meet students' individual needs. Despite differentiated instruction being around for more than 20 years, resources gathered for this study were all published within the last 10 years to make them more relevant. These resources have been gathered from the DeWitt Library at Northwestern College and have been published in peer-reviewed journals. In the end, 20 sources were selected to report findings regarding differentiated instruction, primarily in relation to elementary literacy (though some findings are included from middle school and higher education. These sources include studies of different types of differentiated instruction along with comparison to the whole group instruction approach, as well as the effectiveness of using these approaches. Furthermore, there are three articles from published peer-review journals in the last ten years which further clarify key components of differentiated instruction and the various types of readers to better understand the concept. These studies were gathered to help teachers utilize effective components of literacy-related differentiated instruction in their classrooms, thus helping their students achieve future literacy success.

Before gathering resources, the research question focused on the effectiveness of using differentiated instruction in literacy. Findings support higher success and more growth when teachers incorporate literacy differentiated instruction as compared to using the traditional whole

class approach. However, some studies have shown similar findings supporting the whole class teaching approach, instead finding differentiated instruction ineffective. Yet, the value from the findings supports the need for differentiated instruction while highlighting key components making it more successful than the whole class traditional approach. Thus, it is valuable for educators to know how to utilize these key components in their classrooms, making differentiated instruction effectively serve students' needs.

This literature review will determine what components of differentiated instruction are more successful than the traditional whole class approach to instruction. It will examine various types of literacy differentiated instruction and whole group literacy instruction, as well as highlight obstacles in implementing successful differentiated instruction. The effect of these types of instruction on various literacy components, such as oral reading fluency, comprehension, decoding, vocabulary, and writing, will be examined. The literature review will be organized by key sections that include examining the various types of differentiated instruction, data gathered from implementing differentiated instruction, components of successful differentiated instruction, and obstacles in implementing successful differentiated instruction.

Review of the Literature

Types of Differentiated Instruction

Before further examining the effects of literacy differentiated instruction, it is important to highlight and explain the various types of differentiation. Researchers' opinions regarding the main categories of differentiated instruction vary, though there are also many similarities in their groupings. According to Cornett et al. (2020) the four types include content, process, product, and affect, whereas Puzio et al. (2020) states there are five types which include content, process, product, designed, and interactional. Vawter and Costner (2013) argue there are actually six types of differentiated instruction that can be split into two main categories: student characteristics and curriculum decisions. The six types include student readiness, learning preference, interest, content, process, and product differentiation (Vawter & Costner, 2013). These researchers all include content, process, and product differentiation, but differ in defining the remaining types of differentiated instruction. All sources agree content differentiation is defined as making what students learn different, whether it is by text or topic differentiation (Cornett et al., 2020, Puzio et al., 2020, & Vawter & Costner, 2013). Process differentiation is changing one's instruction to adapt to how students learn skills, strategies, and concepts (Cornett et al., 2020, Puzio et al., 2020, & Vawter & Costner, 2013). Product differentiation is focused more on how students present their understanding of skills, strategies, and concepts (Cornett et al., 2020, Puzio et al., 2020, & Vawter & Costner, 2013).

Affect differentiation is defined as paying attention to the students' feelings and emotional needs, recognizing those needs might change day to day (Cornett et al., 2020). It is similar to student learning preferences and student interest differentiated instruction as it focuses on the uniqueness of each student (Vawter & Costner, 2013). Student learning preferences

focuses on how students learn best, which could include visual, kinesthetic, or auditory learning (Vawter & Costner, 2013), whereas student interest highlights the value of connecting the material to students' interests and the value students place on the task, along with their belief of success on the task (Vawter & Costner, 2013). These different types of differentiated instruction all consider who the student is as a person.

These types of differentiated instruction are quite different from designed differentiation, which focuses on how the teacher prepares before students engage with the lesson. Designed differentiation refers to how the teacher changes the way classroom tasks, texts, and tools are designed, including scaffolding for various levels (Puzio et al., 2020). Yet teachers also cannot anticipate every scenario for how students will interact with the lesson and build their understanding; lessons sometimes go differently than expected. For this reason, the fifth type, interactional differentiation, is when teachers must adapt instruction at the present moment to adjust to students' understanding (Puzio et al., 2020).

Another important type of differentiated instruction includes student readiness (Vawter & Costner, 2013). Vawter & Costner highlight student readiness as the first major principle of differentiated instruction, which contains three assessment categories. These assessment categories focus on the student's readiness to begin learning, the student's readiness to speed up or slow down learning, and the student's readiness to move onto the next topic or skill (Vawter & Costner, 2013). Watts-Taffe et al. (2013) support the value of assessments when using differentiated instruction by focusing on using a variety of formative assessment tools to assess students both carefully and frequently, and then analyze the data gathered to determine patterns of need and regroup students accordingly. Regardless of the many types of differentiated instruction and differences within them, many similar components exist between them, such as

differentiating the content, process, or product to best serve students' needs. In addition, one can recognize researchers highlight the value of other key components, such as characteristics of the students themselves, pre-planning differentiated instruction, on-the-fly adaptation differentiated instruction, and frequent assessment to re-evaluate students' needs.

Differentiated Instruction Data

When gathering resources examining the effectiveness of differentiated instruction, many varying approaches were found to have been taken. Despite the studies being conducted quite differently from one another, most show positive growth from implementing literacy differentiated instruction. Goddard et al.'s (2015) study collected data from 78 schools in Michigan, particularly focusing on 5th grade literacy and math achievement when teachers consistently used differentiated instruction. Students had higher outcomes on state-mandated assessments in literacy and math when compared to schools where the norm for differentiated instruction was weaker (Goddard et al., 2015). Furthermore, the results displayed when a school consistently used differentiated instruction in their teaching practices, students' scores were positively and significantly associated with differences when compared to other schools not differentiating instruction for literacy and math achievement (Goddard et al., 2015). The results from this study regarding differentiated instruction are supported in elementary and secondary schools.

In a mixed analysis study done by Silva-Maceda and Camarillo-Salazar (2021) 27 second grade students were identified as struggling readers at the end of first grade. These students were split into a control group (13 students) and intervention group (14 students). After a year of shared reading intervention using small group differentiated instruction for the students in the intervention group, they found students' scores from the intervention group were much higher in

comparison to the control group's growth (Silva-Maceda & Camarillo-Salazar, 2021). In addition, when examining students' listening comprehension skills, the intervention group showed significant differences whereas the control group did not (Silva-Maceda & Camarillo-Salazar, 2021). Another mixed methods study focused on reading comprehension among 54 tenth grade students also displayed differentiated instruction was effective in improving reading comprehension (Magableh & Abdullah, 2021). The students in the experimental group who used differentiated instruction with modified materials, supplementary materials, and leveled short stories significantly outperformed their peers in the control group who only received the textbook using a one-size-fits-all approach (Magableh & Abdullah, 2021). The control's group pretest mean was 19.42 and increased to the mean of 19.71 in the posttest. Yet, the experimental group's pretest was 18.81 and jumped up to 27.5 on the posttest (Magableh & Abdullah, 2021).

However, another mixed methods study was conducted in four middle schools with over 2,000 students and 47 teachers participating (Sally et al., 2014). This study focused on using the SEM-R (Schoolwide Enrichment Model Reading Framework) program in which the intention is to improve students' enjoyment of reading by providing student choice, thus developing lifelong readers. Within this study, the results from the pretest and posttest for both the treatment group (which used the SEM-R differentiated instructive approach) and the control group were very similar in regard to students' attitudes towards reading (Sally et al., 2014). Despite not showing significant differences between these various teaching approaches, the findings demonstrated higher scores in fluency for those in the treatment group and similar scores for comprehension (Sally et al., 2014). Another quantitative study also examined the effects of using the SEM-R model of differentiated instruction on fourth grade students' reading comprehension (Shaunessy et al., 2015). This study took place in eight urban elementary schools. The results found no

significant differences in students' attitudes regarding reading, but students in the SEM-R group had significantly higher comprehension scores on the posttest in comparison to the students in the control group (Shaunessy et al., 2015). The results of this study contradict Sally et al.'s 2014 study showing the SEM-R approach can significantly increase reading comprehension of students with varying reading abilities (Shaunessy et al., 2015).

One mixed methods study examined the effect of differentiated instruction for struggling readers in grades 4-12 within the Tier 1 program, which is part of the Response to Intervention. Swanson et al. (2017) found there was significant growth in reading comprehension for struggling readers' performance. Yet, they found regarding multicomponent intervention effects, the higher-performing readers made greater gains compared to lower-performing readers (Swanson et al., 2017). Despite this, there were positive effects from using Tier 1 differentiated reading instruction for both comprehension and vocabulary outcomes in comparison to students' peers who did not receive additional reading components (Swanson et al., 2017).

A mixed methods study done by Peters et al. (2021) contradicts the positive results found in the previously mentioned studies. Peters et al. found no significant differences between two intervention groups who used differentiated instruction — one with supplementary materials and one without (Peters et al., 2021). Additionally, this study found no significant differences between lower-performing students in any of the three groups (Peters et al., 2021). Furthermore, high-performing students in the control group which used a traditional whole-class teaching approach showed significantly larger growth in sentence comprehension when compared to students in the LPA-RS second differentiated instruction intervention group (Peters et al., 2021). This contradicts the positive results shown in other studies when comparing differentiated instruction to whole group instruction.

Components of Successful Differentiated Instruction

Research highlights multiple key components are needed for successful literacy differentiated instruction. One of those key components is organizing the literacy block to utilize small group instruction (Firmender et al., 2013; Parsons et al., 2013; Tyner, 2019; Watts-Taffe et al., 2013). During small group instruction the teacher works with a few students at a time, while the remaining students work in small groups on assigned tasks and activities at their own reading level or meet with another reading specialist (Watts-Taffe et al., 2013). One should not eliminate whole-group instruction altogether but use brief mini-lessons to focus on specific skills or concepts, along with interactive read-alouds (Watts-Taffe et al., 2013). However, the majority of the time should be spent meeting with small groups, approximately three to four times each week (Watts-Taffe et al., 2013). Each grouping's exact time with the teacher will differ because of students' needs (Firmender et al., 2013; Watts-Taffe et al., 2013). For example, the teacher should not leave high-performing students on their own for independent reading but should instead guide them with in-depth discussions for a shorter period of time as compared to other groups (Tyner, 2019). Furthermore, Ritzema et al.'s (2016) study supports how teachers tend to direct small group instruction more to struggling students than to advanced students, often not serving advanced students' needs.

It is important to highlight the need for flexible groupings when working with small groups as another key component of differentiated instruction (Firmender et al., 2013; Parsons et al., 2013; Watts-Taffe et al., 2013). Students can go to and from groups depending upon their literacy needs; in other words, students are not stuck in a particular group for a long period of time. For educators to determine the flexible groupings, frequent and on-going assessments must take place (Parsons et al., 2013; Watts-Taffe et al., 2013). The teacher must know the students'

needs, along with the students' interests and strengths (Watts-Taffe et al., 2013). This can be done in multiple ways through the use of formative assessments and then examining the results to see patterns within the data collected (Parsons et al., 2013; Watts-Taffe et al., 2013). In a study done by Jones et al. (2016) examined 6,000 third grade students who failed on a reading standardized comprehension test, they discovered 8.1% of those students struggled to decode grade-level texts with appropriate accuracy, 28.5% could decode with fair accuracy but lacked automaticity, and 63.3% read with accuracy and on-level or above fluency but struggled with comprehension (Jones et al., 2016). This study highlighted three areas of need: decoding words accurately, reading texts with automaticity, and making meaning while reading to improve comprehension (Jones et al., 2016). By using assessments, whether formative or summative, teachers are able to tailor instruction to meet students' specific needs, thus making differentiated instruction more effective.

The need to tailor instruction leads to another key component of differentiated instruction, which is differentiating the reading content and type of instruction to serve students' needs (Firmender et al., 2013; Parsons et al., 2013; Tyner, 2019; Watts-Taffe et al., 2013). This could mean providing students materials of various levels, work of various levels in difficulty, scaffolding, or either enriching or accelerating a particular concept with students (Firmender et al., 2013). It could also mean differing specific strategies to address each student's literacy needs. For instance, Tyner (2019) indicated students who struggle with comprehension benefit most from dialogue between teacher and students in a small group in which the teacher gradually releases students to independence (Tyner, 2019). In addition, she highlighted children only get better at fluency if they can read a text with 90-95% accuracy (Tyner, 2019). This displays the

need to differentiate materials to appropriate reading levels for students, whether is going below grade level or to above grade level texts.

Another key component to successfully differentiate instruction is the teacher's adaptability to meet students' needs during the lesson (Parsons et al., 2013). Some argue differentiated instruction is not reactive instruction, but planned and intentional instruction (Parsons et al., 2013). Yet, to be effective in assisting students' learning, teachers need to be flexible to adjust instruction and provide adaptations as those needs become clearer (Parsons et al., 2013). Lastly, the teacher must be motivated to utilize differentiated instruction within their classrooms (Alstete et al., 2021). In a qualitative study done at the collegiate level in a broad range of management classes, all three participating classrooms proved differentiated instruction is an effective approach regardless of the various types of goals within each class (Alstete et al., 2021). The study also highlighted teachers must be motivated to implement differentiated instruction most effectively, as there were others in the department who were critical of this method (Alstete et al., 2021). It further recognized other faculty support was essential in providing and facilitating the conditions needed to help students achieve mastery in the business goals from these classes (Alstete et al., 2021).

Obstacles in Implementing Differentiated Instruction

Multiple obstacles can make differentiated instruction challenging to implement within the classroom. As mentioned, it is key for educators to be motivated to effectively utilize it within their classroom. In a mixed methods study, Mckeown et al. (2016) found when trying to implement SRSD (Self-Regulated Strategy Development) writing instruction, one of the three fourth-grade teachers was unreceptive to the coaching and feedback provided during the five

weeks the study took place. Thus, the results from the study showed little to no increase in students' story elements scores (Mckeown et al., 2016).

Another obstacle in implementing successful differentiated instruction is access to appropriately leveled materials for all students' literacy levels (Cha & Ahn, 2014; Robb, 2013; Baron et al., 2019). In a study done in Korea, it found teachers did not implement differentiated instruction due to five main categories, with one of those being having the tools and materials needed to implement it (Cha & Ahn, 2014). Robb (2013) supported the challenge teachers face in finding books at students' instructional reading levels because of either limited or no school funds to gain these materials. She suggests teachers utilize their school's library, their own classroom library, and public libraries to provide materials at students' levels (Robb, 2013).

In a quantitative study done in the Midwest, the goal was to determine if technology could be utilized to help differentiate reading instruction for 594 third grade students (Baron et al., 2019). This study found the Lexia Core5 Reading (Core5) technology-based program seemed to be effective in targeting individual student needs across all reader profiles by adapting the difficulty level, complexity of content, and amount of direct teaching (Baron et al., 2019). Yet despite positive results from utilizing this, it discovered more diagnostic assessments and teacher-led instruction would be needed to help remediate reading difficulties for students with mixed-deficits in multiple reading areas (Baron et al., 2019). Despite some positive results from this, the cost for Lexia Core5 technology is \$40 per student for up to 250 students each year, in addition to the needed technology materials (Macaruso & Rodman, 2011). Thus, if limited or no funds are available, this can negate the opportunity to utilize successful literacy technology.

Lastly, another obstacle in implementing literacy differentiated instruction is having the professional knowledge to recognize not every child develops in reading at the same rate (Kuhn,

2022). Multiple researchers state there are various stages of reading development (Jones et al., 2016; Kuhn, 2022; Tyner, 2019). Furthermore, students are not ready to move onto the next reading stage of development until they have mastered the stage they are at (Tyner, 2019). This is explained by stating the path readers follow throughout the reading stages is crucial in teachers' understanding of reading development and creating effective reading instruction (Kuhn, 2022). For example, many preschool classrooms across the United States have the goal to teach the 100 most common high-frequency sight words, which can be developmentally inappropriate for the reading level some students are at, creating frustration and anxiety hindering students' development (Kuhn, 2022). Thus, it is critical to not push instruction too early for where students are at. Doing so may make differentiated instruction more complicated to implement because there could be a vast array of student reading levels within the classroom.

School Profile

Pella Christian Grade School serves students beginning in preschool at age three through eighth grade. During the 2021-2022 school year there were 448 students in total, with 230 boys and 218 girls. Due to the free lunches provided by the government, students were able to receive lunch at no cost if they desired school lunch.

Pella Christian Grade School has a literacy proficiency rate of 66.9% in meeting the 2021-2022 spring benchmark goals. Their math proficiency is 66.3% in meeting the spring 2021-2022 benchmark goals. Fourth through eighth grade students were additionally tested on proficiency of language usage. Of those students, 72% of students were proficient. Lastly, 77% of students from grades five through eight met the spring proficiency goal for science. It is important to highlight Pella Christian Grade School has a Spanish immersion program, in which students in kindergarten through second grade only receive Spanish instruction and are not

taught how to read in English. This is addressed in third grade, yet it might lower the whole school's literacy rates.

Pella Christian Grade School is part of a small community made up of approximately 10,000 people (World Population Review, 2022). According to the 2020 census, the majority race is White at 94.82% (World Population Review, 2022), followed by Asian at 2.4%, Black or African American at 1.12%, and two or more races at 1.07% (World Population Review, 2022). Furthermore, it is important to highlight the Pella community has a strong Dutch heritage and holds an annual Tulip Time Festival at the beginning of May. Tulip Festival celebrates the town's Dutch heritage with thousands of blooming tulips, food, dancing, and other cultural components the town was founded on. Because of this, there are many businesses displaying Pella's Dutch heritage all year, such as bakeries, restaurants, stores, and tours. Also located in Pella, Iowa is Central College, which is a small, private Division III athletics college. In addition, Pella has over thirty churches. The town as a whole has a strong Christian background.

Pella Christian Grade School has strong parental involvement within the school. Elementary parents often have the opportunity to serve in the classroom by helping chaperone field trips, assisting with special events in the classroom (such as a lemonade stand), leading a small group of students or one-on-one with a student, or assisting the teacher with copies or other tasks needing to be completed. In addition, the parent handbook encourages parents to serve eight volunteer hours throughout the school year. PIE (Parents in Education) supports teachers throughout the year, thanking them by providing lunches, snacks, and helping cover recess or lunch duties. Parents of students in kindergarten through fifth grade are required to attend the fall and spring parent teacher conferences, whereas the middle school conferences are optional to attend. Lastly, there are multiple parent-organized fundraisers held throughout the school year

for the Pella Christian Grade School community. These aforementioned opportunities allow and encourage parents to be heavily involved at Pella Christian Grade School throughout the year.

The school's mission statement is "Proclaiming the Lordship of Jesus Christ in all spheres of life and learning, Pella Christian Grade School, together with parents, provides excellent academic training rooted in God's infallible Word, challenging students to develop their individual, God-given gifts for a life of service in God's kingdom" (Pella Christian, 2022). This has been the mission statement for many years now, reflecting desire of the school to work together with parents to not only educate their child but encourage their child's spiritual growth. The mission can be seen through the lessons taught, as well as when addressing other social-emotional and behavioral needs throughout the school day. Furthermore, the goal of this mission statement is to challenge students where they are at academically, thus serving a vast range of academic needs.

Regarding student learning goals, Pella Christian Grade School aims for its students to meet the Iowa Core State Standards based upon the grade level they are at. However, this is not applicable regarding students who receive special education. These students have personalized goals based on their SEP (Student Educational Plan), which are almost the same as IEP (Individualized Educational Plan) goals. Special education students' teachers and parents work together to try to "close the gap" existing between them and their peers. This gap could be academically, socially-emotionally, or behaviorally. A unique student learning goal at Pella Christian Grade School is to have students grow spiritually in their faith. This is not measured or documented, but instead prompted and modeled throughout the school year to help students seek the Lord in all areas of their life.

The school uses a variety of curriculum across the subjects, but teachers are not solely bound to use them. Teachers are encouraged to utilize other supplementary materials to address students' needs. The elementary school, which this school improvement plan is geared toward, uses Houghton Mifflin reading curriculum from kindergarten through fifth grade. In addition, they use Making Reading Heavenly curriculum for phonics instruction and spelling. For students who are struggling in literacy they also use the Wilson program, which is a controlled reading progression curriculum focusing on phonics, writing, and spelling. It is also important to note there is no specific language curriculum. Teachers might use another curriculum of their finding or other supplementary materials to address the Iowa Core State Standards.

Three years ago, the school switched its math curriculum to Eureka Math by Great Minds for kindergarten through eighth grade. The goal of this curriculum is to help students not only get the correct answer but understand why and how the answer is found (Great Minds, 2022). This curriculum also corresponds with Iowa state standards. Within the elementary, teachers' usage of Eureka Math varies. Some teachers strictly use this math curriculum, while others follow the order of the units taught and some additional components but primarily use supplementary materials to teach the desired math concepts.

For science curriculum, the elementary school uses Battle Creek Math and Science. This curriculum is comprised of various kits per grade level, with each kit focusing on a specific science unit teachers will instruct their students on. The kits contain most of the materials needed to implement hands-on lessons and activities. Most teachers stick to the material in this curriculum, just tweaking it to match their style more closely by adding supplementary materials or shortening some lessons. The social studies curriculum the elementary school uses is also by Houghton Mifflin. Students in kindergarten and first grade use a big book of the student edition

to interact with the curriculum, whereas grades two and up have their own personalized student books to go along with social studies lessons.

Pella Christian Grade School uses two main types of assessments. FastBridge is used in kindergarten through third grade. FastBridge offers assessments for grades kindergarten and up in math, literacy, and social-emotional behavior (Illuminate Education, 2022b). In addition, it has progress monitoring tools teachers may utilize for students needing additional support in a specific skill (Illuminate Education, 2022b). These grades use FastBridge for both literacy and math assessments. Literacy skills assessed within these grades includes letter and letter sound recognition, fluency, comprehension, sight words, word segmentation, and nonsense words. Math skills assessed include number recognition, decomposing, word problems, subitizing, place value, and other various skills. After completing the assessment, reports are given to teachers displaying which students made the benchmark, both as a composite score and each skill broken down. Grades four through eight use MAP (Measure of Academic Progress) testing to assess literacy, math, language usage, and science skills. This testing is also done three times each year in the fall, winter, and spring. MAP is strictly done with students using technology for all the assessment pieces and takes significantly more time than FastBridge assessments. It also displays to teachers standards-aligned reports regarding student growth and identifies students who would benefit from intervention (NWEA, 2022).

Professional development occurs two to three times per month throughout the school year for an hour and a half on Wednesdays. Topics vary from week to week. Sometimes PD might be led by Heartland AEA to address math and literacy instruction, whereas other times it might focus on grade level teams gathering to observe data and identify patterns they see emerging from the various assessments used. Additional professional development occurs throughout the

school year. In October, all teachers attend the Heartland Christian Conference held at Dordt University in Sioux Center, Iowa. This is a two-day conference where Christian educators across the Midwest join together to address and learn new strategies and ideas related to a variety of classroom topics. In addition, there are approximately six full professional development days throughout the school year in which the topics are determined by the head of curriculum and grade school principal.

Teachers at Pella Christian Grade School are highly motivated to be effective teachers who serve students' needs. Many teachers can be found at school early in the mornings or staying late after dismissal to not only complete their tasks, but to make learning fun and engaging for their students. At least seven teachers were pursuing higher education throughout this past school year to improve their teaching craft and increase their pedagogical knowledge. Teachers also communicate with parents through e-mail, text, or face-to-face meetings to share highlights from student growth, concerns, or other areas parents desire to be informed of. Much of this communication happens outside of school hours to best coordinate with parents' schedules.

Needs Assessed

Pella Christian Grade School staff needs to address the lower literacy proficiency rates within the school. The school staff need to be better equipped with a variety of literacy materials and successful literacy instructional strategies to improve students' literacy scores. Teachers also need to be able to utilize professional development time to create more intentional instructional plans for their literacy block to address the reading skills students are lacking in, along with ways to extend skills for students who need a challenge.

Within the past few years, the author has seen how fewer and fewer students are meeting literacy benchmark scores throughout the school year. This is true for not only the author's grade level, but across the grade levels. In addition, the author has noticed teachers are feeling overwhelmed with the vast range of students' literacy skills in their classrooms; the range of levels appears to widen year after year. It is not uncommon for teachers within the grade school to have students with literacy skills one to two levels below grade level as well as one to two above grade level. Teachers are not receiving much additional support for these students throughout the day, thus carrying most of the burden. Furthermore, teachers are using outdated reading curriculum not addressing each literacy Iowa Core State Standard, causing teachers to find their own materials to address the Iowa Core skills not met through the curriculum. Because of this, teachers have limited time to effectively address all students' reading needs. Furthermore, more and more students have severe needs, leading Pella Christian Grade School to expand its special education plan. While it is great to better serve more diverse students, teachers need to be educated in effective strategies to use with these students who have special needs or a learning disability. For these reasons, the staff could benefit from more intentional training and time to plan and implement successful differentiated instruction, along with access to a variety of literacy materials to increase higher student success in literacy proficiency.

Data Analysis

As mentioned above, there are 448 students who attend this grade school, with 33% of those students below or significantly below the literacy benchmark. Breaking this down grade by grade for students' spring literacy proficiency rates, only 48.6% were proficient in kindergarten, 71.6% in first grade, 59.5% in second grade, 60.4% in third grade, 50% in fourth grade, 69% in fifth grade, 74.2% in sixth grade, 70.2% in seventh grade, and 60.3% in eighth grade. This data

was gathered by the FastBridge assessments for grades kindergarten through third and MAP assessments for grades fourth through eighth. The data informs the author addressing students' literacy needs should become a high priority for the grade school, specifically regarding needed materials, instructional strategies, and formatting of the literacy block to address the literacy needs in each grade level and improve the literacy proficiency rates.

Despite these alarming proficiency rates, there are strengths within Pella Christian's literacy program. For instance, looking at the comprehension portion of the FastBridge assessment, 87% of first grade students met the spring benchmark goal, 75% in second grade, and 88.7% in third grade (reading comprehension is not assessed within FastBridge for kindergarten-aged students). For students who are in fourth grade and above, their reading comprehension knowledge was combined with other essential reading skills, thus making it impossible for the author to determine the specific comprehension proficiency rates for the grades using the MAP assessments. Another strength is students at the beginning of kindergarten had a 75% spring benchmark goal proficiency rate when they took the concepts of print assessment during the fall benchmark testing; this is a key foundational skill for future literacy knowledge. Even more, 93.5% of first graders met either the winter or spring benchmark testing goal. In addition, 80% of first-grade students met the proficiency goal in nonsense words during spring benchmark testing.

Despite some of these positive highlights regarding comprehension, concepts of print, word segmentation, and nonsense words, students are still struggling to have successful reading fluency (including sight word knowledge), which are key aspects of students in first through third grades' benchmark testing. Illuminate Education (2022a) highlights the importance of the FastBridge benchmarks by stating each grade's benchmarks were created by a research team to

predict later student success in meeting future benchmark goals. Based off each student's score, they categorize the results into four categories: advanced, low-risk, some-risk, and high-risk (Illuminate Education, 2022a). To determine what category a student's score might fall under, the students' scores correspond to values within fixed national percentile ranges. These percentages do not change based off the number of students who take the FastBridge literacy assessments (Illuminate Education, 2022a). Students who are in the 71st percentile or above are categorized as advanced, students in the 40th-70th percentiles are low-risk, students in the 15th to 39th percentiles are some-risk, and students below the 15th percentile are high-risk (Illuminate Education, 2022a).

Because 33% of the grade school's students in grades kindergarten through third did not meet benchmark, they would fall under either the low-risk, some-risk, or high-risk categories. Students who fall in the low-risk category might have met the benchmark goal but could fall behind, especially if they are in the lower percentile range of that group. Therefore, the teacher needs to continuously monitor those children to prevent them falling behind.

Going forward, other assessments might be needed for students who fall within some-risk or high-risk categories. FastBridge recommends students in the some-risk category receive supplemental instruction or support because prior research has shown students can improve their scores and get back onto benchmark if receiving this support (Illuminate Education, 2019). It is recommended teachers use either weekly or bi-monthly progress-monitoring with high target goals to help some-risk students achieve the low-risk level by the next benchmark testing period (Illuminate Education, 2019). These progress-monitoring assessments can be accessed through FastBridge and can be over many different skillsets depending upon what the student needs. FastBridge then collects the data from the progress monitoring implemented and can then be

used to create reports to later share with others as needed to see students' progress. Students in the high-risk category will likely need their own SEP (student education plan), in which other assessments might need to be utilized. This could include using FastBridge progress monitoring as well, but potentially at below grade-level. Thus, further progress monitoring assessments or other developmentally appropriate assessments for students in the high-risk category should be utilized in literacy instruction going forward.

Action Plan

Multiple actions need to be taken to better equip students for literacy success. First, the author proposes the grade school dedicates professional development at least one time per month to allowing teachers to prepare for their literacy block. The author would rather have literacy-specific professional development at least two times per month but recognizes the scheduling challenges this presents. Utilizing professional development could differ in multiple ways, depending upon the teachers' needs. For instance, it could be educating teachers on various ways to differentiate, such as by content, process, or product. Utilizing the AEA along with collaboration between grade levels, teachers could develop ways to differentiate a specific upcoming unit, skillset, or project. Then, after collaboration with one another and the AEA, the teachers could create a plan for how to implement their new ideas.

Teachers could also utilize professional development to differentiate by again collaborating with the AEA and similar grade level teachers to create the structure of one's literacy block. As highlighted in the literature review, a key component of successful differentiated instruction is the use of flexible small groups as opposed to traditional whole-class teaching. Teachers could brainstorm how to implement small group instruction and create a rotation for implementation. In addition, teachers could discuss details such as the approximate

time length for each group, recognizing the exact time might differ somewhat depending upon students' needs. It is important to highlight younger children will be unable to spend as much time at independent stations as older children working in small groups, based upon their developmental level. Lower elementary students might utilize small group instruction for about 8-20 minutes, while older grades can sustain 15-25 minutes.

Teachers could also use professional development to learn how to successfully utilize technology helpful to implement differentiated instruction. Lexia Core5 has been found to be effective for most students. Teachers could be given a list of literacy technology materials to utilize during small group instruction based off grade-level research done by the AEA. Professional development time could be used to explore these technology resources and determine which ones to further utilize during either independent small group time or while working with the teacher. Due to many burdens and tasks on teachers' plates, utilizing various technology resources can sometimes be overlooked. By providing specific time during professional development, teachers can select the tools they feel would be most beneficial based upon guidance from the AEA.

Helping teachers utilize frequent assessments to create and readjust their flexible groupings is another key component for professional development on differentiation. The AEA could provide training on simple time assessments for students working one-on-one with the teacher, assessments done with the whole group, utilizing checklists or rubrics to assess students' knowledge, or using other tools such as FastBridge progress monitoring. Once again, the AEA and other teachers can collaborate to structure their literacy block so teachers can use these assessments to guide their groupings. It is important educators can use these assessments easily, as well as implement them among the various distractions within in their classrooms. Teachers

can then re-evaluate which assessments have been beneficial and which ones have not and share their observations with other teachers, thus providing helpful feedback.

Lastly, the author believes it is key to conduct observations during a teacher's literacy block throughout the school year. These observations could be carried out by the principal, curriculum director, AEA literacy specialist, special education teachers, resource teachers, or other grade level teachers. Observations could be formal or informal, meaning someone could suddenly drop by and provide feedback on both positives seen and areas to improve, or the observation could be prescheduled and require the teacher to share lesson plans ahead of time. It is important to note if this is done multiple times each year, it will take significant time from several individuals. Formatting these observations in a sustainable and meaningful way throughout the year with the observations given is crucial to their success. The author would recommend at least one observation occurs within each grading period at the grade school, totaling at least three times within the school year.

Implementation of School Improvement Plan

Going forward, the author believes it will take a complete school year to successfully implement literacy differentiated instruction by laying the foundation and providing educators with time to implement differentiation within their classrooms. Implementation will begin during the first Wednesday professional development period for approximately one hour and fifteen minutes. The author will work alongside the AEA to first highlight the need for and benefits of differentiated instruction, offering a brief overview along with what is essential to include for successful differentiated instruction. Together they will then provide multiple examples of how differentiation could look in one's classroom, using various formats used in lower elementary and upper elementary classrooms around the United States. Following these explanations,

teachers would use the remainder of PD time to begin brainstorming how to structure their literacy block to incorporate small group instruction appropriate for their particular grade level, allowing for collaboration between teachers as needed.

Following the initial meeting introducing literacy differentiated instruction, at least one professional development session per month will be used to regroup the elementary school teachers to see how they are doing in implementation and to address questions they have on supporting students' needs. This period will also be used to provide additional tools or resources teachers can use to implement literacy differentiated instruction in their classrooms, such as providing multiple strategies and lists of common manipulatives or tools to use in teaching a specific reading component (ex. comprehension, fluency, word segmentation, sight words) students might be struggling with. Teachers can utilize the list of resources and strategies provided by the AEA to then plan which ideas to use for specific students' needs.

Responsibility to hold teachers accountable for the classroom implementation of literacy differentiated instruction will mainly fall upon the curriculum director, grade school principal, and AEA literacy specialist. Yet, teachers have the responsibility to structure their literacy block to utilize differentiated instruction, along with adjusting their instruction to students' needs (instead of doing the same lesson with each small group). The curriculum director, grade school principal, and AEA literacy specialist will be the ones who observe the teachers during their literacy blocks, with a goal for each person to observe each elementary teacher at least one time during the school year; fourteen elementary teachers would need observations. Administrators will coordinate a schedule in which the teacher will be observed once each grading period for all three grading periods, allowing the teacher to be observed at least three times throughout the school year. The teacher and educational leader who observed the teacher will follow up the

observation to discuss what is going well, aspects to improve upon, and challenges they are facing in implementing differentiated instruction. It would be ideal if each elementary teacher would be able to observe another similar grade level teacher during their literacy block at least one time during the school year to gain ideas to implement within their own classroom.

Some of the professional development periods dedicated to literacy differentiated instruction will include working alongside the special education and resource teachers to assist grade level teachers in learning successful strategies to use with struggling readers. The special education and resource teachers can lead trainings on how they utilize the Wilson program and other resources for their students and help teachers create a plan for how to consistently use similar methods during small group instruction within their classroom.

Because this plan will take a full school year to implement successfully, teachers will gather baseline data of students' reading levels when implementing the fall benchmark testing (FastBridge for grades kindergarten through three and MAP assessments for grades four and five). These assessments are first given between late September and mid-October. After gathering baseline data, teachers can identify students' strengths and weaknesses from the assessments to help structure their flexible small groups, using those groups to address the areas where students need to improve. Additionally, teachers can utilize progress monitoring during their small group instruction to see students' improvement and adjust flexible small groups as needed.

To evaluate the effectiveness of differentiated instruction, educators will also gather data from the winter benchmark testing occurring in January and February to observe students' progress. They will ask questions like, "What surprises them? What trends do they notice? Who has shown significant growth or little growth?" These questions will help guide teachers to re-

evaluate their literacy block, examining what literacy instruction or components students need more practice on to meet the desired skillset. Those adjustments will be made throughout the winter and early spring until the spring benchmark testing occurs between late April and May. After gathering data from the spring benchmark, educators can evaluate if differentiated instruction was successful or not. They will utilize a professional development session to determine this, providing evidence to support their reasoning. Furthermore, they will reflect on what appeared to work well and what adjustments need to be made to make differentiation more successful for the upcoming school year.

Multiple barriers or challenges could complicate this plan's implementation. First, the curriculum director and grade school principal need to be on board with utilizing professional development time to support teachers in implementing differentiated instruction, along with creating time in their schedules to observe elementary teachers. The AEA literacy specialist must also be willing to be present to assist and provide resources for the educators to use in their literacy block, making time in their schedule to attend professional development sessions and observations as well. Another possible challenge to occur in implementation of differentiated instruction is teachers' willingness and attitude towards the required time and effort. As highlighted in the literature review, teacher willingness is a key component needed for successful differentiated instruction. If there are teachers opposed to this, results might not reflect the possible growth that could have happened if they were willing.

Lastly, a main challenge in implementation of literacy differentiated instruction is time. It will take a lot of time both during and outside of professional development sessions to learn to successfully differentiate and implement lessons according to students' needs. Leaders doing the observations will need time to observe, as well as time to provide face-to-face feedback from

their literacy classroom observations. Furthermore, time will need to be given or sacrificed if elementary teachers want to observe similar grade level teachers during the literacy block. They will likely either have to sacrifice a prep period or have another teacher be willing to cover their classroom in order to observe. Time to address the many tasks needed to be covered within each school day is precious to teachers, so this could be the biggest challenge faced when implementing differentiated instruction.

Conclusion

In conclusion, utilizing differentiated instruction during the literacy block enables teachers to best address students' vast array of needs within the classroom. It is essential teachers use the components making literacy differentiated instruction effective, such as small group instruction, flexible groupings, flexible time with each small group, frequent and on-going assessments, tailoring instruction to meet students' individual needs, adaptability to adjust instruction in the moment, and motivation to utilize differentiated instruction. Research shows when teachers consistently use differentiated instruction, students' scores are positively and significantly different when compared to other schools not using literacy differentiated instruction.

After examining Pella Christian's literacy proficiency rate, strong evidence suggests adjustments to teachers' literacy instruction are needed to improve their literacy proficiency rate above the 2021-2022 school year's 66.9% average. Going forward, the author suggests Pella Christian uses a combination of professional development, observations, partnership with Heartland AEA, and collaboration within grade level teams and similar grade level teams and allocates significant time to be able to implement the successful components of differentiated instruction within literacy blocks throughout the 2022-2023 school year. The author suggests

Pella Christian should gather data from their fall, winter, and spring literacy benchmark testing regarding the effectiveness of using differentiated instruction and adjust as needed to improve its success. In addition, the author suggests gathering more research on other schools' literacy proficiency rates in the area. If another school has a higher success rate, the author suggests partnering with that school to learn the components their teachers are using and then incorporate those components within literacy instruction at Pella Christian.

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Appendix